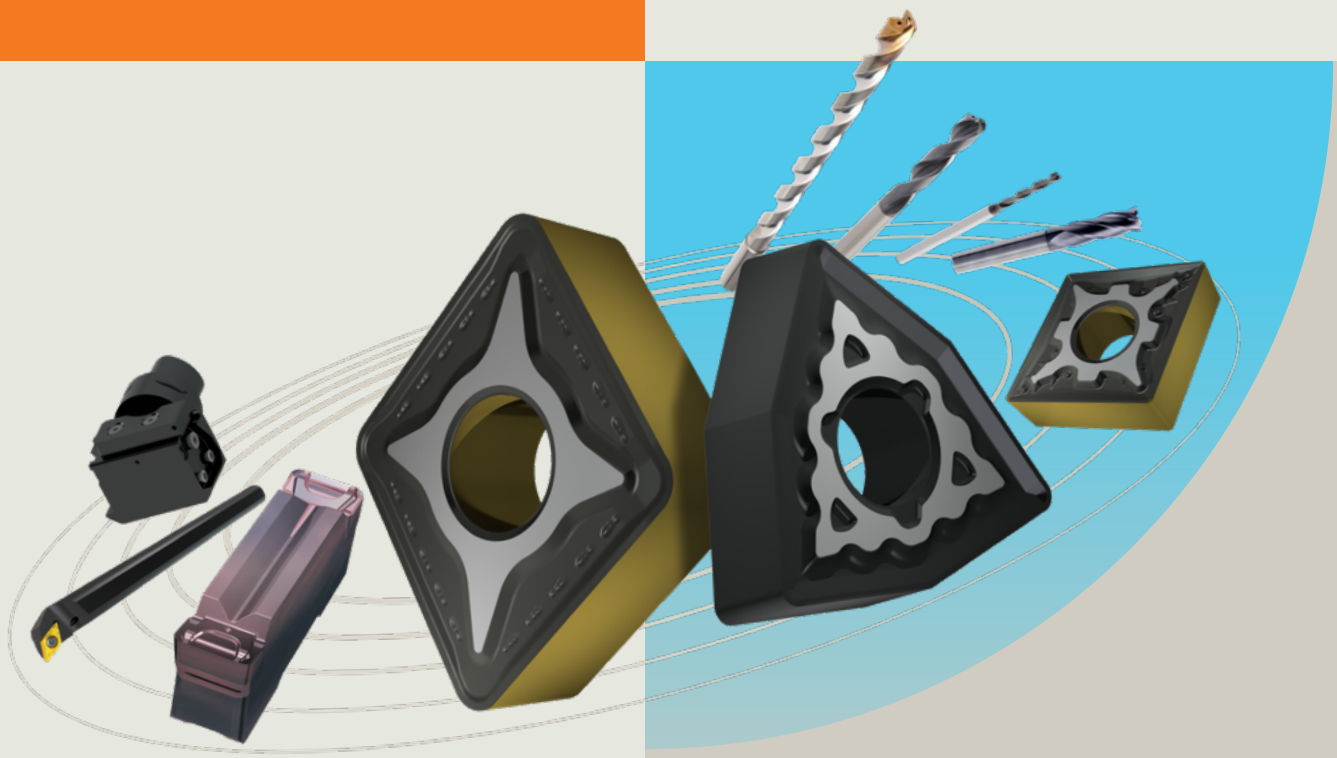
DORMER PRAMET™

New products 2026



Certainty at every turn™

dormerpramet.com

Foreword

Dear Valued Customer,

It is with great pleasure and excitement that we share with you our new products for 2026.

Each year gives us the opportunity to deliver better solutions, and this launch reflects the steady progress we have made by staying committed to doing what's right.

As a leading global supplier of metal cutting tools and related services, our latest developments demonstrate how far we have come in advancing our technologies to meet your evolving needs.

With our 2026 portfolio, we aim to help you maximise your performance potential. These solutions are designed to support consistent and increased productivity, greater process stability, and reliable results. Our products are engineered to increase productivity and optimize performance, delivering exceptional stability, and the durability needed to overcome challenges and exceed expectations. This synergy enables us to provide reliability, cost savings, and innovation, bringing more value to you.

We look forward to supporting your success in 2026 and beyond.

Warm regards,
Filippo Mauri
President, Dormer Pramet

Holemaking

Force X Generation 2	4
Force Deep Hole Drills	26
Force Micro	40

New turning products

T5405 Grade	48
T9425 Grade	76
ML Chipbreaker	90
G8415 Grade	134

New milling products

S9xx Expanded Solid Carbide End Mill Range	142

Holders

PSC Holders	163
S-Holders	170

Sustainability

Building a sustainable future together

For Dormer Pramet, sustainability isn't a challenge, it's an opportunity. But it's not something we can tackle alone.

With our customers, partners, and communities, we are navigating this journey; innovating, learning, and growing as one team. Our approach is simple: we're in this together, to make a meaningful impact.

We know that making a sustainable choice isn't just about doing the right thing. It's about doing what's right for your business, too. Our tools are built to last longer, work harder, and be more efficient, helping you reduce your environmental footprint and improve your performance at the same time.

Longer tool life, less waste

Our products are engineered for durability, meaning fewer replacements, less waste, and more value in the long run.

That's sustainability in action; keeping tools in circulation longer and conserving precious resources.

Reduced energy consumption, increased productivity

We make products that help our customers use less energy while doing more.

With reduced cutting forces and enhanced productivity, we make your operation more efficient and eco-friendly.

Sustainability at the core of every tool

Facing challenges, providing solutions

Our commitment to the planet and your business drives every decision we make.

Circularity

We work to ensure at least 90% material circularity for waste, products, and packaging. We are committed to sourcing ethical and recycled materials to continue circularity throughout our supply chain.

With new customer projects, our focus is on material and resource efficiency with new models designed for reuse and recycling.

Where local infrastructure allows, we work to recover and recycle valuable materials from our operations, supporting a more circular approach to tooling materials.

CO_2 reduction

Our goal is to become net-zero by 2040.
In 2025, we reduced our CO_2 emissions by circa 78% compared to our 2019 baseline (Scope 1 and 2*), demonstrating the significant progress we have made on our sustainability journey.

* Scope 1 emissions include direct emissions fromcompany-owned operations.
* Scope 2 emissions are indirect, deriving from an organization's purchase of electricity, steam, heat, or cooling.

Packaging

From 2025, Dormer Pramet products moved to new grey packaging with orange labels, retaining PCR plastics and improving circularity by making the packaging simpler to recycle repeatedly due to its neutral colour.

The impact can be seen throughout our production units. In Sao Paulo, we are recycling over 100 tonnes of plastic per year, and we have reduced CO_2 emissions.

High-performance solid carbide drills for various materials

Boost productivity with versatility and durability

Introducing Force X Generation 2 – the perfect solution for demanding drilling applications. Available in both through-coolant and solid versions, this series includes 3xD, 5xD and 8xD for different drilling depths.

These solid carbide drills feature a 140° self-centering 4-facet split point and advanced CTW flute design, delivering superior hole quality in diverse materials (H9 hole tolerance).

With a TiAlN-top coating that enhances hardness and extends tool life, Force X Generation 2 ensures reliable performance even in challenging applications in ISO P, M and K material groups.

Related products

RC408

8xD

3 – 16 mm

TiAlN-Top coating, **Coolant feed**

RS405

5xD

3 – 20 mm

TiAlN-Top coating

RC405

5xD

3 – 20 mm

TiAlN-Top coating, **Coolant feed**

RS403

3xD

3 – 20 mm

TiAlN-Top coating

RC403

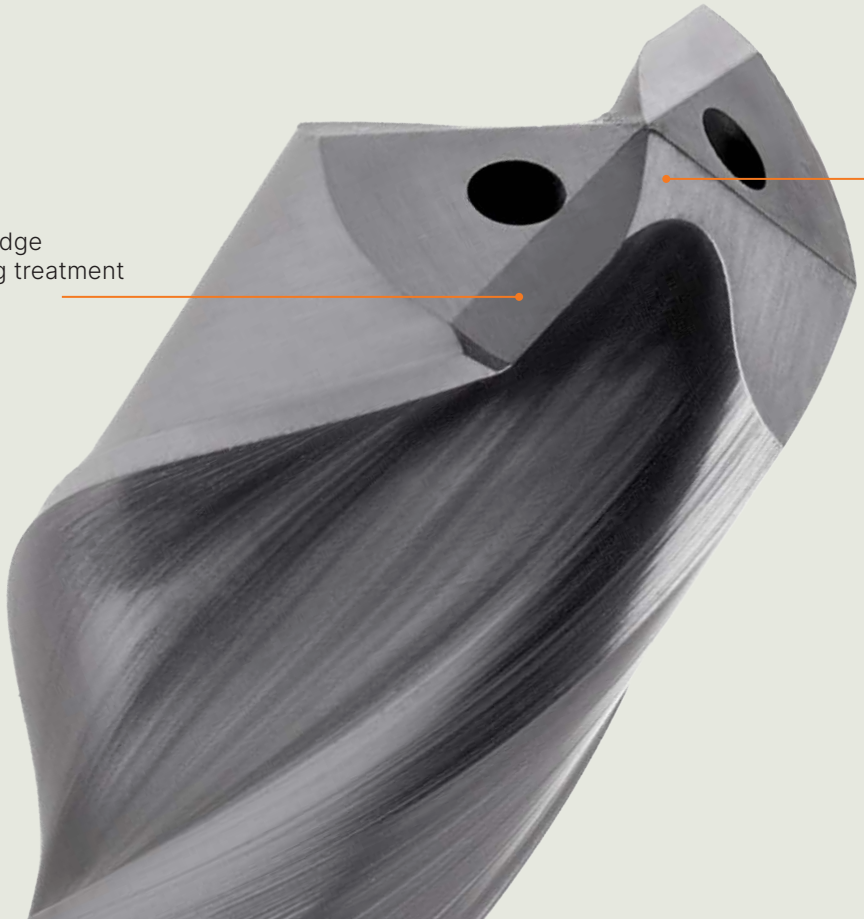
3xD

3 – 20 mm

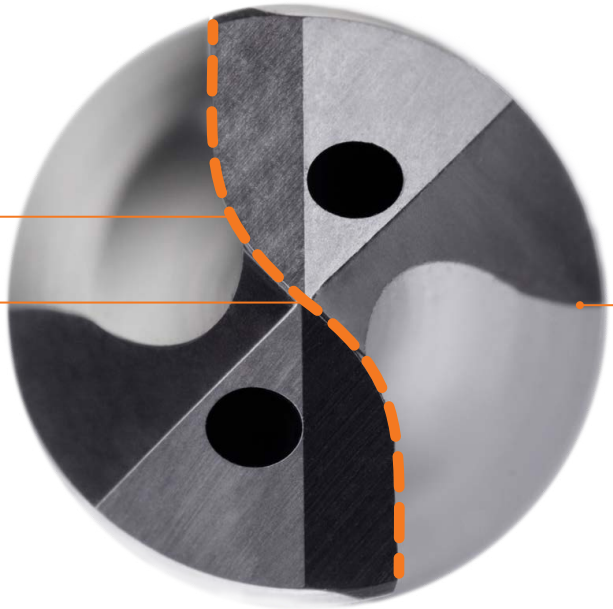
TiAlN-Top coating, **Coolant feed**

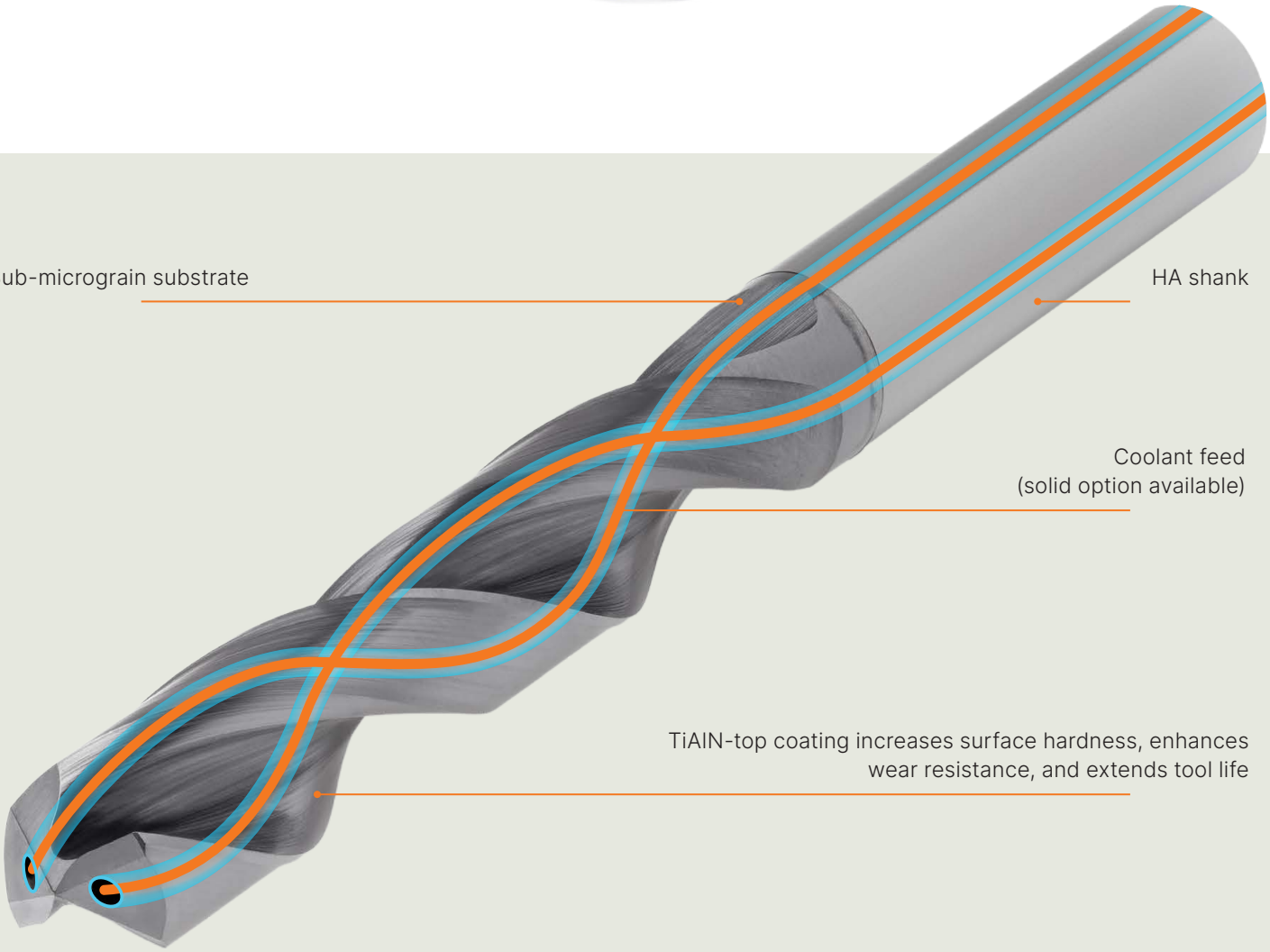
Features & benefits

Unique flute design with continuously thinned web and rolled heel.	**Reliable chip control** ensures smooth evacuation across P, M and K materials.
Sub-micron grade carbide substrate.	**Extended edge toughness and balance of hardness** delivers stable performance and long life in varied material conditions.
TiAlN-Top coating for wear protection.	**Improved tool life** lower coefficient of friction maintains performance at high speeds over longer runs.
S-shape 4-facet split point with fine honing.	**Accurate hole positioning** supports clean entry, exit and high-quality surface finish.
Optimized chisel with strong corner geometry.	**Higher feed rates** reduce cycle times and boost productivity per part.



Features & benefits





Success stories

Achieve **57%** longer tool life at **35%** lower cost in steel machining

Customer result: Force X Generation 2 drill delivers outstanding performance in steel machining, achieving 57% longer tool life (640 vs. 408 holes) compared to premium competitor tools. Despite a comparable tool price, Force X Generation 2 lowers tool cost per piece by 35%, making it the clear choice for cost-efficient, high-performance drilling.

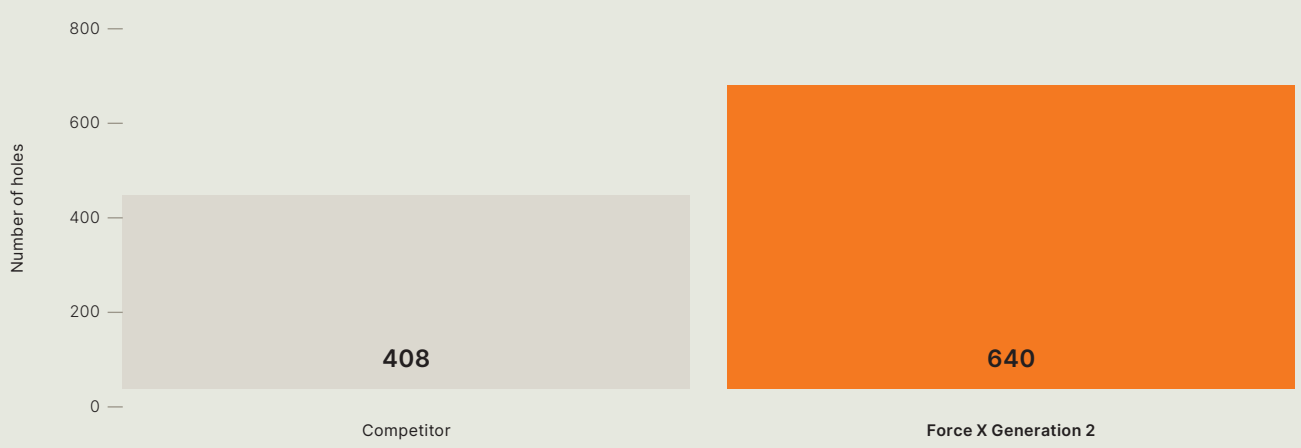
With the same cutting parameters, it maintains productivity while significantly reducing total tool costs. For manufacturers aiming to maximize output and profitability, Force X Generation 2 sets a new benchmark in ISO-P applications.

Segment	Application	Material	Coolant	Dormer Pramet Solution
Die & Mold	Thread pre-hole drilling	1.2379 / 255 HB	Yes	RC4056.8

Machining data	Competitor	Force X Generation 2
Drilling depth (mm)	20	20
Cutting speed v_c (m/min)	80	80
Feed f_n (mm/rev)	0.14	0.15
Feed v_f (mm/min)	524	561

P4.1

Tool life (number of holes)



Success stories

Boost productivity with **108%** higher feed rates in steel drilling

Customer result: The Force X Generation 2 drill sets a new benchmark in multi-material machining, delivering up to 108% higher feed rate and 51% higher cutting speed in 4140 steel compared to premium competitor tools.

Even in demanding stainless steel applications, it achieves 8% higher feed rate and 4% higher cutting speed, ensuring superior productivity across ISO-P and ISO-M materials. With no visible tool wear in early trials, Force X Generation 2 proves its capability for cost-efficient, high-performance drilling in small batch operations.

Segment	Application	Material	Coolant	Dormer Pramet Solution
Automotive	Drilling pin holes	4140	Yes (external)	RS4056.0

Machining data	Competitor	Force X Generation 2
Drilling depth (inch)	1.2	1.2
Cutting speed v_c (feet/min)	173	262
Spindle speed n (rev/min)	2800	4240
Feed f_n (inch/rev)	0.0043	0.006
Feed v_f (inch/min)	12	25

P3.2

Segment	Application	Material	Coolant	Dormer Pramet Solution
Automotive	Drilling pin holes	304	Yes (external)	RS4056.0

Machining data	Competitor	Force X Generation 2
Drilling depth (inch)	1.35	1.35
Cutting speed v_c (feet/min)	173	180
Spindle speed n (rev/min)	2800	2913
Feed f_n (inch/rev)	0.0043	0.0045
Feed v_f (inch/min)	12	13

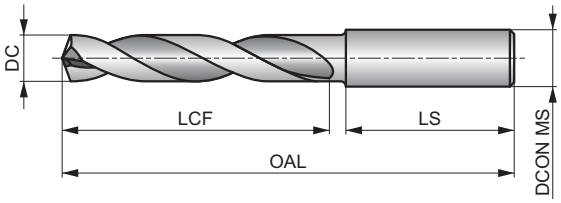
M3.2

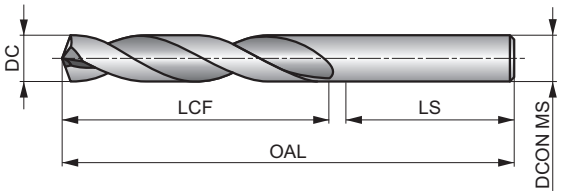
RS403

DORMER PRAMET

FORCE X Solid Carbide 3XD Drill, TiAlN-Top Coated

High-performance drill is specifically designed to deliver superior hole quality at high speeds and feeds (H9 hole tolerance for multi-materials). A 140° self-centering, 4-facet split point and CTW flute construction. TiAlN-top coating increases surface hardness, enhances wear resistance, and extends tool life.





HM	DIN 6537	3×D
140°	TiAlN Top	DIN 6535HA
CTW	R	DC m7

Workpiece material group suitability, starting values for cutting speed (m/min) and feed Alpha Code. Tables with feed per revolution can be found starting from page 24.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
■ 112 V	■ 114 V	■ 114 V	■ 98 V	■ 96 V	■ 84 V	■ 88 V	■ 82 V	■ 80 V	■ 79 V	■ 76 V	■ 40 U	◪ 79 V	◪ 76 V
M2.1	M2.2	M2.3	M3.1	M3.2	M3.3	M4.1	M4.2	K1.1	K1.2	K1.3	K2.1	K2.2	K2.3
◪ 74 U	◪ 60 U	◪ 52 U	◪ 64 U	◪ 52 U	◪ 49 U	◪ 45 U	◪ 38 U	■ 89 W	■ 86 W	■ 84 W	■ 89 W	■ 88 W	■ 79 W
K3.1	K3.2	K3.3	K4.1	K4.2	K4.3	K4.4	K4.5	K5.1	K5.2	K5.3	N1.2	N1.3	N2.1
■ 84 W	■ 79 W	■ 76 W	■ 80 W	■ 64 W	■ 62 W	■ 58 W	■ 56 W	■ 84 V	■ 80 V	■ 64 V	◪ 279 W	◪ 270 W	◪ 199 W
N2.2	N2.3	N3.1	N3.2	N3.3	S1.1	S1.2	S1.3						
◪ 198 W	◪ 180 W	◪ 166 W	◪ 162 W	◪ 158 W	◪ 40 U	◪ 32 U	◪ 28 U						

DCON MS tolerance h6.

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RS4033.0	–	3.00	0.1181	20.0	62.0	36.0	6.00
RS4033.1	–	3.10	0.1220	20.0	62.0	36.0	6.00
RS4031/8	1/8	3.18	0.1250	20.0	62.0	36.0	6.00
RS4033.2	–	3.20	0.1260	20.0	62.0	36.0	6.00
RS403N30	N30	3.26	0.1283	20.0	62.0	36.0	6.00
RS4033.3	–	3.30	0.1299	20.0	62.0	36.0	6.00
RS4033.4	–	3.40	0.1339	20.0	62.0	36.0	6.00
RS403N29	N29	3.45	0.1360	20.0	62.0	36.0	6.00
RS4033.5	–	3.50	0.1378	20.0	62.0	36.0	6.00
RS403N28	N28	3.57	0.1406	20.0	62.0	36.0	6.00
RS4039/64	9/64	3.57	0.1406	20.0	62.0	36.0	6.00
RS4033.6	–	3.60	0.1417	20.0	62.0	36.0	6.00
RS403N27	N27	3.66	0.1441	20.0	62.0	36.0	6.00
RS4033.7	–	3.70	0.1457	20.0	62.0	36.0	6.00
RS4033.73	–	3.73	0.1469	24.0	66.0	36.0	6.00
RS403N26	N26	3.73	0.1469	24.0	66.0	36.0	6.00
RS403N25	N25	3.80	0.1496	24.0	66.0	36.0	6.00
RS4033.8	–	3.80	0.1496	24.0	66.0	36.0	6.00
RS403N24	N24	3.86	0.1520	24.0	66.0	36.0	6.00
RS4033.9	–	3.90	0.1535	24.0	66.0	36.0	6.00
RS403N23	N23	3.91	0.1539	24.0	66.0	36.0	6.00
RS4035/32	5/32	3.97	0.1563	24.0	66.0	36.0	6.00
RS403N22	N22	3.99	0.1571	24.0	66.0	36.0	6.00
RS4034.0	–	4.00	0.1575	24.0	66.0	36.0	6.00
RS403N21	N21	4.04	0.1591	24.0	66.0	36.0	6.00

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RS403N20	N20	4.09	0.1610	24.0	66.0	36.0	6.00
RS4034.1	–	4.10	0.1614	24.0	66.0	36.0	6.00
RS4034.2	–	4.20	0.1654	24.0	66.0	36.0	6.00
RS403N19	N19	4.22	0.1661	24.0	66.0	36.0	6.00
RS4034.3	–	4.30	0.1693	24.0	66.0	36.0	6.00
RS403N18	N18	4.31	0.1697	24.0	66.0	36.0	6.00
RS40311/64	11/64	4.37	0.1719	24.0	66.0	36.0	6.00
RS403N17	N17	4.39	0.1728	24.0	66.0	36.0	6.00
RS4034.4	–	4.40	0.1732	24.0	66.0	36.0	6.00
RS403N16	N16	4.50	0.1772	24.0	66.0	36.0	6.00
RS4034.5	–	4.50	0.1772	24.0	66.0	36.0	6.00
RS403N15	N15	4.57	0.1799	24.0	66.0	36.0	6.00
RS4034.6	–	4.60	0.1811	24.0	66.0	36.0	6.00
RS403N14	N14	4.62	0.1819	24.0	66.0	36.0	6.00
RS403N13	N13	4.70	0.1850	24.0	66.0	36.0	6.00
RS4034.7	–	4.70	0.1850	24.0	66.0	36.0	6.00
RS4033/16	3/16	4.76	0.1875	28.0	66.0	36.0	6.00
RS403N12	N12	4.80	0.1890	28.0	66.0	36.0	6.00
RS4034.8	–	4.80	0.1890	28.0	66.0	36.0	6.00
RS403N11	N11	4.85	0.1909	28.0	66.0	36.0	6.00
RS4034.9	–	4.90	0.1929	28.0	66.0	36.0	6.00
RS403N10	N10	4.92	0.1937	28.0	66.0	36.0	6.00
RS403N9	N9	4.98	0.1961	28.0	66.0	36.0	6.00
RS4035.0	–	5.00	0.1969	28.0	66.0	36.0	6.00
RS403N8	N8	5.06	0.1992	28.0	66.0	36.0	6.00

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RS4035.1	–	5.10	0.2008	28.0	66.0	36.0	6.00
RS403N7	N7	5.11	0.2010	28.0	66.0	36.0	6.00
RS40313/64	13/64	5.16	0.2031	28.0	66.0	36.0	6.00
RS403N6	N6	5.18	0.2039	28.0	66.0	36.0	6.00
RS4035.2	–	5.20	0.2047	28.0	66.0	36.0	6.00
RS403N5	N5	5.22	0.2055	28.0	66.0	36.0	6.00
RS4035.3	–	5.30	0.2087	28.0	66.0	36.0	6.00
RS403N4	N4	5.31	0.2091	28.0	66.0	36.0	6.00
RS4035.4	–	5.40	0.2126	28.0	66.0	36.0	6.00
RS403N3	N3	5.41	0.2130	28.0	66.0	36.0	6.00
RS4035.5	–	5.50	0.2165	28.0	66.0	36.0	6.00
RS4037/32	7/32	5.56	0.2188	28.0	66.0	36.0	6.00
RS4035.6	–	5.60	0.2205	28.0	66.0	36.0	6.00
RS403N2	N2	5.61	0.2209	28.0	66.0	36.0	6.00
RS4035.7	–	5.70	0.2244	28.0	66.0	36.0	6.00
RS403N1	N1	5.79	0.2280	28.0	66.0	36.0	6.00
RS4035.8	–	5.80	0.2283	28.0	66.0	36.0	6.00
RS4035.9	–	5.90	0.2323	28.0	66.0	36.0	6.00
RS403A	A	5.94	0.2339	28.0	66.0	36.0	6.00
RS40315/64	15/64	5.95	0.2344	28.0	66.0	36.0	6.00
RS4036.0	–	6.00	0.2362	28.0	66.0	36.0	6.00
RS403B	B	6.05	0.2380	34.0	79.0	36.0	8.00
RS4036.1	–	6.10	0.2402	34.0	79.0	36.0	8.00
RS403C	C	6.15	0.2421	34.0	79.0	36.0	8.00
RS4036.2	–	6.20	0.2441	34.0	79.0	36.0	8.00
RS403D	D	6.25	0.2461	34.0	79.0	36.0	8.00
RS4036.3	–	6.30	0.2480	34.0	79.0	36.0	8.00
RS403E	E	6.35	0.2500	34.0	79.0	36.0	8.00
RS4031/4	1/4	6.35	0.2500	34.0	79.0	36.0	8.00
RS4036.4	–	6.40	0.2520	34.0	79.0	36.0	8.00
RS4036.5	–	6.50	0.2559	34.0	79.0	36.0	8.00
RS403F	F	6.53	0.2571	34.0	79.0	36.0	8.00
RS4036.6	–	6.60	0.2598	34.0	79.0	36.0	8.00
RS403G	G	6.63	0.2610	34.0	79.0	36.0	8.00
RS4036.7	–	6.70	0.2638	34.0	79.0	36.0	8.00
RS40317/64	17/64	6.75	0.2656	34.0	79.0	36.0	8.00
RS403H	H	6.76	0.2661	34.0	79.0	36.0	8.00
RS4036.8	–	6.80	0.2677	34.0	79.0	36.0	8.00
RS4036.9	–	6.90	0.2717	34.0	79.0	36.0	8.00
RS403I	I	6.91	0.2720	34.0	79.0	36.0	8.00
RS4037.0	–	7.00	0.2756	34.0	79.0	36.0	8.00
RS403J	J	7.04	0.2772	34.0	79.0	36.0	8.00
RS4037.1	–	7.10	0.2795	41.0	79.0	36.0	8.00
RS403K	K	7.14	0.2811	41.0	79.0	36.0	8.00
RS4039/32	9/32	7.14	0.2813	41.0	79.0	36.0	8.00
RS4037.2	–	7.20	0.2835	41.0	79.0	36.0	8.00
RS4037.3	–	7.30	0.2874	41.0	79.0	36.0	8.00
RS403L	L	7.37	0.2902	41.0	79.0	36.0	8.00
RS4037.4	–	7.40	0.2913	41.0	79.0	36.0	8.00
RS403M	M	7.49	0.2949	41.0	79.0	36.0	8.00
RS4037.5	–	7.50	0.2953	41.0	79.0	36.0	8.00
RS40319/64	19/64	7.54	0.2969	41.0	79.0	36.0	8.00
RS4037.6	–	7.60	0.2992	41.0	79.0	36.0	8.00
RS403N	N	7.67	0.3020	41.0	79.0	36.0	8.00
RS4037.7	–	7.70	0.3031	41.0	79.0	36.0	8.00
RS4037.8	–	7.80	0.3071	41.0	79.0	36.0	8.00
RS4037.9	–	7.90	0.3110	41.0	79.0	36.0	8.00
RS4035/16	5/16	7.94	0.3125	41.0	79.0	36.0	8.00
RS4038.0	–	8.00	0.3150	41.0	79.0	36.0	8.00
RS403O	O	8.03	0.3161	47.0	89.0	40.0	10.00
RS4038.1	–	8.10	0.3189	47.0	89.0	40.0	10.00
RS4038.2	–	8.20	0.3228	47.0	89.0	40.0	10.00

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RS403P	P	8.20	0.3228	47.0	89.0	40.0	10.00
RS4038.3	–	8.30	0.3268	47.0	89.0	40.0	10.00
RS40321/64	21/64	8.33	0.3281	47.0	89.0	40.0	10.00
RS4038.4	–	8.40	0.3307	47.0	89.0	40.0	10.00
RS403Q	Q	8.43	0.3319	47.0	89.0	40.0	10.00
RS4038.5	–	8.50	0.3346	47.0	89.0	40.0	10.00
RS4038.6	–	8.60	0.3386	47.0	89.0	40.0	10.00
RS403R	R	8.61	0.3390	47.0	89.0	40.0	10.00
RS4038.7	–	8.70	0.3425	47.0	89.0	40.0	10.00
RS40311/32	11/32	8.73	0.3438	47.0	89.0	40.0	10.00
RS4038.8	–	8.80	0.3465	47.0	89.0	40.0	10.00
RS403S	S	8.84	0.3480	47.0	89.0	40.0	10.00
RS4038.9	–	8.90	0.3504	47.0	89.0	40.0	10.00
RS4039.0	–	9.00	0.3543	47.0	89.0	40.0	10.00
RS403T	T	9.09	0.3579	47.0	89.0	40.0	10.00
RS4039.1	–	9.10	0.3583	47.0	89.0	40.0	10.00
RS40323/64	23/64	9.13	0.3594	47.0	89.0	40.0	10.00
RS4039.2	–	9.20	0.3622	47.0	89.0	40.0	10.00
RS4039.3	–	9.30	0.3661	47.0	89.0	40.0	10.00
RS403U	U	9.35	0.3681	47.0	89.0	40.0	10.00
RS4039.4	–	9.40	0.3701	47.0	89.0	40.0	10.00
RS4039.5	–	9.50	0.3740	47.0	89.0	40.0	10.00
RS4033/8	3/8	9.53	0.3750	47.0	89.0	40.0	10.00
RS403V	V	9.58	0.3772	47.0	89.0	40.0	10.00
RS4039.6	–	9.60	0.3780	47.0	89.0	40.0	10.00
RS4039.7	–	9.70	0.3819	47.0	89.0	40.0	10.00
RS4039.8	–	9.80	0.3858	47.0	89.0	40.0	10.00
RS403W	W	9.80	0.3858	47.0	89.0	40.0	10.00
RS4039.9	–	9.90	0.3898	47.0	89.0	40.0	10.00
RS40325/64	25/64	9.92	0.3906	47.0	89.0	40.0	10.00
RS40310.0	–	10.00	0.3937	47.0	89.0	40.0	10.00
RS403X	X	10.08	0.3969	55.0	102.0	45.0	12.00
RS40310.1	–	10.10	0.3976	55.0	102.0	45.0	12.00
RS40310.2	–	10.20	0.4016	55.0	102.0	45.0	12.00
RS403Y	Y	10.26	0.4039	55.0	102.0	45.0	12.00
RS40310.3	–	10.30	0.4055	55.0	102.0	45.0	12.00
RS40313/32	13/32	10.32	0.4063	55.0	102.0	45.0	12.00
RS40310.4	–	10.40	0.4094	55.0	102.0	45.0	12.00
RS403Z	Z	10.49	0.4130	55.0	102.0	45.0	12.00
RS40310.5	–	10.50	0.4134	55.0	102.0	45.0	12.00
RS40310.6	–	10.60	0.4173	55.0	102.0	45.0	12.00
RS40310.7	–	10.70	0.4213	55.0	102.0	45.0	12.00
RS40327/64	27/64	10.72	0.4219	55.0	102.0	45.0	12.00
RS40310.8	–	10.80	0.4252	55.0	102.0	45.0	12.00
RS40310.9	–	10.90	0.4291	55.0	102.0	45.0	12.00
RS40311.0	–	11.00	0.4331	55.0	102.0	45.0	12.00
RS40311.1	–	11.10	0.4370	55.0	102.0	45.0	12.00
RS4037/16	7/16	11.11	0.4375	55.0	102.0	45.0	12.00
RS40311.2	–	11.20	0.4409	55.0	102.0	45.0	12.00
RS40311.3	–	11.30	0.4449	55.0	102.0	45.0	12.00
RS40311.4	–	11.40	0.4488	55.0	102.0	45.0	12.00
RS40311.5	–	11.50	0.4528	55.0	102.0	45.0	12.00
RS40329/64	29/64	11.51	0.4531	55.0	102.0	45.0	12.00
RS40311.6	–	11.60	0.4567	55.0	102.0	45.0	12.00
RS40311.7	–	11.70	0.4606	55.0	102.0	45.0	12.00
RS40311.8	–	11.80	0.4646	55.0	102.0	45.0	12.00
RS40311.9	–	11.90	0.4685	55.0	102.0	45.0	12.00
RS40315/32	15/32	11.91	0.4688	55.0	102.0	45.0	12.00
RS40312.0	–	12.00	0.4724	55.0	102.0	45.0	12.00
RS40312.1	–	12.10	0.4764	60.0	107.0	45.0	14.00
RS40312.2	–	12.20	0.4803	60.0	107.0	45.0	14.00
RS40331/64	31/64	12.30	0.4844	60.0	107.0	45.0	14.00

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RS40312.5	–	12.50	0.4921	60.0	107.0	45.0	14.00
RS4031/2	1/2	12.70	0.5000	60.0	107.0	45.0	14.00
RS40312.7	–	12.70	0.5000	60.0	107.0	45.0	14.00
RS40312.8	–	12.80	0.5039	60.0	107.0	45.0	14.00
RS40313.0	–	13.00	0.5118	60.0	107.0	45.0	14.00
RS40333/64	33/64	13.10	0.5156	60.0	107.0	45.0	14.00
RS40313.3	–	13.30	0.5236	60.0	107.0	45.0	14.00
RS40317/32	17/32	13.49	0.5313	60.0	107.0	45.0	14.00
RS40313.5	–	13.50	0.5315	60.0	107.0	45.0	14.00
RS40313.8	–	13.80	0.5433	60.0	107.0	45.0	14.00
RS40335/64	35/64	13.89	0.5469	60.0	107.0	45.0	14.00
RS40314.0	–	14.00	0.5512	60.0	107.0	45.0	14.00
RS40314.25	–	14.25	0.5610	65.0	115.0	48.0	16.00
RS4039/16	9/16	14.29	0.5625	65.0	115.0	48.0	16.00
RS40314.5	–	14.50	0.5709	65.0	115.0	48.0	16.00
RS40337/64	37/64	14.68	0.5781	65.0	115.0	48.0	16.00
RS40314.8	–	14.80	0.5827	65.0	115.0	48.0	16.00
RS40315.0	–	15.00	0.5906	65.0	115.0	48.0	16.00
RS40319/32	19/32	15.08	0.5938	65.0	115.0	48.0	16.00
RS40315.1	–	15.10	0.5945	65.0	115.0	48.0	16.00
RS40315.3	–	15.30	0.6024	65.0	115.0	48.0	16.00
RS40339/64	39/64	15.48	0.6094	65.0	115.0	48.0	16.00

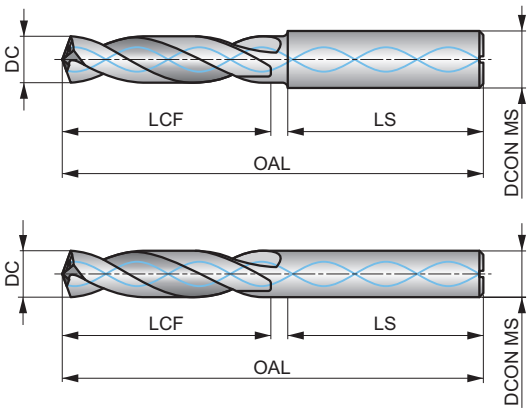
Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RS40315.5	–	15.50	0.6102	65.0	115.0	48.0	16.00
RS40315.8	–	15.80	0.6220	65.0	115.0	48.0	16.00
RS4035/8	5/8	15.88	0.6250	65.0	115.0	48.0	16.00
RS40316.0	–	16.00	0.6299	65.0	115.0	48.0	16.00
RS40341/64	41/64	16.27	0.6406	73.0	123.0	48.0	18.00
RS40316.5	–	16.50	0.6496	73.0	123.0	48.0	18.00
RS40321/32	21/32	16.67	0.6563	73.0	123.0	48.0	18.00
RS40317.0	–	17.00	0.6693	73.0	123.0	48.0	18.00
RS40343/64	43/64	17.07	0.6720	73.0	123.0	48.0	18.00
RS40311/16	11/16	17.46	0.6874	73.0	123.0	48.0	18.00
RS40317.5	–	17.50	0.6890	73.0	123.0	48.0	18.00
RS40317.8	–	17.80	0.7008	73.0	123.0	48.0	18.00
RS40345/64	45/64	17.86	0.7031	73.0	123.0	48.0	18.00
RS40318.0	–	18.00	0.7087	73.0	123.0	48.0	18.00
RS40323/32	23/32	18.26	0.7189	79.0	131.0	50.0	20.00
RS40318.5	–	18.50	0.7283	79.0	131.0	50.0	20.00
RS40347/64	47/64	18.65	0.7343	79.0	131.0	50.0	20.00
RS40319.0	–	19.00	0.7480	79.0	131.0	50.0	20.00
RS4033/4	3/4	19.05	0.7500	79.0	131.0	50.0	20.00
RS40319.5	–	19.50	0.7677	79.0	131.0	50.0	20.00
RS40319.8	–	19.80	0.7795	79.0	131.0	50.0	20.00
RS40320.0	–	20.00	0.7874	79.0	131.0	50.0	20.00

RC403

DORMER PRAMET

FORCE X Solid Carbide 3XD Drill with Coolant Feed, TiAlN-Top Coated

High-performance drill is specifically designed to deliver superior hole quality at high speeds and feeds (H9 hole tolerance for multi-materials). A 140° self-centering, 4-facet split point and CTW flute construction. Coolant holes enhance chip evacuation. TiAlN-top coating increases surface hardness, enhances wear resistance, and extends tool life.



HM	DIN 6537	3×D
140°	TiAlN Top	DIN 6535HA
CTW	R	DC m7

Workpiece material group suitability, starting values for cutting speed (m/min) and feed Alpha Code. Tables with feed per revolution can be found starting from page 24.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
140 W	142 W	142 W	122 W	120 W	105 V	110 V	102 V	100 V	99 V	95 V	50 U	105 G	101 G
M2.1	M2.2	M2.3	M3.1	M3.2	M3.3	M4.1	M4.2	K1.1	K1.2	K1.3	K2.1	K2.2	K2.3
99 G	80 G	70 E	85 G	70 G	65 F	60 F	50 E	111 W	108 W	105 W	111 W	110 W	99 W
K3.1	K3.2	K3.3	K4.1	K4.2	K4.3	K4.4	K4.5	K5.1	K5.2	K5.3	N1.1	N1.2	N1.3
105 W	99 W	95 W	100 W	80 W	77 W	72 W	70 W	105 W	100 W	80 W	305 W	310 W	300 W
N2.1	N2.2	N2.3	N3.1	N3.2	N3.3	S1.1	S1.2	S1.3	S2.1	S2.2	S3.1	S3.2	S4.1
221 W	220 W	200 W	185 W	180 W	175 W	50 V	40 V	35 U	40 U	28 U	32 U	32 U	30 U
S4.2													
25 U													

DCON MS tolerance h6.

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RC4033.0	–	3.00	0.1181	20.0	62.0	36.0	6.00
RC4033.1	–	3.10	0.1220	20.0	62.0	36.0	6.00
RC4031/8	1/8	3.18	0.1250	20.0	62.0	36.0	6.00
RC4033.2	–	3.20	0.1260	20.0	62.0	36.0	6.00
RC403N30	N30	3.26	0.1283	20.0	62.0	36.0	6.00
RC4033.3	–	3.30	0.1299	20.0	62.0	36.0	6.00
RC4033.4	–	3.40	0.1339	20.0	62.0	36.0	6.00
RC403N29	N29	3.45	0.1360	20.0	62.0	36.0	6.00
RC4033.5	–	3.50	0.1378	20.0	62.0	36.0	6.00
RC403N28	N28	3.57	0.1406	20.0	62.0	36.0	6.00
RC4039/64	9/64	3.57	0.1406	20.0	62.0	36.0	6.00
RC4033.6	–	3.60	0.1417	20.0	62.0	36.0	6.00
RC403N27	N27	3.66	0.1441	20.0	62.0	36.0	6.00
RC4033.7	–	3.70	0.1457	20.0	62.0	36.0	6.00
RC403N26	N26	3.73	0.1469	24.0	66.0	36.0	6.00
RC403N25	N25	3.80	0.1496	24.0	66.0	36.0	6.00
RC4033.8	–	3.80	0.1496	24.0	66.0	36.0	6.00
RC403N24	N24	3.86	0.1520	24.0	66.0	36.0	6.00
RC4033.9	–	3.90	0.1535	24.0	66.0	36.0	6.00
RC403N23	N23	3.91	0.1539	24.0	66.0	36.0	6.00
RC4035/32	5/32	3.97	0.1563	24.0	66.0	36.0	6.00
RC403N22	N22	3.99	0.1571	24.0	66.0	36.0	6.00
RC4034.0	–	4.00	0.1575	24.0	66.0	36.0	6.00

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RC403N21	N21	4.04	0.1591	24.0	66.0	36.0	6.00
RC4034.05	–	4.05	0.1594	24.0	66.0	36.0	6.00
RC403N20	N20	4.09	0.1610	24.0	66.0	36.0	6.00
RC4034.1	–	4.10	0.1614	24.0	66.0	36.0	6.00
RC4034.2	–	4.20	0.1654	24.0	66.0	36.0	6.00
RC403N19	N19	4.22	0.1661	24.0	66.0	36.0	6.00
RC4034.3	–	4.30	0.1693	24.0	66.0	36.0	6.00
RC403N18	N18	4.31	0.1697	24.0	66.0	36.0	6.00
RC40311/64	11/64	4.37	0.1719	24.0	66.0	36.0	6.00
RC403N17	N17	4.39	0.1728	24.0	66.0	36.0	6.00
RC4034.4	–	4.40	0.1732	24.0	66.0	36.0	6.00
RC403N16	N16	4.50	0.1772	24.0	66.0	36.0	6.00
RC4034.5	–	4.50	0.1772	24.0	66.0	36.0	6.00
RC403N15	N15	4.57	0.1799	24.0	66.0	36.0	6.00
RC4034.6	–	4.60	0.1811	24.0	66.0	36.0	6.00
RC403N14	N14	4.62	0.1819	24.0	66.0	36.0	6.00
RC403N13	N13	4.70	0.1850	24.0	66.0	36.0	6.00
RC4034.7	–	4.70	0.1850	24.0	66.0	36.0	6.00
RC4033/16	3/16	4.76	0.1875	28.0	66.0	36.0	6.00
RC403N12	N12	4.80	0.1890	28.0	66.0	36.0	6.00
RC4034.8	–	4.80	0.1890	28.0	66.0	36.0	6.00
RC403N11	N11	4.85	0.1909	28.0	66.0	36.0	6.00
RC4034.9	–	4.90	0.1929	28.0	66.0	36.0	6.00

Product	DC	DC	DC	LCF	OAL	LS	DCON MS
	(inch)	(mm)	(inch)	(mm)	(mm)	(mm)	(mm)
RC403N10	N10	4.92	0.1937	28.0	66.0	36.0	6.00
RC403N9	N9	4.98	0.1961	28.0	66.0	36.0	6.00
RC4035.0	–	5.00	0.1969	28.0	66.0	36.0	6.00
RC4035.05	–	5.05	0.1988	28.0	66.0	36.0	6.00
RC403N8	N8	5.06	0.1992	28.0	66.0	36.0	6.00
RC4035.1	–	5.10	0.2008	28.0	66.0	36.0	6.00
RC403N7	N7	5.11	0.2010	28.0	66.0	36.0	6.00
RC40313/64	13/64	5.16	0.2031	28.0	66.0	36.0	6.00
RC403N6	N6	5.18	0.2039	28.0	66.0	36.0	6.00
RC4035.2	–	5.20	0.2047	28.0	66.0	36.0	6.00
RC403N5	N5	5.22	0.2055	28.0	66.0	36.0	6.00
RC4035.3	–	5.30	0.2087	28.0	66.0	36.0	6.00
RC403N4	N4	5.31	0.2091	28.0	66.0	36.0	6.00
RC4035.4	–	5.40	0.2126	28.0	66.0	36.0	6.00
RC403N3	N3	5.41	0.2130	28.0	66.0	36.0	6.00
RC4035.5	–	5.50	0.2165	28.0	66.0	36.0	6.00
RC4037/32	7/32	5.56	0.2188	28.0	66.0	36.0	6.00
RC4035.6	–	5.60	0.2205	28.0	66.0	36.0	6.00
RC403N2	N2	5.61	0.2209	28.0	66.0	36.0	6.00
RC4035.7	–	5.70	0.2244	28.0	66.0	36.0	6.00
RC403N1	N1	5.79	0.2280	28.0	66.0	36.0	6.00
RC4035.8	–	5.80	0.2283	28.0	66.0	36.0	6.00
RC4035.9	–	5.90	0.2323	28.0	66.0	36.0	6.00
RC403A	A	5.94	0.2339	28.0	66.0	36.0	6.00
RC40315/64	15/64	5.95	0.2344	28.0	66.0	36.0	6.00
RC4036.0	–	6.00	0.2362	28.0	66.0	36.0	6.00
RC403B	B	6.05	0.2380	34.0	79.0	36.0	8.00
RC4036.05	–	6.05	0.2382	34.0	79.0	36.0	8.00
RC4036.1	–	6.10	0.2402	34.0	79.0	36.0	8.00
RC403C	C	6.15	0.2421	34.0	79.0	36.0	8.00
RC4036.2	–	6.20	0.2441	34.0	79.0	36.0	8.00
RC403D	D	6.25	0.2461	34.0	79.0	36.0	8.00
RC4036.3	–	6.30	0.2480	34.0	79.0	36.0	8.00
RC403E	E	6.35	0.2500	34.0	79.0	36.0	8.00
RC4031/4	1/4	6.35	0.2500	34.0	79.0	36.0	8.00
RC4036.4	–	6.40	0.2520	34.0	79.0	36.0	8.00
RC4036.5	–	6.50	0.2559	34.0	79.0	36.0	8.00
RC403F	F	6.53	0.2571	34.0	79.0	36.0	8.00
RC4036.6	–	6.60	0.2598	34.0	79.0	36.0	8.00
RC403G	G	6.63	0.2610	34.0	79.0	36.0	8.00
RC4036.7	–	6.70	0.2638	34.0	79.0	36.0	8.00
RC40317/64	17/64	6.75	0.2656	34.0	79.0	36.0	8.00
RC403H	H	6.76	0.2661	34.0	79.0	36.0	8.00
RC4036.8	–	6.80	0.2677	34.0	79.0	36.0	8.00
RC4036.9	–	6.90	0.2717	34.0	79.0	36.0	8.00
RC403I	I	6.91	0.2720	34.0	79.0	36.0	8.00
RC4037.0	–	7.00	0.2756	34.0	79.0	36.0	8.00
RC403J	J	7.04	0.2772	41.0	79.0	36.0	8.00
RC4037.1	–	7.10	0.2795	41.0	79.0	36.0	8.00
RC403K	K	7.14	0.2811	41.0	79.0	36.0	8.00
RC4039/32	9/32	7.14	0.2813	41.0	79.0	36.0	8.00
RC4037.2	–	7.20	0.2835	41.0	79.0	36.0	8.00
RC4037.3	–	7.30	0.2874	41.0	79.0	36.0	8.00
RC403L	L	7.37	0.2902	41.0	79.0	36.0	8.00
RC4037.4	–	7.40	0.2913	41.0	79.0	36.0	8.00
RC403M	M	7.49	0.2949	41.0	79.0	36.0	8.00
RC4037.5	–	7.50	0.2953	41.0	79.0	36.0	8.00
RC40319/64	19/64	7.54	0.2969	41.0	79.0	36.0	8.00
RC4037.6	–	7.60	0.2992	41.0	79.0	36.0	8.00
RC403N	N	7.67	0.3020	41.0	79.0	36.0	8.00
RC4037.7	–	7.70	0.3031	41.0	79.0	36.0	8.00
RC4037.8	–	7.80	0.3071	41.0	79.0	36.0	8.00

Product	DC	DC	DC	LCF	OAL	LS	DCON MS
	(inch)	(mm)	(inch)	(mm)	(mm)	(mm)	(mm)
RC4037.9	–	7.90	0.3110	41.0	79.0	36.0	8.00
RC4035/16	5/16	7.94	0.3125	41.0	79.0	36.0	8.00
RC4038.0	–	8.00	0.3150	41.0	79.0	36.0	8.00
RC403O	O	8.03	0.3161	47.0	89.0	40.0	10.00
RC4038.05	–	8.05	0.3169	47.0	89.0	40.0	10.00
RC4038.1	–	8.10	0.3189	47.0	89.0	40.0	10.00
RC4038.2	–	8.20	0.3228	47.0	89.0	40.0	10.00
RC403P	P	8.20	0.3228	47.0	89.0	40.0	10.00
RC4038.3	–	8.30	0.3268	47.0	89.0	40.0	10.00
RC40321/64	21/64	8.33	0.3281	47.0	89.0	40.0	10.00
RC4038.4	–	8.40	0.3307	47.0	89.0	40.0	10.00
RC403Q	Q	8.43	0.3319	47.0	89.0	40.0	10.00
RC4038.5	–	8.50	0.3346	47.0	89.0	40.0	10.00
RC4038.6	–	8.60	0.3386	47.0	89.0	40.0	10.00
RC403R	R	8.61	0.3390	47.0	89.0	40.0	10.00
RC4038.7	–	8.70	0.3425	47.0	89.0	40.0	10.00
RC40311/32	11/32	8.73	0.3438	47.0	89.0	40.0	10.00
RC4038.8	–	8.80	0.3465	47.0	89.0	40.0	10.00
RC403S	S	8.84	0.3480	47.0	89.0	40.0	10.00
RC4038.9	–	8.90	0.3504	47.0	89.0	40.0	10.00
RC4039.0	–	9.00	0.3543	47.0	89.0	40.0	10.00
RC403T	T	9.09	0.3579	47.0	89.0	40.0	10.00
RC4039.1	–	9.10	0.3583	47.0	89.0	40.0	10.00
RC40323/64	23/64	9.13	0.3594	47.0	89.0	40.0	10.00
RC4039.2	–	9.20	0.3622	47.0	89.0	40.0	10.00
RC4039.3	–	9.30	0.3661	47.0	89.0	40.0	10.00
RC403U	U	9.35	0.3681	47.0	89.0	40.0	10.00
RC4039.4	–	9.40	0.3701	47.0	89.0	40.0	10.00
RC4039.5	–	9.50	0.3740	47.0	89.0	40.0	10.00
RC4033/8	3/8	9.53	0.3750	47.0	89.0	40.0	10.00
RC403V	V	9.58	0.3772	47.0	89.0	40.0	10.00
RC4039.6	–	9.60	0.3780	47.0	89.0	40.0	10.00
RC4039.7	–	9.70	0.3819	47.0	89.0	40.0	10.00
RC4039.8	–	9.80	0.3858	47.0	89.0	40.0	10.00
RC403W	W	9.80	0.3858	47.0	89.0	40.0	10.00
RC4039.9	–	9.90	0.3898	47.0	89.0	40.0	10.00
RC40325/64	25/64	9.92	0.3906	47.0	89.0	40.0	10.00
RC40310.0	–	10.00	0.3937	47.0	89.0	40.0	10.00
RC40310.05	–	10.05	0.3957	55.0	102.0	45.0	12.00
RC403X	X	10.08	0.3969	55.0	102.0	45.0	12.00
RC40310.1	–	10.10	0.3976	55.0	102.0	45.0	12.00
RC40310.2	–	10.20	0.4016	55.0	102.0	45.0	12.00
RC403Y	Y	10.26	0.4039	55.0	102.0	45.0	12.00
RC40310.3	–	10.30	0.4055	55.0	102.0	45.0	12.00
RC40313/32	13/32	10.32	0.4063	55.0	102.0	45.0	12.00
RC40310.4	–	10.40	0.4094	55.0	102.0	45.0	12.00
RC403Z	Z	10.49	0.4130	55.0	102.0	45.0	12.00
RC40310.5	–	10.50	0.4134	55.0	102.0	45.0	12.00
RC40310.6	–	10.60	0.4173	55.0	102.0	45.0	12.00
RC40327/64	27/64	10.72	0.4219	55.0	102.0	45.0	12.00
RC40310.8	–	10.80	0.4252	55.0	102.0	45.0	12.00
RC40310.9	–	10.90	0.4291	55.0	102.0	45.0	12.00
RC40311.0	–	11.00	0.4331	55.0	102.0	45.0	12.00
RC4037/16	7/16	11.11	0.4375	55.0	102.0	45.0	12.00
RC40311.2	–	11.20	0.4409	55.0	102.0	45.0	12.00
RC40311.3	–	11.30	0.4449	55.0	102.0	45.0	12.00
RC40311.4	–	11.40	0.4488	55.0	102.0	45.0	12.00
RC40311.5	–	11.50	0.4528	55.0	102.0	45.0	12.00
RC40329/64	29/64	11.51	0.4531	55.0	102.0	45.0	12.00
RC40311.6	–	11.60	0.4567	55.0	102.0	45.0	12.00
RC40311.8	–	11.80	0.4646	55.0	102.0	45.0	12.00
RC40315/32	15/32	11.91	0.4688	55.0	102.0	45.0	12.00

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RC40312.0	–	12.00	0.4724	55.0	102.0	45.0	12.00
RC40312.05	–	12.05	0.4744	60.0	107.0	45.0	14.00
RC40312.1	–	12.10	0.4764	60.0	107.0	45.0	14.00
RC40312.2	–	12.20	0.4803	60.0	107.0	45.0	14.00
RC40331/64	31/64	12.30	0.4844	60.0	107.0	45.0	14.00
RC40312.5	–	12.50	0.4921	60.0	107.0	45.0	14.00
RC4031/2	1/2	12.70	0.5000	60.0	107.0	45.0	14.00
RC40312.7	–	12.70	0.5000	60.0	107.0	45.0	14.00
RC40312.8	–	12.80	0.5039	60.0	107.0	45.0	14.00
RC40313.0	–	13.00	0.5118	60.0	107.0	45.0	14.00
RC40333/64	33/64	13.10	0.5156	60.0	107.0	45.0	14.00
RC40313.3	–	13.30	0.5236	60.0	107.0	45.0	14.00
RC40317/32	17/32	13.49	0.5313	60.0	107.0	45.0	14.00
RC40313.5	–	13.50	0.5315	60.0	107.0	45.0	14.00
RC40313.8	–	13.80	0.5433	60.0	107.0	45.0	14.00
RC40335/64	35/64	13.89	0.5469	60.0	107.0	45.0	14.00
RC40314.0	–	14.00	0.5512	60.0	107.0	45.0	14.00
RC40314.25	–	14.25	0.5610	65.0	115.0	48.0	16.00
RC4039/16	9/16	14.29	0.5625	65.0	115.0	48.0	16.00
RC40314.5	–	14.50	0.5709	65.0	115.0	48.0	16.00
RC40337/64	37/64	14.68	0.5781	65.0	115.0	48.0	16.00
RC40314.8	–	14.80	0.5827	65.0	115.0	48.0	16.00
RC40315.0	–	15.00	0.5906	65.0	115.0	48.0	16.00
RC40319/32	19/32	15.08	0.5938	65.0	115.0	48.0	16.00
RC40315.1	–	15.10	0.5945	65.0	115.0	48.0	16.00

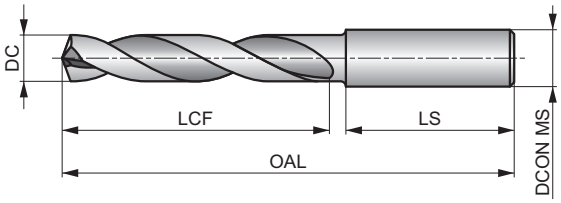
Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RC40315.3	–	15.30	0.6024	65.0	115.0	48.0	16.00
RC40339/64	39/64	15.48	0.6094	65.0	115.0	48.0	16.00
RC40315.5	–	15.50	0.6102	65.0	115.0	48.0	16.00
RC40315.8	–	15.80	0.6220	65.0	115.0	48.0	16.00
RC4035/8	5/8	15.88	0.6250	65.0	115.0	48.0	16.00
RC40316.0	–	16.00	0.6299	65.0	115.0	48.0	16.00
RC40341/64	41/64	16.27	0.6406	73.0	123.0	48.0	18.00
RC40316.5	–	16.50	0.6496	73.0	123.0	48.0	18.00
RC40321/32	21/32	16.67	0.6563	73.0	123.0	48.0	18.00
RC40317.0	–	17.00	0.6693	73.0	123.0	48.0	18.00
RC40343/64	43/64	17.07	0.6720	73.0	123.0	48.0	18.00
RC40311/16	11/16	17.46	0.6874	73.0	123.0	48.0	18.00
RC40317.5	–	17.50	0.6890	73.0	123.0	48.0	18.00
RC40345/64	45/64	17.86	0.7031	73.0	123.0	48.0	18.00
RC40318.0	–	18.00	0.7087	73.0	123.0	48.0	18.00
RC40323/32	23/32	18.26	0.7189	79.0	131.0	50.0	20.00
RC40318.5	–	18.50	0.7283	79.0	131.0	50.0	20.00
RC40347/64	47/64	18.65	0.7343	79.0	131.0	50.0	20.00
RC40318.8	–	18.80	0.7402	79.0	131.0	50.0	20.00
RC40319.0	–	19.00	0.7480	79.0	131.0	50.0	20.00
RC4033/4	3/4	19.05	0.7500	79.0	131.0	50.0	20.00
RC40319.5	–	19.50	0.7677	79.0	131.0	50.0	20.00
RC40319.8	–	19.80	0.7795	79.0	131.0	50.0	20.00
RC40320.0	–	20.00	0.7874	79.0	131.0	50.0	20.00

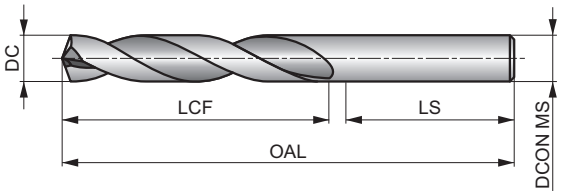
RS405

DORMER PRAMET

FORCE X Solid Carbide 5XD Drill, TiAlN-Top Coated

High-performance drill is specifically designed to deliver superior hole quality at high speeds and feeds (H9 hole tolerance for multi-materials). A 140° self-centering, 4-facet split point and CTW flute construction. TiAlN-top coating increases surface hardness, enhances wear resistance, and extends tool life.





HM	DIN 6537	5×D
140°	TiAlN Top	DIN 6535HA
CTW	R	DC m7

Workpiece material group suitability, starting values for cutting speed (m/min) and feed Alpha Code. Tables with feed per revolution can be found starting from page 24.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
■ 112 V	■ 114 V	■ 114 V	■ 98 V	■ 96 V	■ 84 V	■ 88 V	■ 82 V	■ 80 V	■ 79 V	■ 76 V	■ 40 U	◪ 79 V	◪ 76 V
M2.1	M2.2	M2.3	M3.1	M3.2	M3.3	M4.1	M4.2	K1.1	K1.2	K1.3	K2.1	K2.2	K2.3
◪ 74 U	◪ 60 U	◪ 52 U	◪ 64 U	◪ 52 U	◪ 49 U	◪ 45 U	◪ 38 U	■ 89 W	■ 86 W	■ 84 W	■ 89 W	■ 88 W	■ 79 W
K3.1	K3.2	K3.3	K4.1	K4.2	K4.3	K4.4	K4.5	K5.1	K5.2	K5.3	N1.2	N1.3	N2.1
■ 84 W	■ 79 W	■ 76 W	■ 80 W	■ 64 W	■ 62 W	■ 58 W	■ 56 W	■ 84 V	■ 80 V	■ 64 V	◪ 279 W	◪ 270 W	◪ 199 W
N2.2	N2.3	N3.1	N3.2	N3.3	S1.1	S1.2	S1.3						
◪ 198 W	◪ 180 W	◪ 166 W	◪ 162 W	◪ 158 W	◪ 40 U	◪ 32 U	◪ 28 U						

DCON MS tolerance h6.

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RS4053.0	–	3.00	0.1181	28.0	66.0	36.0	6.00
RS4053.1	–	3.10	0.1220	28.0	66.0	36.0	6.00
RS4051/8	1/8	3.18	0.1250	28.0	66.0	36.0	6.00
RS4053.2	–	3.20	0.1260	28.0	66.0	36.0	6.00
RS405N30	N30	3.26	0.1283	28.0	66.0	36.0	6.00
RS4053.3	–	3.30	0.1299	28.0	66.0	36.0	6.00
RS4053.4	–	3.40	0.1339	28.0	66.0	36.0	6.00
RS405N29	N29	3.45	0.1360	28.0	66.0	36.0	6.00
RS4053.5	–	3.50	0.1378	28.0	66.0	36.0	6.00
RS405N28	N28	3.57	0.1406	28.0	66.0	36.0	6.00
RS4059/64	9/64	3.57	0.1406	28.0	66.0	36.0	6.00
RS4053.6	–	3.60	0.1417	28.0	66.0	36.0	6.00
RS405N27	N27	3.66	0.1441	28.0	66.0	36.0	6.00
RS4053.7	–	3.70	0.1457	28.0	66.0	36.0	6.00
RS405N26	N26	3.73	0.1469	36.0	74.0	36.0	6.00
RS405N25	N25	3.80	0.1496	36.0	74.0	36.0	6.00
RS4053.8	–	3.80	0.1496	36.0	74.0	36.0	6.00
RS405N24	N24	3.86	0.1520	36.0	74.0	36.0	6.00
RS4053.9	–	3.90	0.1535	36.0	74.0	36.0	6.00
RS405N23	N23	3.91	0.1539	36.0	74.0	36.0	6.00
RS4055/32	5/32	3.97	0.1563	36.0	74.0	36.0	6.00
RS405N22	N22	3.99	0.1571	36.0	74.0	36.0	6.00
RS4054.0	–	4.00	0.1575	36.0	74.0	36.0	6.00
RS405N21	N21	4.04	0.1591	36.0	74.0	36.0	6.00
RS405N20	N20	4.09	0.1610	36.0	74.0	36.0	6.00

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RS4054.1	–	4.10	0.1614	36.0	74.0	36.0	6.00
RS4054.2	–	4.20	0.1654	36.0	74.0	36.0	6.00
RS405N19	N19	4.22	0.1661	36.0	74.0	36.0	6.00
RS4054.3	–	4.30	0.1693	36.0	74.0	36.0	6.00
RS405N18	N18	4.31	0.1697	36.0	74.0	36.0	6.00
RS40511/64	11/64	4.37	0.1719	36.0	74.0	36.0	6.00
RS405N17	N17	4.39	0.1728	36.0	74.0	36.0	6.00
RS4054.4	–	4.40	0.1732	36.0	74.0	36.0	6.00
RS405N16	N16	4.50	0.1772	36.0	74.0	36.0	6.00
RS4054.5	–	4.50	0.1772	36.0	74.0	36.0	6.00
RS405N15	N15	4.57	0.1799	36.0	74.0	36.0	6.00
RS4054.6	–	4.60	0.1811	36.0	74.0	36.0	6.00
RS405N14	N14	4.62	0.1819	36.0	74.0	36.0	6.00
RS405N13	N13	4.70	0.1850	36.0	74.0	36.0	6.00
RS4054.7	–	4.70	0.1850	36.0	74.0	36.0	6.00
RS4053/16	3/16	4.76	0.1875	44.0	82.0	36.0	6.00
RS405N12	N12	4.80	0.1890	44.0	82.0	36.0	6.00
RS4054.8	–	4.80	0.1890	44.0	82.0	36.0	6.00
RS405N11	N11	4.85	0.1909	44.0	82.0	36.0	6.00
RS4054.9	–	4.90	0.1929	44.0	82.0	36.0	6.00
RS405N10	N10	4.92	0.1937	44.0	82.0	36.0	6.00
RS405N9	N9	4.98	0.1961	44.0	82.0	36.0	6.00
RS4055.0	–	5.00	0.1969	44.0	82.0	36.0	6.00
RS405N8	N8	5.06	0.1992	44.0	82.0	36.0	6.00
RS4055.1	–	5.10	0.2008	44.0	82.0	36.0	6.00

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RS405N7	N7	5.11	0.2010	44.0	82.0	36.0	6.00
RS40513/64	13/64	5.16	0.2031	44.0	82.0	36.0	6.00
RS405N6	N6	5.18	0.2039	44.0	82.0	36.0	6.00
RS4055.2	–	5.20	0.2047	44.0	82.0	36.0	6.00
RS405N5	N5	5.22	0.2055	44.0	82.0	36.0	6.00
RS405N4	N4	5.31	0.2091	44.0	82.0	36.0	6.00
RS405N3	N3	5.41	0.2130	44.0	82.0	36.0	6.00
RS4055.5	–	5.50	0.2165	44.0	82.0	36.0	6.00
RS4057/32	7/32	5.56	0.2188	44.0	82.0	36.0	6.00
RS4055.6	–	5.60	0.2205	44.0	82.0	36.0	6.00
RS405N2	N2	5.61	0.2209	44.0	82.0	36.0	6.00
RS4055.7	–	5.70	0.2244	44.0	82.0	36.0	6.00
RS405N1	N1	5.79	0.2280	44.0	82.0	36.0	6.00
RS4055.8	–	5.80	0.2283	44.0	82.0	36.0	6.00
RS405A	A	5.94	0.2339	44.0	82.0	36.0	6.00
RS40515/64	15/64	5.95	0.2344	44.0	82.0	36.0	6.00
RS4056.0	–	6.00	0.2362	44.0	82.0	36.0	6.00
RS405B	B	6.05	0.2380	53.0	91.0	36.0	8.00
RS4056.1	–	6.10	0.2402	53.0	91.0	36.0	8.00
RS405C	C	6.15	0.2421	53.0	91.0	36.0	8.00
RS4056.2	–	6.20	0.2441	53.0	91.0	36.0	8.00
RS405D	D	6.25	0.2461	53.0	91.0	36.0	8.00
RS4056.3	–	6.30	0.2480	53.0	91.0	36.0	8.00
RS405E	E	6.35	0.2500	53.0	91.0	36.0	8.00
RS4051/4	1/4	6.35	0.2500	53.0	91.0	36.0	8.00
RS4056.4	–	6.40	0.2520	53.0	91.0	36.0	8.00
RS4056.5	–	6.50	0.2559	53.0	91.0	36.0	8.00
RS405F	F	6.53	0.2571	53.0	91.0	36.0	8.00
RS4056.6	–	6.60	0.2598	53.0	91.0	36.0	8.00
RS405G	G	6.63	0.2610	53.0	91.0	36.0	8.00
RS4056.7	–	6.70	0.2638	53.0	91.0	36.0	8.00
RS40517/64	17/64	6.75	0.2656	53.0	91.0	36.0	8.00
RS405H	H	6.76	0.2661	53.0	91.0	36.0	8.00
RS4056.8	–	6.80	0.2677	53.0	91.0	36.0	8.00
RS4056.9	–	6.90	0.2717	53.0	91.0	36.0	8.00
RS405I	I	6.91	0.2720	53.0	91.0	36.0	8.00
RS4057.0	–	7.00	0.2756	53.0	91.0	36.0	8.00
RS405J	J	7.04	0.2772	53.0	91.0	36.0	8.00
RS4057.1	–	7.10	0.2795	53.0	91.0	36.0	8.00
RS405K	K	7.14	0.2811	53.0	91.0	36.0	8.00
RS4059/32	9/32	7.14	0.2813	53.0	91.0	36.0	8.00
RS4057.3	–	7.30	0.2874	53.0	91.0	36.0	8.00
RS405L	L	7.37	0.2902	53.0	91.0	36.0	8.00
RS4057.4	–	7.40	0.2913	53.0	91.0	36.0	8.00
RS405M	M	7.49	0.2949	53.0	91.0	36.0	8.00
RS4057.5	–	7.50	0.2953	53.0	91.0	36.0	8.00
RS40519/64	19/64	7.54	0.2969	53.0	91.0	36.0	8.00
RS4057.6	–	7.60	0.2992	53.0	91.0	36.0	8.00
RS405N	N	7.67	0.3020	53.0	91.0	36.0	8.00
RS4057.7	–	7.70	0.3031	53.0	91.0	36.0	8.00
RS4057.8	–	7.80	0.3071	53.0	91.0	36.0	8.00
RS4057.9	–	7.90	0.3110	53.0	91.0	36.0	8.00
RS4055/16	5/16	7.94	0.3125	53.0	91.0	36.0	8.00
RS4058.0	–	8.00	0.3150	53.0	91.0	36.0	8.00
RS405O	O	8.03	0.3161	61.0	103.0	40.0	10.00
RS4058.1	–	8.10	0.3189	61.0	103.0	40.0	10.00
RS4058.2	–	8.20	0.3228	61.0	103.0	40.0	10.00
RS405P	P	8.20	0.3228	61.0	103.0	40.0	10.00
RS40521/64	21/64	8.33	0.3281	61.0	103.0	40.0	10.00
RS4058.4	–	8.40	0.3307	61.0	103.0	40.0	10.00
RS405Q	Q	8.43	0.3319	61.0	103.0	40.0	10.00
RS4058.5	–	8.50	0.3346	61.0	103.0	40.0	10.00

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RS4058.6	–	8.60	0.3386	61.0	103.0	40.0	10.00
RS405R	R	8.61	0.3390	61.0	103.0	40.0	10.00
RS4058.7	–	8.70	0.3425	61.0	103.0	40.0	10.00
RS40511/32	11/32	8.73	0.3438	61.0	103.0	40.0	10.00
RS4058.8	–	8.80	0.3465	61.0	103.0	40.0	10.00
RS405S	S	8.84	0.3480	61.0	103.0	40.0	10.00
RS4058.9	–	8.90	0.3504	61.0	103.0	40.0	10.00
RS4059.0	–	9.00	0.3543	61.0	103.0	40.0	10.00
RS405T	T	9.09	0.3579	61.0	103.0	40.0	10.00
RS4059.1	–	9.10	0.3583	61.0	103.0	40.0	10.00
RS40523/64	23/64	9.13	0.3594	61.0	103.0	40.0	10.00
RS4059.3	–	9.30	0.3661	61.0	103.0	40.0	10.00
RS405U	U	9.35	0.3681	61.0	103.0	40.0	10.00
RS4059.4	–	9.40	0.3701	61.0	103.0	40.0	10.00
RS4059.5	–	9.50	0.3740	61.0	103.0	40.0	10.00
RS4053/8	3/8	9.53	0.3750	61.0	103.0	40.0	10.00
RS405V	V	9.58	0.3772	61.0	103.0	40.0	10.00
RS4059.6	–	9.60	0.3780	61.0	103.0	40.0	10.00
RS4059.7	–	9.70	0.3819	61.0	103.0	40.0	10.00
RS4059.8	–	9.80	0.3858	61.0	103.0	40.0	10.00
RS405W	W	9.80	0.3858	61.0	103.0	40.0	10.00
RS4059.9	–	9.90	0.3898	61.0	103.0	40.0	10.00
RS40525/64	25/64	9.92	0.3906	61.0	103.0	40.0	10.00
RS40510.0	–	10.00	0.3937	61.0	103.0	40.0	10.00
RS405X	X	10.08	0.3969	70.0	118.0	45.0	12.00
RS40510.1	–	10.10	0.3976	70.0	118.0	45.0	12.00
RS40510.2	–	10.20	0.4016	70.0	118.0	45.0	12.00
RS405Y	Y	10.26	0.4039	70.0	118.0	45.0	12.00
RS40510.3	–	10.30	0.4055	70.0	118.0	45.0	12.00
RS40513/32	13/32	10.32	0.4063	70.0	118.0	45.0	12.00
RS40510.4	–	10.40	0.4094	70.0	118.0	45.0	12.00
RS405Z	Z	10.49	0.4130	70.0	118.0	45.0	12.00
RS40510.5	–	10.50	0.4134	70.0	118.0	45.0	12.00
RS40510.6	–	10.60	0.4173	70.0	118.0	45.0	12.00
RS40527/64	27/64	10.72	0.4219	70.0	118.0	45.0	12.00
RS40511.0	–	11.00	0.4331	70.0	118.0	45.0	12.00
RS4057/16	7/16	11.11	0.4375	70.0	118.0	45.0	12.00
RS40511.2	–	11.20	0.4409	70.0	118.0	45.0	12.00
RS40511.4	–	11.40	0.4488	70.0	118.0	45.0	12.00
RS40511.5	–	11.50	0.4528	70.0	118.0	45.0	12.00
RS40529/64	29/64	11.51	0.4531	70.0	118.0	45.0	12.00
RS40511.6	–	11.60	0.4567	70.0	118.0	45.0	12.00
RS40511.8	–	11.80	0.4646	70.0	118.0	45.0	12.00
RS40515/32	15/32	11.91	0.4688	70.0	118.0	45.0	12.00
RS40512.0	–	12.00	0.4724	70.0	118.0	45.0	12.00
RS40512.1	–	12.10	0.4764	76.0	124.0	45.0	14.00
RS40512.2	–	12.20	0.4803	76.0	124.0	45.0	14.00
RS40531/64	31/64	12.30	0.4844	76.0	124.0	45.0	14.00
RS40512.5	–	12.50	0.4921	76.0	124.0	45.0	14.00
RS4051/2	1/2	12.70	0.5000	76.0	124.0	45.0	14.00
RS40512.7	–	12.70	0.5000	76.0	124.0	45.0	14.00
RS40512.8	–	12.80	0.5039	76.0	124.0	45.0	14.00
RS40513.0	–	13.00	0.5118	76.0	124.0	45.0	14.00
RS40533/64	33/64	13.10	0.5156	76.0	124.0	45.0	14.00
RS40517/32	17/32	13.49	0.5313	76.0	124.0	45.0	14.00
RS40513.5	–	13.50	0.5315	76.0	124.0	45.0	14.00
RS40513.8	–	13.80	0.5433	76.0	124.0	45.0	14.00
RS40535/64	35/64	13.89	0.5469	76.0	124.0	45.0	14.00
RS40514.0	–	14.00	0.5512	76.0	124.0	45.0	14.00
RS40514.25	–	14.25	0.5610	82.0	133.0	48.0	16.00
RS4059/16	9/16	14.29	0.5625	82.0	133.0	48.0	16.00
RS40514.5	–	14.50	0.5709	82.0	133.0	48.0	16.00

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RS40537/64	37/64	14.68	0.5781	82.0	133.0	48.0	16.00
RS40514.8	–	14.80	0.5827	82.0	133.0	48.0	16.00
RS40515.0	–	15.00	0.5906	82.0	133.0	48.0	16.00
RS40519/32	19/32	15.08	0.5938	82.0	133.0	48.0	16.00
RS40515.1	–	15.10	0.5945	82.0	133.0	48.0	16.00
RS40539/64	39/64	15.48	0.6094	82.0	133.0	48.0	16.00
RS40515.5	–	15.50	0.6102	82.0	133.0	48.0	16.00
RS40515.8	–	15.80	0.6220	82.0	133.0	48.0	16.00
RS4055/8	5/8	15.88	0.6250	82.0	133.0	48.0	16.00
RS40516.0	–	16.00	0.6299	82.0	133.0	48.0	16.00
RS40541/64	41/64	16.27	0.6406	91.0	143.0	48.0	18.00
RS40516.5	–	16.50	0.6496	91.0	143.0	48.0	18.00
RS40521/32	21/32	16.67	0.6563	91.0	143.0	48.0	18.00
RS40517.0	–	17.00	0.6693	91.0	143.0	48.0	18.00

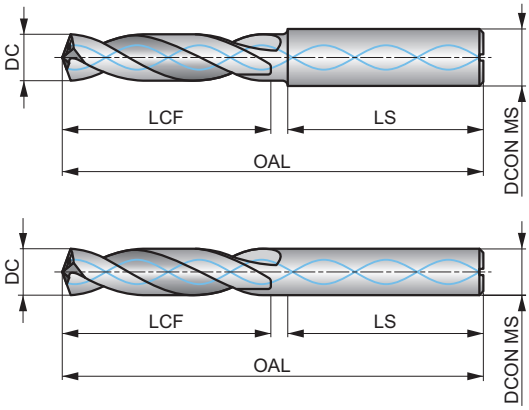
Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RS40543/64	43/64	17.07	0.6720	91.0	143.0	48.0	18.00
RS40511/16	11/16	17.46	0.6874	91.0	143.0	48.0	18.00
RS40517.5	–	17.50	0.6890	91.0	143.0	48.0	18.00
RS40517.8	–	17.80	0.7008	91.0	143.0	48.0	18.00
RS40545/64	45/64	17.86	0.7031	91.0	143.0	48.0	18.00
RS40518.0	–	18.00	0.7087	91.0	143.0	48.0	18.00
RS40523/32	23/32	18.26	0.7189	99.0	153.0	50.0	20.00
RS40518.5	–	18.50	0.7283	99.0	153.0	50.0	20.00
RS40547/64	47/64	18.65	0.7343	99.0	153.0	50.0	20.00
RS40519.0	–	19.00	0.7480	99.0	153.0	50.0	20.00
RS4053/4	3/4	19.05	0.7500	99.0	153.0	50.0	20.00
RS40519.5	–	19.50	0.7677	99.0	153.0	50.0	20.00
RS40519.8	–	19.80	0.7795	99.0	153.0	50.0	20.00
RS40520.0	–	20.00	0.7874	99.0	153.0	50.0	20.00

RC405

DORMER PRAMET

FORCE X Solid Carbide 5XD Drill with Coolant Feed, TiAlN-Top Coated

High-performance drill is specifically designed to deliver superior hole quality at high speeds and feeds (H9 hole tolerance for multi-materials). A 140° self-centering, 4-facet split point and CTW flute construction. Coolant holes enhance chip evacuation. TiAlN-top coating increases surface hardness, enhances wear resistance, and extends tool life.



HM	DIN 6537	5×D
140°	TiAlN Top	DIN 6535HA
CTW	R	DC m7

Workpiece material group suitability, starting values for cutting speed (m/min) and feed Alpha Code. Tables with feed per revolution can be found starting from page 24.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
140 W	142 W	142 W	122 W	120 W	105 V	110 V	102 V	100 V	99 V	95 V	50 U	105 G	101 G
M2.1	M2.2	M2.3	M3.1	M3.2	M3.3	M4.1	M4.2	K1.1	K1.2	K1.3	K2.1	K2.2	K2.3
99 G	80 G	70 E	85 G	70 G	65 F	60 F	50 E	111 W	108 W	105 W	111 W	110 W	99 W
K3.1	K3.2	K3.3	K4.1	K4.2	K4.3	K4.4	K4.5	K5.1	K5.2	K5.3	N1.1	N1.2	N1.3
105 W	99 W	95 W	100 W	80 W	77 W	72 W	70 W	105 W	100 W	80 W	305 W	310 W	300 W
N2.1	N2.2	N2.3	N3.1	N3.2	N3.3	S1.1	S1.2	S1.3	S2.1	S2.2	S3.1	S3.2	S4.1
221 W	220 W	200 W	185 W	180 W	175 W	50 V	40 V	35 U	40 U	28 U	32 U	32 U	30 U
S4.2													
25 U													

DCON MS tolerance h6.

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RC4053.0	–	3.00	0.1181	28.0	66.0	36.0	6.00
RC4053.1	–	3.10	0.1220	28.0	66.0	36.0	6.00
RC4051/8	1/8	3.18	0.1250	28.0	66.0	36.0	6.00
RC4053.2	–	3.20	0.1260	28.0	66.0	36.0	6.00
RC405N30	N30	3.26	0.1283	28.0	66.0	36.0	6.00
RC4053.3	–	3.30	0.1299	28.0	66.0	36.0	6.00
RC4053.4	–	3.40	0.1339	28.0	66.0	36.0	6.00
RC405N29	N29	3.45	0.1360	28.0	66.0	36.0	6.00
RC4053.5	–	3.50	0.1378	28.0	66.0	36.0	6.00
RC405N28	N28	3.57	0.1406	28.0	66.0	36.0	6.00
RC4059/64	9/64	3.57	0.1406	28.0	66.0	36.0	6.00
RC4053.6	–	3.60	0.1417	28.0	66.0	36.0	6.00
RC405N27	N27	3.66	0.1441	28.0	66.0	36.0	6.00
RC4053.7	–	3.70	0.1457	28.0	66.0	36.0	6.00
RC405N26	N26	3.73	0.1469	36.0	74.0	36.0	6.00
RC405N25	N25	3.80	0.1496	36.0	74.0	36.0	6.00
RC4053.8	–	3.80	0.1496	36.0	74.0	36.0	6.00
RC405N24	N24	3.86	0.1520	36.0	74.0	36.0	6.00
RC4053.9	–	3.90	0.1535	36.0	74.0	36.0	6.00
RC405N23	N23	3.91	0.1539	36.0	74.0	36.0	6.00
RC4055/32	5/32	3.97	0.1563	36.0	74.0	36.0	6.00
RC405N22	N22	3.99	0.1571	36.0	74.0	36.0	6.00
RC4054.0	–	4.00	0.1575	36.0	74.0	36.0	6.00

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RC405N21	N21	4.04	0.1591	36.0	74.0	36.0	6.00
RC4054.05	–	4.05	0.1594	36.0	74.0	36.0	6.00
RC405N20	N20	4.09	0.1610	36.0	74.0	36.0	6.00
RC4054.1	–	4.10	0.1614	36.0	74.0	36.0	6.00
RC4054.2	–	4.20	0.1654	36.0	74.0	36.0	6.00
RC405N19	N19	4.22	0.1661	36.0	74.0	36.0	6.00
RC4054.3	–	4.30	0.1693	36.0	74.0	36.0	6.00
RC405N18	N18	4.31	0.1697	36.0	74.0	36.0	6.00
RC40511/64	11/64	4.37	0.1719	36.0	74.0	36.0	6.00
RC405N17	N17	4.39	0.1728	36.0	74.0	36.0	6.00
RC4054.4	–	4.40	0.1732	36.0	74.0	36.0	6.00
RC405N16	N16	4.50	0.1772	36.0	74.0	36.0	6.00
RC4054.5	–	4.50	0.1772	36.0	74.0	36.0	6.00
RC405N15	N15	4.57	0.1799	36.0	74.0	36.0	6.00
RC4054.6	–	4.60	0.1811	36.0	74.0	36.0	6.00
RC405N14	N14	4.62	0.1819	36.0	74.0	36.0	6.00
RC405N13	N13	4.70	0.1850	36.0	74.0	36.0	6.00
RC4054.7	–	4.70	0.1850	36.0	74.0	36.0	6.00
RC4053/16	3/16	4.76	0.1875	44.0	82.0	36.0	6.00
RC405N12	N12	4.80	0.1890	44.0	82.0	36.0	6.00
RC4054.8	–	4.80	0.1890	44.0	82.0	36.0	6.00
RC405N11	N11	4.85	0.1909	44.0	82.0	36.0	6.00
RC4054.9	–	4.90	0.1929	44.0	82.0	36.0	6.00

Product	DC	DC	DC	LCF	OAL	LS	DCON MS
	(inch)	(mm)	(inch)	(mm)	(mm)	(mm)	(mm)
RC405N10	N10	4.92	0.1937	44.0	82.0	36.0	6.00
RC405N9	N9	4.98	0.1961	44.0	82.0	36.0	6.00
RC4055.0	–	5.00	0.1969	44.0	82.0	36.0	6.00
RC4055.05	–	5.05	0.1988	44.0	82.0	36.0	6.00
RC405N8	N8	5.06	0.1992	44.0	82.0	36.0	6.00
RC4055.1	–	5.10	0.2008	44.0	82.0	36.0	6.00
RC405N7	N7	5.11	0.2010	44.0	82.0	36.0	6.00
RC40513/64	13/64	5.16	0.2031	44.0	82.0	36.0	6.00
RC405N6	N6	5.18	0.2039	44.0	82.0	36.0	6.00
RC4055.2	–	5.20	0.2047	44.0	82.0	36.0	6.00
RC405N5	N5	5.22	0.2055	44.0	82.0	36.0	6.00
RC4055.3	–	5.30	0.2087	44.0	82.0	36.0	6.00
RC405N4	N4	5.31	0.2091	44.0	82.0	36.0	6.00
RC4055.4	–	5.40	0.2126	44.0	82.0	36.0	6.00
RC405N3	N3	5.41	0.2130	44.0	82.0	36.0	6.00
RC4055.5	–	5.50	0.2165	44.0	82.0	36.0	6.00
RC4057/32	7/32	5.56	0.2188	44.0	82.0	36.0	6.00
RC4055.6	–	5.60	0.2205	44.0	82.0	36.0	6.00
RC405N2	N2	5.61	0.2209	44.0	82.0	36.0	6.00
RC4055.7	–	5.70	0.2244	44.0	82.0	36.0	6.00
RC405N1	N1	5.79	0.2280	44.0	82.0	36.0	6.00
RC4055.8	–	5.80	0.2283	44.0	82.0	36.0	6.00
RC4055.9	–	5.90	0.2323	44.0	82.0	36.0	6.00
RC405A	A	5.94	0.2339	44.0	82.0	36.0	6.00
RC40515/64	15/64	5.95	0.2344	44.0	82.0	36.0	6.00
RC4056.0	–	6.00	0.2362	44.0	82.0	36.0	6.00
RC405B	B	6.05	0.2380	53.0	91.0	36.0	8.00
RC4056.05	–	6.05	0.2382	53.0	91.0	36.0	8.00
RC4056.1	–	6.10	0.2402	53.0	91.0	36.0	8.00
RC405C	C	6.15	0.2421	53.0	91.0	36.0	8.00
RC4056.2	–	6.20	0.2441	53.0	91.0	36.0	8.00
RC405D	D	6.25	0.2461	53.0	91.0	36.0	8.00
RC4056.3	–	6.30	0.2480	53.0	91.0	36.0	8.00
RC405E	E	6.35	0.2500	53.0	91.0	36.0	8.00
RC4051/4	1/4	6.35	0.2500	53.0	91.0	36.0	8.00
RC4056.4	–	6.40	0.2520	53.0	91.0	36.0	8.00
RC4056.5	–	6.50	0.2559	53.0	91.0	36.0	8.00
RC405F	F	6.53	0.2571	53.0	91.0	36.0	8.00
RC4056.6	–	6.60	0.2598	53.0	91.0	36.0	8.00
RC405G	G	6.63	0.2610	53.0	91.0	36.0	8.00
RC4056.7	–	6.70	0.2638	53.0	91.0	36.0	8.00
RC40517/64	17/64	6.75	0.2656	53.0	91.0	36.0	8.00
RC405H	H	6.76	0.2661	53.0	91.0	36.0	8.00
RC4056.8	–	6.80	0.2677	53.0	91.0	36.0	8.00
RC4056.9	–	6.90	0.2717	53.0	91.0	36.0	8.00
RC405I	I	6.91	0.2720	53.0	91.0	36.0	8.00
RC4057.0	–	7.00	0.2756	53.0	91.0	36.0	8.00
RC405J	J	7.04	0.2772	53.0	91.0	36.0	8.00
RC4057.1	–	7.10	0.2795	53.0	91.0	36.0	8.00
RC405K	K	7.14	0.2811	53.0	91.0	36.0	8.00
RC4059/32	9/32	7.14	0.2813	53.0	91.0	36.0	8.00
RC4057.2	–	7.20	0.2835	53.0	91.0	36.0	8.00
RC4057.3	–	7.30	0.2874	53.0	91.0	36.0	8.00
RC405L	L	7.37	0.2902	53.0	91.0	36.0	8.00
RC4057.4	–	7.40	0.2913	53.0	91.0	36.0	8.00
RC405M	M	7.49	0.2949	53.0	91.0	36.0	8.00
RC4057.5	–	7.50	0.2953	53.0	91.0	36.0	8.00
RC40519/64	19/64	7.54	0.2969	53.0	91.0	36.0	8.00
RC4057.6	–	7.60	0.2992	53.0	91.0	36.0	8.00
RC405N	N	7.67	0.3020	53.0	91.0	36.0	8.00
RC4057.7	–	7.70	0.3031	53.0	91.0	36.0	8.00
RC4057.8	–	7.80	0.3071	53.0	91.0	36.0	8.00

Product	DC	DC	DC	LCF	OAL	LS	DCON MS
	(inch)	(mm)	(inch)	(mm)	(mm)	(mm)	(mm)
RC4057.9	–	7.90	0.3110	53.0	91.0	36.0	8.00
RC4055/16	5/16	7.94	0.3125	53.0	91.0	36.0	8.00
RC4058.0	–	8.00	0.3150	53.0	91.0	36.0	8.00
RC405O	O	8.03	0.3161	61.0	103.0	40.0	10.00
RC4058.05	–	8.05	0.3169	61.0	103.0	40.0	10.00
RC4058.1	–	8.10	0.3189	61.0	103.0	40.0	10.00
RC4058.2	–	8.20	0.3228	61.0	103.0	40.0	10.00
RC405P	P	8.20	0.3228	61.0	103.0	40.0	10.00
RC4058.3	–	8.30	0.3268	61.0	103.0	40.0	10.00
RC40521/64	21/64	8.33	0.3281	61.0	103.0	40.0	10.00
RC4058.4	–	8.40	0.3307	61.0	103.0	40.0	10.00
RC405Q	Q	8.43	0.3319	61.0	103.0	40.0	10.00
RC4058.5	–	8.50	0.3346	61.0	103.0	40.0	10.00
RC4058.6	–	8.60	0.3386	61.0	103.0	40.0	10.00
RC405R	R	8.61	0.3390	61.0	103.0	40.0	10.00
RC4058.7	–	8.70	0.3425	61.0	103.0	40.0	10.00
RC40511/32	11/32	8.73	0.3438	61.0	103.0	40.0	10.00
RC4058.8	–	8.80	0.3465	61.0	103.0	40.0	10.00
RC405S	S	8.84	0.3480	61.0	103.0	40.0	10.00
RC4058.9	–	8.90	0.3504	61.0	103.0	40.0	10.00
RC4059.0	–	9.00	0.3543	61.0	103.0	40.0	10.00
RC405T	T	9.09	0.3579	61.0	103.0	40.0	10.00
RC4059.1	–	9.10	0.3583	61.0	103.0	40.0	10.00
RC40523/64	23/64	9.13	0.3594	61.0	103.0	40.0	10.00
RC4059.2	–	9.20	0.3622	61.0	103.0	40.0	10.00
RC4059.3	–	9.30	0.3661	61.0	103.0	40.0	10.00
RC405U	U	9.35	0.3681	61.0	103.0	40.0	10.00
RC4059.4	–	9.40	0.3701	61.0	103.0	40.0	10.00
RC4059.5	–	9.50	0.3740	61.0	103.0	40.0	10.00
RC4053/8	3/8	9.53	0.3750	61.0	103.0	40.0	10.00
RC405V	V	9.58	0.3772	61.0	103.0	40.0	10.00
RC4059.6	–	9.60	0.3780	61.0	103.0	40.0	10.00
RC4059.7	–	9.70	0.3819	61.0	103.0	40.0	10.00
RC4059.8	–	9.80	0.3858	61.0	103.0	40.0	10.00
RC405W	W	9.80	0.3858	61.0	103.0	40.0	10.00
RC4059.9	–	9.90	0.3898	61.0	103.0	40.0	10.00
RC40525/64	25/64	9.92	0.3906	61.0	103.0	40.0	10.00
RC40510.0	–	10.00	0.3937	61.0	103.0	40.0	10.00
RC40510.05	–	10.05	0.3957	70.0	118.0	45.0	12.00
RC405X	X	10.08	0.3969	70.0	118.0	45.0	12.00
RC40510.1	–	10.10	0.3976	70.0	118.0	45.0	12.00
RC40510.2	–	10.20	0.4016	70.0	118.0	45.0	12.00
RC405Y	Y	10.26	0.4039	70.0	118.0	45.0	12.00
RC40510.3	–	10.30	0.4055	70.0	118.0	45.0	12.00
RC40513/32	13/32	10.32	0.4063	70.0	118.0	45.0	12.00
RC40510.4	–	10.40	0.4094	70.0	118.0	45.0	12.00
RC405Z	Z	10.49	0.4130	70.0	118.0	45.0	12.00
RC40510.5	–	10.50	0.4134	70.0	118.0	45.0	12.00
RC40510.6	–	10.60	0.4173	70.0	118.0	45.0	12.00
RC40527/64	27/64	10.72	0.4219	70.0	118.0	45.0	12.00
RC40510.8	–	10.80	0.4252	70.0	118.0	45.0	12.00
RC40510.9	–	10.90	0.4291	70.0	118.0	45.0	12.00
RC40511.0	–	11.00	0.4331	70.0	118.0	45.0	12.00
RC4057/16	7/16	11.11	0.4375	70.0	118.0	45.0	12.00
RC40511.2	–	11.20	0.4409	70.0	118.0	45.0	12.00
RC40511.3	–	11.30	0.4449	70.0	118.0	45.0	12.00
RC40511.4	–	11.40	0.4488	70.0	118.0	45.0	12.00
RC40511.5	–	11.50	0.4528	70.0	118.0	45.0	12.00
RC40529/64	29/64	11.51	0.4531	70.0	118.0	45.0	12.00
RC40511.6	–	11.60	0.4567	70.0	118.0	45.0	12.00
RC40511.8	–	11.80	0.4646	70.0	118.0	45.0	12.00
RC40515/32	15/32	11.91	0.4688	70.0	118.0	45.0	12.00

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RC40512.0	–	12.00	0.4724	70.0	118.0	45.0	12.00
RC40512.05	–	12.05	0.4744	76.0	124.0	45.0	14.00
RC40512.2	–	12.20	0.4803	76.0	124.0	45.0	14.00
RC40531/64	31/64	12.30	0.4844	76.0	124.0	45.0	14.00
RC40512.5	–	12.50	0.4921	76.0	124.0	45.0	14.00
RC4051/2	1/2	12.70	0.5000	76.0	124.0	45.0	14.00
RC40512.7	–	12.70	0.5000	76.0	124.0	45.0	14.00
RC40512.8	–	12.80	0.5039	76.0	124.0	45.0	14.00
RC40513.0	–	13.00	0.5118	76.0	124.0	45.0	14.00
RC40533/64	33/64	13.10	0.5156	76.0	124.0	45.0	14.00
RC40513.3	–	13.30	0.5236	76.0	124.0	45.0	14.00
RC40517/32	17/32	13.49	0.5313	76.0	124.0	45.0	14.00
RC40513.5	–	13.50	0.5315	76.0	124.0	45.0	14.00
RC40513.8	–	13.80	0.5433	76.0	124.0	45.0	14.00
RC40535/64	35/64	13.89	0.5469	76.0	124.0	45.0	14.00
RC40514.0	–	14.00	0.5512	76.0	124.0	45.0	14.00
RC40514.25	–	14.25	0.5610	82.0	133.0	48.0	16.00
RC4059/16	9/16	14.29	0.5625	82.0	133.0	48.0	16.00
RC40514.5	–	14.50	0.5709	82.0	133.0	48.0	16.00
RC40537/64	37/64	14.68	0.5781	82.0	133.0	48.0	16.00
RC40514.8	–	14.80	0.5827	82.0	133.0	48.0	16.00
RC40515.0	–	15.00	0.5906	82.0	133.0	48.0	16.00
RC40519/32	19/32	15.08	0.5938	82.0	133.0	48.0	16.00
RC40515.1	–	15.10	0.5945	82.0	133.0	48.0	16.00

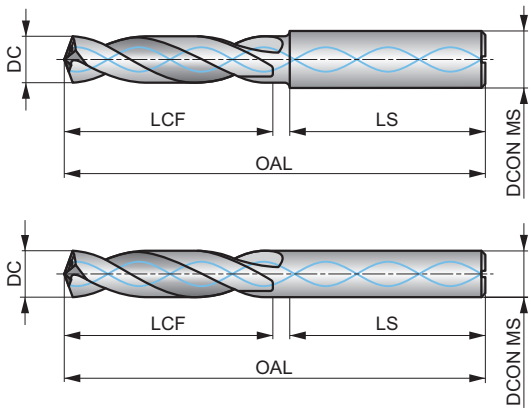
Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RC40515.3	–	15.30	0.6024	82.0	133.0	48.0	16.00
RC40539/64	39/64	15.48	0.6094	82.0	133.0	48.0	16.00
RC40515.5	–	15.50	0.6102	82.0	133.0	48.0	16.00
RC40515.8	–	15.80	0.6220	82.0	133.0	48.0	16.00
RC4055/8	5/8	15.88	0.6250	82.0	133.0	48.0	16.00
RC40516.0	–	16.00	0.6299	82.0	133.0	48.0	16.00
RC40541/64	41/64	16.27	0.6406	91.0	143.0	48.0	18.00
RC40516.5	–	16.50	0.6496	91.0	143.0	48.0	18.00
RC40521/32	21/32	16.67	0.6563	91.0	143.0	48.0	18.00
RC40517.0	–	17.00	0.6693	91.0	143.0	48.0	18.00
RC40543/64	43/64	17.07	0.6720	91.0	143.0	48.0	18.00
RC40511/16	11/16	17.46	0.6874	91.0	143.0	48.0	18.00
RC40517.5	–	17.50	0.6890	91.0	143.0	48.0	18.00
RC40517.8	–	17.80	0.7008	91.0	143.0	48.0	18.00
RC40545/64	45/64	17.86	0.7031	91.0	143.0	48.0	18.00
RC40518.0	–	18.00	0.7087	91.0	143.0	48.0	18.00
RC40523/32	23/32	18.26	0.7189	99.0	153.0	50.0	20.00
RC40518.5	–	18.50	0.7283	99.0	153.0	50.0	20.00
RC40547/64	47/64	18.65	0.7343	99.0	153.0	50.0	20.00
RC40519.0	–	19.00	0.7480	99.0	153.0	50.0	20.00
RC4053/4	3/4	19.05	0.7500	99.0	153.0	50.0	20.00
RC40519.5	–	19.50	0.7677	99.0	153.0	50.0	20.00
RC40519.8	–	19.80	0.7795	99.0	153.0	50.0	20.00
RC40520.0	–	20.00	0.7874	99.0	153.0	50.0	20.00

RC408

DORMER PRAMET

FORCE X Solid Carbide 8XD Drill with Coolant Feed, TiAlN-Top Coated

High-performance drill is specifically designed to deliver superior hole quality at high speeds and feeds (H9 hole tolerance for multi-materials). A 140° self-centering, 4-facet split point and CTW flute construction. Coolant holes enhance chip evacuation. TiAlN-top coating increases surface hardness, enhances wear resistance, and extends tool life.



HM	WORK NORM	8×D
140°	TiAlN Top	DIN 6535HA
CTW	R	DC m7

Workpiece material group suitability, starting values for cutting speed (m/min) and feed Alpha Code. Tables with feed per revolution can be found starting from page 24.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
■ 140 W	■ 142 W	■ 142 W	■ 122 W	■ 120 W	■ 105 V	■ 110 V	■ 102 V	■ 100 V	■ 99 V	■ 95 V	■ 50 T	■ 105 G	■ 101 G
M2.1	M2.2	M2.3	M3.1	M3.2	M3.3	M4.1	M4.2	K1.1	K1.2	K1.3	K2.1	K2.2	K2.3
■ 99 G	■ 80 G	■ 70 E	■ 85 G	■ 70 G	■ 65 F	■ 60 F	■ 50 E	■ 111 W	■ 108 W	■ 105 W	■ 111 W	■ 110 W	■ 99 W
K3.1	K3.2	K3.3	K4.1	K4.2	K4.3	K4.4	K4.5	K5.1	K5.2	K5.3	N1.1	N1.2	N1.3
■ 105 W	■ 99 W	■ 95 W	■ 100 W	■ 80 W	■ 77 W	■ 72 W	■ 70 W	■ 105 W	■ 100 W	■ 80 W	◪ 305 W	◪ 310 W	◪ 300 W
N2.1	N2.2	N2.3	N3.1	N3.2	N3.3	S1.1	S1.2	S1.3	S2.1	S2.2	S3.1	S3.2	S4.1
◪ 221 W	◪ 220 W	◪ 200 W	◪ 185 W	◪ 180 W	◪ 175 W	■ 50 V	■ 40 V	■ 35 U	◪ 40 U	◪ 28 U	◪ 32 U	◪ 32 U	◪ 30 U
S4.2													
◪ 25 U													

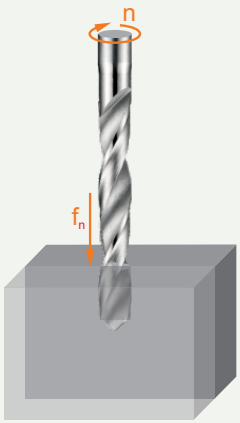
DCON MS tolerance h6.

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RC4083.0	–	3.00	0.1181	37.0	79.0	36.0	6.00
RC4083.1	–	3.10	0.1220	37.0	79.0	36.0	6.00
RC4081/8	1/8	3.18	0.1250	37.0	79.0	36.0	6.00
RC4083.2	–	3.20	0.1260	37.0	79.0	36.0	6.00
RC4083.3	–	3.30	0.1299	37.0	79.0	36.0	6.00
RC4083.4	–	3.40	0.1339	37.0	79.0	36.0	6.00
RC4083.5	–	3.50	0.1378	37.0	79.0	36.0	6.00
RC4089/64	9/64	3.57	0.1406	37.0	79.0	36.0	6.00
RC4083.6	–	3.60	0.1417	37.0	79.0	36.0	6.00
RC4083.7	–	3.70	0.1457	37.0	79.0	36.0	6.00
RC4083.8	–	3.80	0.1496	48.0	90.0	36.0	6.00
RC4083.9	–	3.90	0.1535	48.0	90.0	36.0	6.00
RC4085/32	5/32	3.97	0.1563	48.0	90.0	36.0	6.00
RC4084.0	–	4.00	0.1575	48.0	90.0	36.0	6.00
RC4084.1	–	4.10	0.1614	48.0	90.0	36.0	6.00
RC4084.2	–	4.20	0.1654	48.0	90.0	36.0	6.00
RC4084.3	–	4.30	0.1693	48.0	90.0	36.0	6.00
RC40811/64	11/64	4.37	0.1719	48.0	90.0	36.0	6.00
RC4084.4	–	4.40	0.1732	48.0	90.0	36.0	6.00
RC4084.5	–	4.50	0.1772	48.0	90.0	36.0	6.00
RC4084.6	–	4.60	0.1811	48.0	90.0	36.0	6.00
RC4084.7	–	4.70	0.1850	62.0	104.0	36.0	6.00
RC4083/16	3/16	4.76	0.1875	62.0	104.0	36.0	6.00

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RC4084.8	–	4.80	0.1890	62.0	104.0	36.0	6.00
RC4084.9	–	4.90	0.1929	62.0	104.0	36.0	6.00
RC4085.0	–	5.00	0.1969	62.0	104.0	36.0	6.00
RC4085.1	–	5.10	0.2008	62.0	104.0	36.0	6.00
RC40813/64	13/64	5.16	0.2031	62.0	104.0	36.0	6.00
RC4085.2	–	5.20	0.2047	62.0	104.0	36.0	6.00
RC4085.3	–	5.30	0.2087	62.0	104.0	36.0	6.00
RC4085.4	–	5.40	0.2126	62.0	104.0	36.0	6.00
RC4085.5	–	5.50	0.2165	62.0	104.0	36.0	6.00
RC4087/32	7/32	5.56	0.2188	62.0	104.0	36.0	6.00
RC4085.6	–	5.60	0.2205	62.0	104.0	36.0	6.00
RC4085.7	–	5.70	0.2244	62.0	104.0	36.0	6.00
RC4085.8	–	5.80	0.2283	62.0	104.0	36.0	6.00
RC4085.9	–	5.90	0.2323	62.0	104.0	36.0	6.00
RC40815/64	15/64	5.95	0.2344	62.0	104.0	36.0	6.00
RC4086.0	–	6.00	0.2362	62.0	104.0	36.0	6.00
RC4086.1	–	6.10	0.2402	84.0	126.0	36.0	8.00
RC4086.2	–	6.20	0.2441	84.0	126.0	36.0	8.00
RC4086.3	–	6.30	0.2480	84.0	126.0	36.0	8.00
RC4081/4	1/4	6.35	0.2500	84.0	126.0	36.0	8.00
RC4086.4	–	6.40	0.2520	84.0	126.0	36.0	8.00
RC4086.5	–	6.50	0.2559	84.0	126.0	36.0	8.00
RC4086.6	–	6.60	0.2598	84.0	126.0	36.0	8.00

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RC4086.7	–	6.70	0.2638	84.0	126.0	36.0	8.00
RC40817/64	17/64	6.75	0.2656	84.0	126.0	36.0	8.00
RC4086.8	–	6.80	0.2677	84.0	126.0	36.0	8.00
RC4086.9	–	6.90	0.2717	84.0	126.0	36.0	8.00
RC4087.0	–	7.00	0.2756	84.0	126.0	36.0	8.00
RC4087.1	–	7.10	0.2795	84.0	126.0	36.0	8.00
RC4089/32	9/32	7.14	0.2813	84.0	126.0	36.0	8.00
RC4087.2	–	7.20	0.2835	84.0	126.0	36.0	8.00
RC4087.3	–	7.30	0.2874	84.0	126.0	36.0	8.00
RC4087.4	–	7.40	0.2913	84.0	126.0	36.0	8.00
RC4087.5	–	7.50	0.2953	84.0	126.0	36.0	8.00
RC40819/64	19/64	7.54	0.2969	84.0	126.0	36.0	8.00
RC4087.6	–	7.60	0.2992	84.0	126.0	36.0	8.00
RC4087.7	–	7.70	0.3031	84.0	126.0	36.0	8.00
RC4087.8	–	7.80	0.3071	84.0	126.0	36.0	8.00
RC4087.9	–	7.90	0.3110	84.0	126.0	36.0	8.00
RC4085/16	5/16	7.94	0.3125	84.0	126.0	36.0	8.00
RC4088.0	–	8.00	0.3150	84.0	126.0	36.0	8.00
RC4088.1	–	8.10	0.3189	106.0	152.0	40.0	10.00
RC4088.2	–	8.20	0.3228	106.0	152.0	40.0	10.00
RC4088.3	–	8.30	0.3268	106.0	152.0	40.0	10.00
RC40821/64	21/64	8.33	0.3281	106.0	152.0	40.0	10.00
RC4088.4	–	8.40	0.3307	106.0	152.0	40.0	10.00
RC4088.5	–	8.50	0.3346	106.0	152.0	40.0	10.00
RC4088.6	–	8.60	0.3386	106.0	152.0	40.0	10.00
RC4088.7	–	8.70	0.3425	106.0	152.0	40.0	10.00
RC40811/32	11/32	8.73	0.3438	106.0	152.0	40.0	10.00
RC4088.8	–	8.80	0.3465	106.0	152.0	40.0	10.00
RC4088.9	–	8.90	0.3504	106.0	152.0	40.0	10.00
RC4089.0	–	9.00	0.3543	106.0	152.0	40.0	10.00
RC4089.1	–	9.10	0.3583	106.0	152.0	40.0	10.00
RC40823/64	23/64	9.13	0.3594	106.0	152.0	40.0	10.00
RC4089.2	–	9.20	0.3622	106.0	152.0	40.0	10.00
RC4089.3	–	9.30	0.3661	106.0	152.0	40.0	10.00
RC4089.4	–	9.40	0.3701	106.0	152.0	40.0	10.00
RC4089.5	–	9.50	0.3740	106.0	152.0	40.0	10.00
RC4083/8	3/8	9.53	0.3750	106.0	152.0	40.0	10.00
RC4089.6	–	9.60	0.3780	106.0	152.0	40.0	10.00
RC4089.7	–	9.70	0.3819	106.0	152.0	40.0	10.00
RC4089.8	–	9.80	0.3858	106.0	152.0	40.0	10.00
RC4089.9	–	9.90	0.3898	106.0	152.0	40.0	10.00

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LS (mm)	DCON MS (mm)
RC40825/64	25/64	9.92	0.3906	106.0	152.0	40.0	10.00
RC40810.0	–	10.00	0.3937	106.0	152.0	40.0	10.00
RC40810.2	–	10.20	0.4016	128.0	180.0	45.0	12.00
RC40810.3	–	10.30	0.4055	128.0	180.0	45.0	12.00
RC40813/32	13/32	10.32	0.4063	128.0	180.0	45.0	12.00
RC40810.4	–	10.40	0.4094	128.0	180.0	45.0	12.00
RC40810.5	–	10.50	0.4134	128.0	180.0	45.0	12.00
RC40827/64	27/64	10.72	0.4219	128.0	180.0	45.0	12.00
RC40810.8	–	10.80	0.4252	128.0	180.0	45.0	12.00
RC40811.0	–	11.00	0.4331	128.0	180.0	45.0	12.00
RC4087/16	7/16	11.11	0.4375	128.0	180.0	45.0	12.00
RC40811.2	–	11.20	0.4409	128.0	180.0	45.0	12.00
RC40811.3	–	11.30	0.4449	128.0	180.0	45.0	12.00
RC40811.5	–	11.50	0.4528	128.0	180.0	45.0	12.00
RC40829/64	29/64	11.51	0.4531	128.0	180.0	45.0	12.00
RC40811.8	–	11.80	0.4646	128.0	180.0	45.0	12.00
RC40815/32	15/32	11.91	0.4688	128.0	180.0	45.0	12.00
RC40812.0	–	12.00	0.4724	128.0	180.0	45.0	12.00
RC40812.2	–	12.20	0.4803	151.0	202.0	48.0	14.00
RC40831/64	31/64	12.30	0.4844	151.0	202.0	48.0	14.00
RC40812.5	–	12.50	0.4921	151.0	202.0	48.0	14.00
RC4081/2	1/2	12.70	0.5000	151.0	202.0	48.0	14.00
RC40812.8	–	12.80	0.5039	151.0	202.0	48.0	14.00
RC40813.0	–	13.00	0.5118	151.0	202.0	48.0	14.00
RC40833/64	33/64	13.10	0.5156	151.0	202.0	48.0	14.00
RC40817/32	17/32	13.49	0.5313	151.0	202.0	48.0	14.00
RC40813.5	–	13.50	0.5315	151.0	202.0	48.0	14.00
RC40835/64	35/64	13.89	0.5469	151.0	202.0	48.0	14.00
RC40814.0	–	14.00	0.5512	151.0	202.0	48.0	14.00
RC40814.25	–	14.25	0.5610	172.0	227.0	48.0	16.00
RC4089/16	9/16	14.29	0.5625	172.0	227.0	48.0	16.00
RC40814.5	–	14.50	0.5709	172.0	227.0	48.0	16.00
RC40837/64	37/64	14.68	0.5781	172.0	227.0	48.0	16.00
RC40815.0	–	15.00	0.5906	172.0	227.0	48.0	16.00
RC40819/32	19/32	15.08	0.5938	172.0	227.0	48.0	16.00
RC40815.1	–	15.10	0.5945	172.0	227.0	48.0	16.00
RC40839/64	39/64	15.48	0.6094	172.0	227.0	48.0	16.00
RC40815.5	–	15.50	0.6102	172.0	227.0	48.0	16.00
RC4085/8	5/8	15.88	0.6250	172.0	227.0	48.0	16.00
RC40816.0	–	16.00	0.6299	172.0	227.0	48.0	16.00



Feed per revolution f_n (mm/rev)
Depending on the working conditions it might be necessary to adjust these values ± 25 %.

How to use this table to find the feed per revolution f_n:

1. Find your Alpha Code on the product page (example: 46J, "**J**" is the Alpha Code).
2. Find the closest diameter for your cutting application in the top row of the table.
3. Find your Alpha Code in the left column of the table.
4. The intersection (cell) of the Diameter and Alpha Code is the feed per revolution f_n.

Feed rates (mm/rev)	ø DC (mm)																		
	0.15	0.5	1.0	2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0	15.0	16.0	20.0	25.0	30.0	40.0	50.0	100
A	0.003	0.006	0.012	0.023	0.029	0.032	0.036	0.042	0.054	0.062	0.069	0.082	0.086	0.110	0.125	0.135	0.155	0.175	0.263
B	0.004	0.007	0.014	0.028	0.037	0.041	0.046	0.053	0.067	0.080	0.090	0.103	0.108	0.135	0.153	0.165	0.188	0.208	0.312
C	0.004	0.008	0.015	0.032	0.044	0.050	0.056	0.064	0.080	0.098	0.110	0.125	0.130	0.160	0.180	0.195	0.220	0.240	0.360
D	0.004	0.008	0.016	0.038	0.053	0.060	0.068	0.078	0.098	0.119	0.130	0.149	0.155	0.188	0.210	0.228	0.253	0.275	0.413
E	0.004	0.009	0.017	0.043	0.062	0.071	0.080	0.092	0.115	0.140	0.150	0.173	0.180	0.215	0.240	0.260	0.285	0.310	0.465
F	0.005	0.009	0.018	0.050	0.073	0.084	0.095	0.109	0.138	0.165	0.178	0.202	0.210	0.248	0.275	0.295	0.320	0.343	0.515
G	0.005	0.010	0.019	0.056	0.084	0.096	0.109	0.126	0.160	0.190	0.205	0.231	0.240	0.280	0.310	0.330	0.355	0.375	0.563
H	0.005	0.010	0.020	0.066	0.102	0.116	0.130	0.150	0.190	0.228	0.243	0.271	0.280	0.320	0.355	0.375	0.398	0.418	0.627
I	0.005	0.011	0.021	0.076	0.119	0.134	0.150	0.173	0.220	0.265	0.280	0.310	0.320	0.360	0.400	0.420	0.440	0.460	0.690
J	0.006	0.012	0.024	0.084	0.135	0.152	0.170	0.197	0.250	0.298	0.315	0.349	0.360	0.405	0.445	0.465	0.485	0.503	0.755
K	0.007	0.013	0.026	0.092	0.150	0.170	0.190	0.220	0.280	0.330	0.350	0.388	0.400	0.450	0.490	0.510	0.530	0.545	0.818
L	0.007	0.014	0.028	0.101	0.165	0.186	0.208	0.240	0.305	0.360	0.385	0.419	0.430	0.485	0.525	0.545	0.568	0.588	0.882
M	0.008	0.015	0.030	0.110	0.180	0.202	0.225	0.260	0.330	0.390	0.420	0.450	0.460	0.520	0.560	0.580	0.605	0.630	0.945
N	0.008	0.016	0.032	0.119	0.195	0.218	0.242	0.280	0.355	0.420	0.455	0.481	0.490	0.555	0.595	0.615	0.642	0.672	1.008
S	0.002	0.004	0.008	0.014	0.020	0.025	0.030	0.037	0.050	0.080	0.100	0.123	0.130	0.150	0.170	0.190	0.220	0.240	–
T	0.004	0.008	0.015	0.028	0.040	0.050	0.060	0.070	0.090	0.110	0.130	0.160	0.170	0.190	0.210	0.230	0.260	0.275	–
U	0.007	0.013	0.026	0.048	0.070	0.080	0.090	0.107	0.140	0.170	0.200	0.223	0.230	0.240	0.270	0.300	0.360	0.375	–
V	0.010	0.019	0.038	0.069	0.100	0.115	0.130	0.153	0.200	0.250	0.280	0.310	0.320	0.340	0.400	0.440	0.510	0.530	–
W	0.012	0.025	0.049	0.089	0.130	0.150	0.170	0.200	0.260	0.330	0.380	0.418	0.430	0.450	0.470	0.490	0.520	0.540	–
X	0.014	0.028	0.056	0.103	0.150	0.180	0.210	0.250	0.330	0.420	0.480	0.533	0.550	0.580	–	–	–	–	–
Y	0.017	0.034	0.068	0.124	0.180	0.220	0.260	0.317	0.430	0.550	0.700	0.700	0.700	0.740	–	–	–	–	–
Z	0.024	0.047	0.094	0.172	0.250	0.325	0.400	0.533	0.800	1.000	1.100	1.175	1.200	1.200	–	–	–	–	–

DORMER PRAMET™

Force Deep Hole Drills

Solid carbide multi-material deep hole drills

Certainty
at every turn™

Solid carbide multi-material deep hole drills

Redefine deep hole drilling for maximum efficiency

Introducing the Force Deep Hole Drills (DHD) series from Dormer Pramet, designed for high-performance deep hole drilling up to 12xD, 16xD, and 20xD. These solid carbide drills feature a 140° point angle and optimized web design for rapid penetration and superior positional accuracy without pecking. Internal coolant channels enhance chip evacuation, minimizing bottlenecks, while the Nano-Tip multilayer coating provides exceptional thermal stability and longer tool life.

This series also includes 2xD pilot drills with a multilayer TiAlN coating used to create an accurate pilot hole prior to using the deep hole drills (16xD and deeper).

Related products

RC412

12xD

3 – 20 mm

Nano-Tip coating, **Coolant feed**

RC416

16xD

3 – 16 mm

Nano-Tip coating, **Coolant feed**

RC420

20xD

3 – 16 mm

Nano-Tip coating, **Coolant feed**

RC4P

2xD Pilot drill

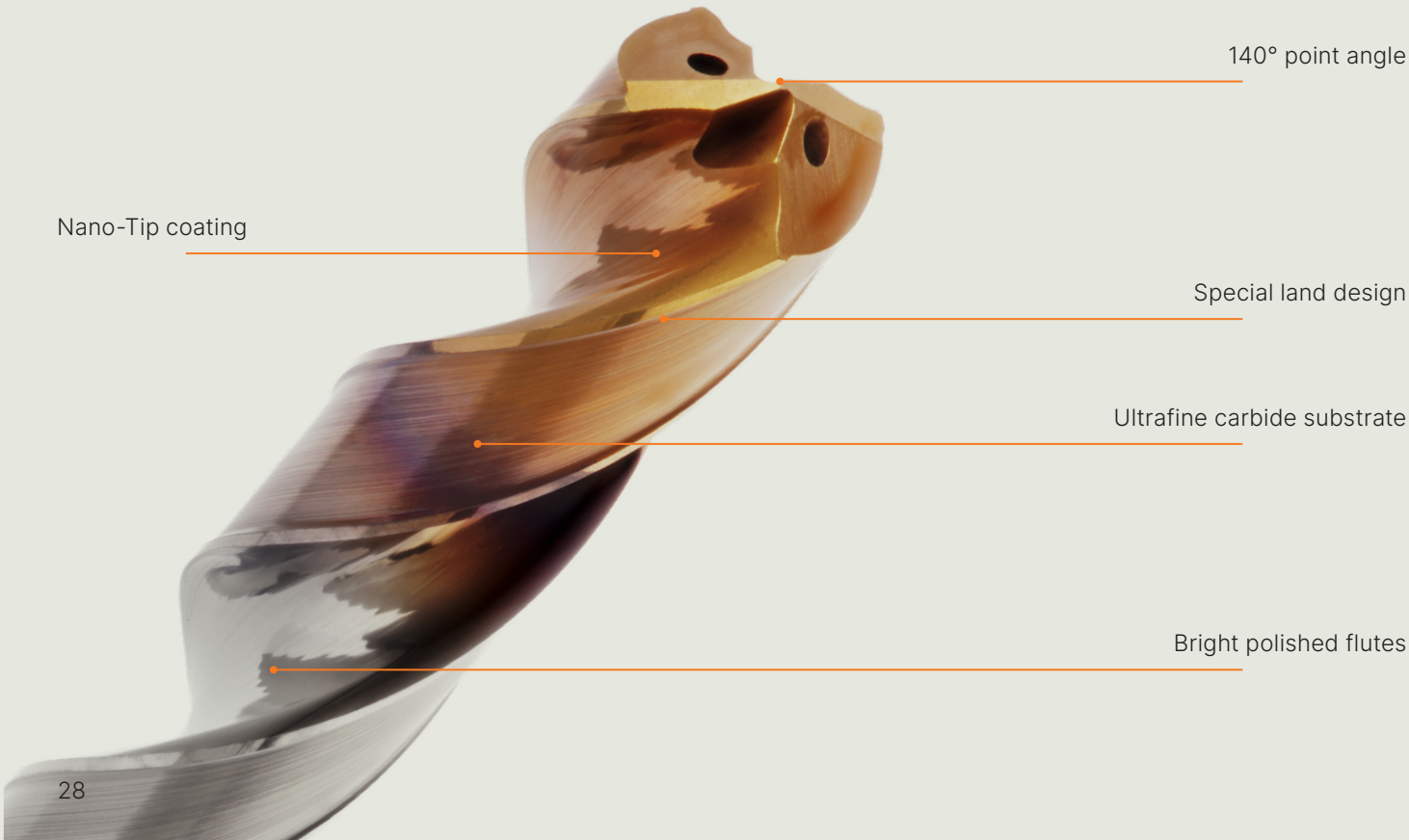
3 – 16 mm

Multi TiAlN coating, **Coolant feed**

Features and benefits

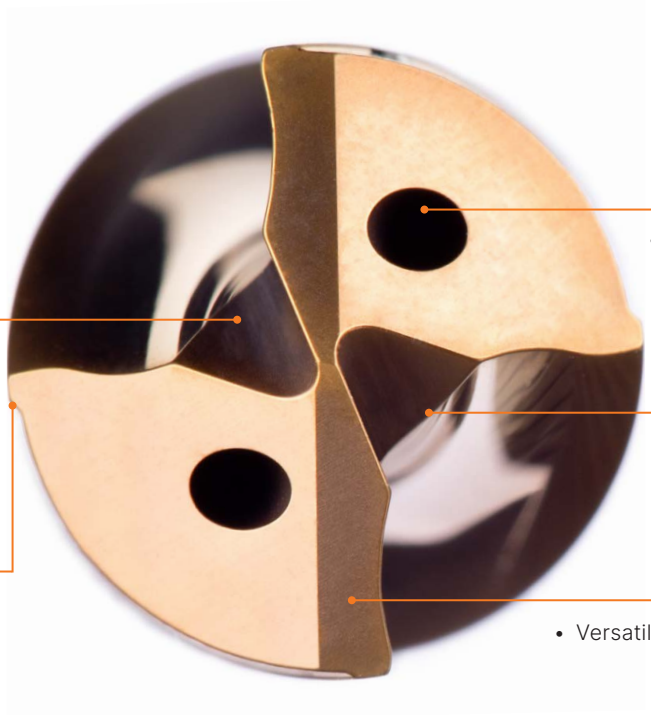
Advanced thinner web design minimizes cutting forces.	**Increased stability** ensures more precise hole positioning and straight drilling paths.
Internal coolant channels improve chip evacuation.	**High process reliability** maintains consistent drilling flow without interruptions.
Eliminates the need for pecking cycles thanks to optimized flute geometrie.	**Faster drilling** reduces cycle times and improves productivity in demanding applications.
High-performance depth capabilities (12xD, 16xD and 20xD).	**Versatile options** allow precise drilling in a wide range of applications and depths. Pilot drills are recommended for use prior to drilling with 16xD and 20xD drills.
Nano-Tip coating enhances wear resistance and thermal stability.	**Extended tool life** reduces cost per hole and increases overall efficiency.

Deep hole drills
(RC412, RC416, RC420)



Features and benefits

Geometry (RC412, RC416, RC420)



Internal coolant holes

- Suitable for a variety of coolants
- Oil or emulsion
- MQL

Optimized web design

- For high drill stiffness
- No restriction of flute size
- Allowing secure and efficient swarf evacuation

Web thinning

- Enhances hole position accuracy

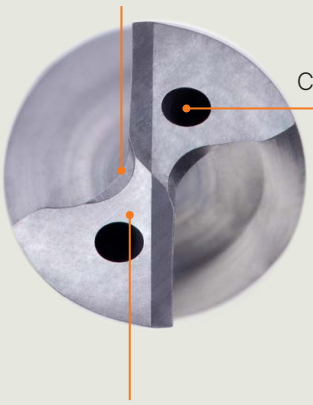
Special land design

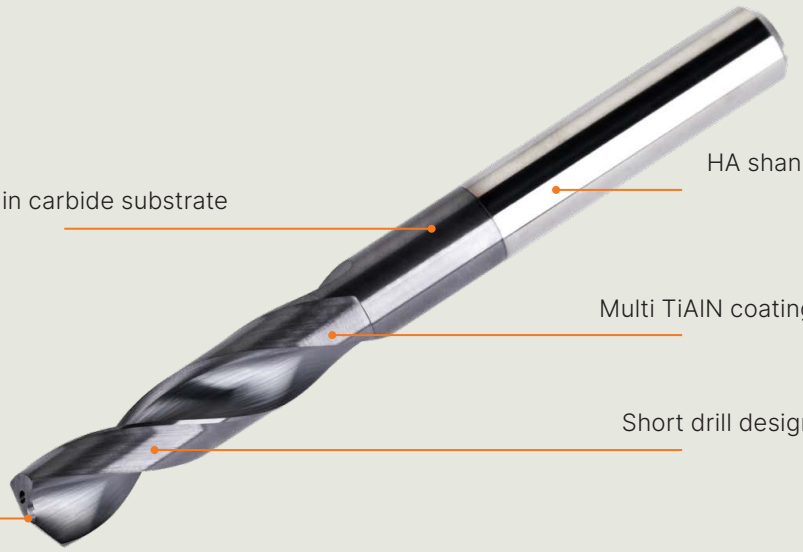
- Allows rapid guidance in hole

Unique geometry

- Versatile drilling in a wide range of WMG´s
- High productivity
- Hole accuracy without pecking

Pilot drills (RC4P)





Please note: Pilot drills are recommended for use prior to drilling with 16xD and 20xD.

Machining examples

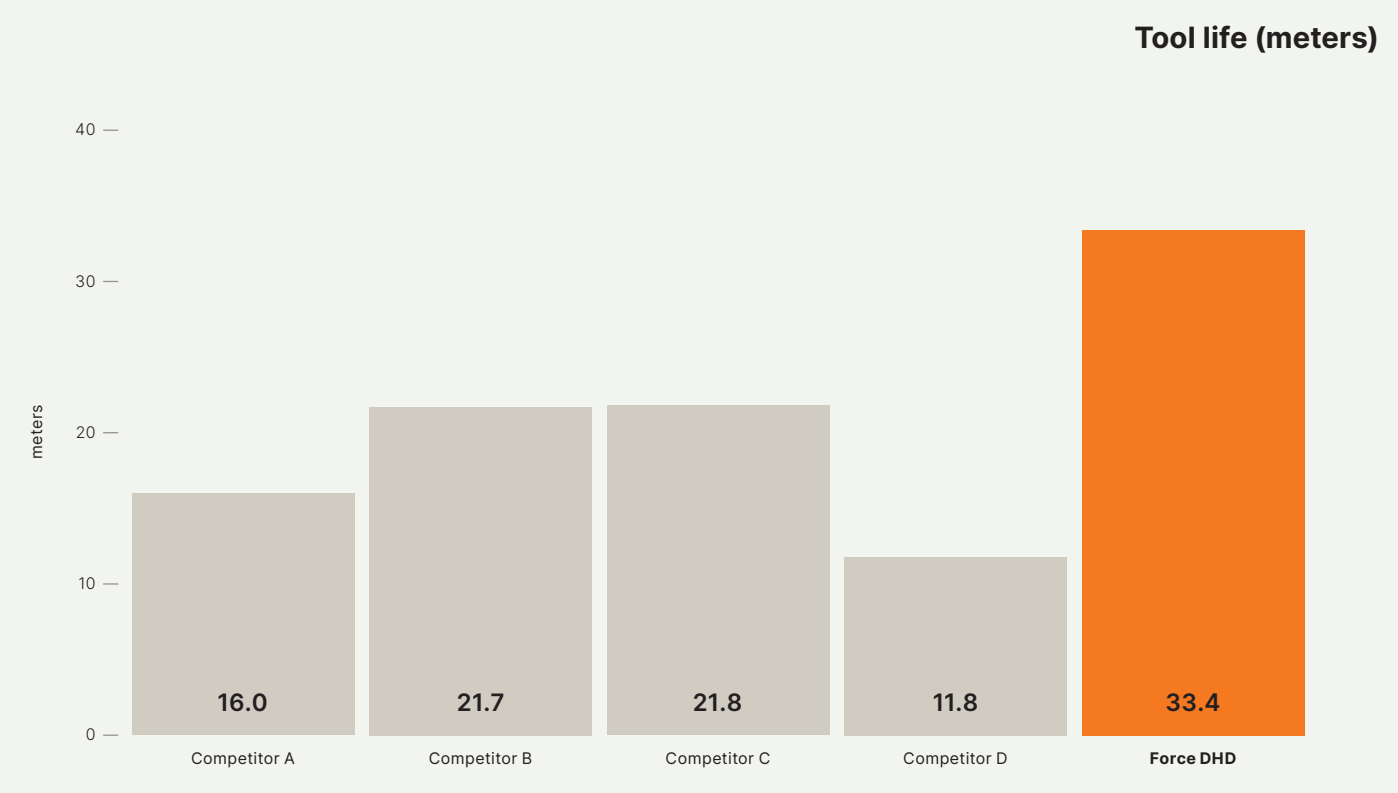
Extend tool life by **50%** in ISO-P materials

The Force Deep Hole Drill delivered a 50% improvement in tool life, reaching 33.4 meters compared to 21.8 meters by the nearest competitor. With fewer tool changes required, it boosts machining efficiency and is perfectly suited for challenging ISO-P applications.

Machining	Drilling
Application	Deep hole drilling
Material	1.7225 / 42CrMo4 / 4140
Coolant	Yes

Dormer Pramer solution		
Force DHD RC4166.0		
Machining data		
v_c	f_n	Depth
90	0.17	90

P3.2



v_c = cutting speed (m/min), f_n = feed per revolution (mm/rev), Depth = drilling depth (mm)

Machining examples

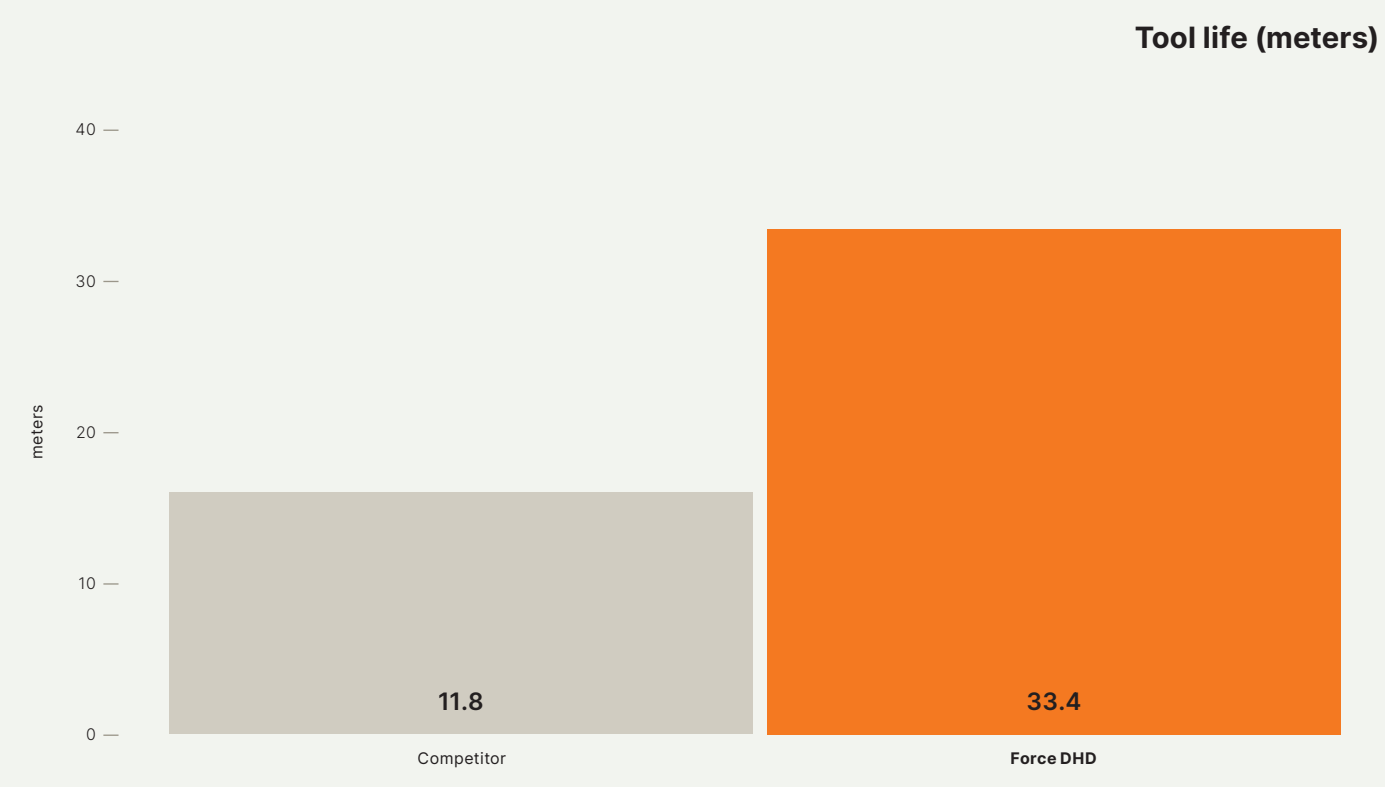
Achieve **179%** longer tool life in ISO-K materials

In ISO-K materials, the Force Deep Hole Drill excelled with an impressive 179% increase in tool life, reaching 33.4 meters versus only 11.8 meters by the previous generation. This ensures fewer interruptions, longer machining times, and significantly enhanced productivity for highly demanding operations.

Machining	Drilling
Application	Deep hole drilling
Material	EN-GJV–450 / 230 HB
Coolant	Yes

Dormer Pramer solution		
Force DHD RC4206.0		
Machining data		
v_c	f_n	Depth
150	0.23	110

K5.3



v_c = cutting speed (m/min), f_n = feed per revolution (mm/rev), Depth = drilling depth (mm)

Machining examples

Boost tool life by **20%** in ISO-P materials

Providing a 20% increase in tool life, the Force Deep Hole Drill processed 12 parts per tool compared to 10 parts by a competitor, achieving 33 meters tool life versus 27.5 meters.
Its extended durability ensures greater reliability and optimizes machining efficiency in demanding ISO-P environments.

Machining	Application	Material	Coolant	Dormer Pramet Solution
Drilling	Deep hole drilling	42CrMo4	Yes	Force DHD RC42010.0

Machining data	Competitor	Force DHD
Cutting speed v_c (m/min)	79	79
Feed f_n (mm/rev)	0.25	0.25
Feed v_f (mm/min)	628	628
Spindle speed n (rev/min)	2515	2515
Drilling depth (mm)	185	185
Number of parts	10	12
Tool life (min)	27.5	33

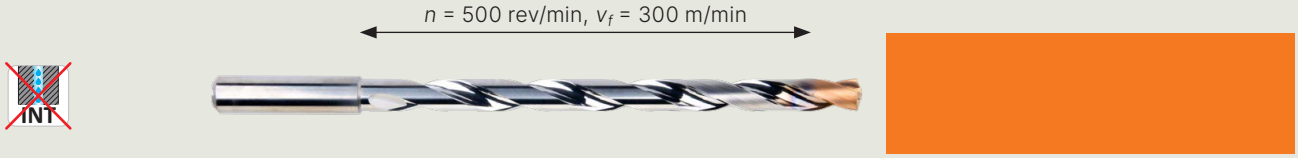
P3.2

Tool life (number of parts)

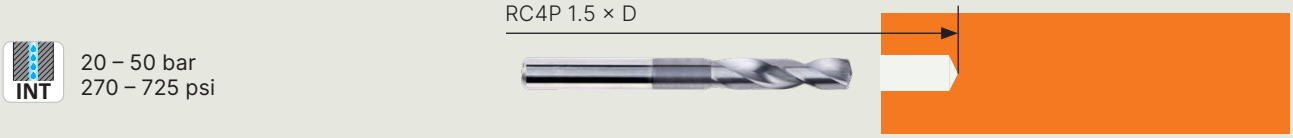
Deep hole drilling application

Machining recommendations

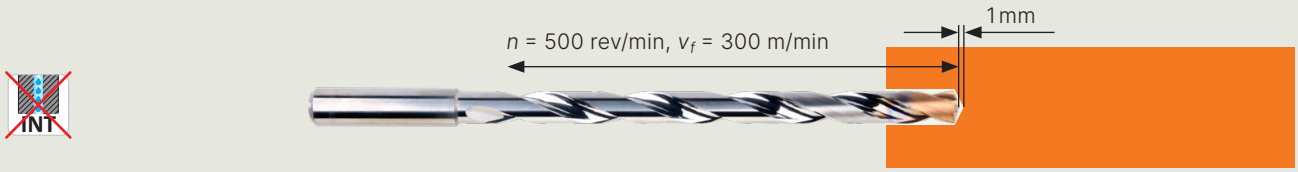
General precaution:
Don't move the deep hole drill outside of the pilot hole with over 500 rev/min and 300 mm/min.



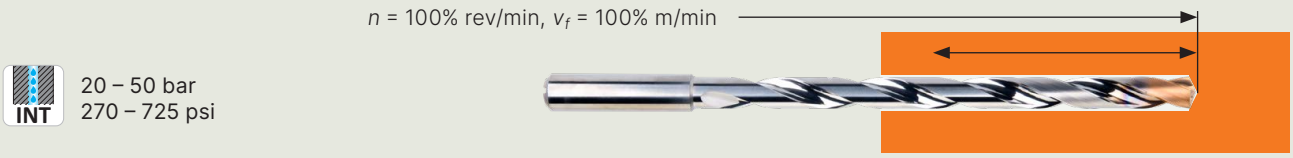
1. Drill a pilot hole (min 1.5 × D)



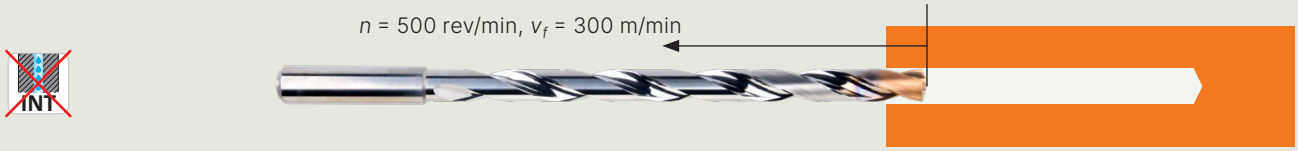
2. Infeed the deep hole drill with low feed (500 rev/min and 300 mm/min) until 1 mm to the depth of drilled pilot hole.



3. Turn on coolant (min 20 bar), start to drill with recommended speed and feed to the final drilling depth – no pecking needed. Return the drill to the pilot drill depth. Coolant off!



4. Feed out the drill from the pilot hole with low speed and feed (500 rev/min and 300 mm/min).

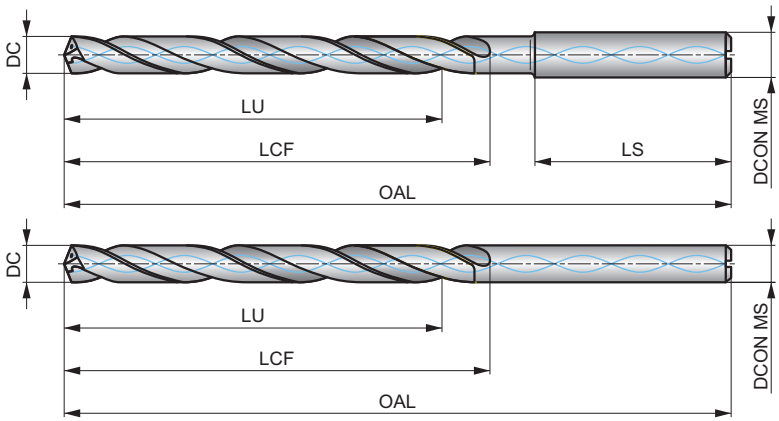


RC412

DORMER PRAMET

FORCE Deep Hole Solid Carbide 12XD Drill with Coolant Feed, Nano-Tip Coated

High-performance deep hole drill with a 140° point angle and thinner web design for drilling up to 12xD without pecking. Designed for rapid penetration and precise guidance, ensuring excellent positional accuracy. Internal coolant enhances chip evacuation, and Nano-Tip multilayer coating delivers superior thermal stability and wear resistance for extended tool life.



HM	DIN 6535	12×D
140°	Nano-Tip	DIN 6535HA
R	DC m7	

Workpiece material group suitability, starting values for cutting speed (m/min) and feed Alpha Code. Tables with feed per revolution can be found starting from page 39.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
■ 116 H	■ 118 H	■ 121 H	■ 113 G	■ 105 H	■ 100 G	■ 113 G	■ 84 G	■ 47 E	■ 76 F	■ 84 G	■ 32 E	■ 100 H	■ 95 H
M2.1	M2.2	M2.3	M3.1	M3.2	M3.3	M4.1	M4.2	K1.1	K1.2	K1.3	K2.1	K2.2	K2.3
◪ 47 F	◪ 44 F	◪ 42 F	◪ 41 D	◪ 40 D	◪ 37 D	◪ 32 C	◪ 37 D	■ 110 J	■ 105 J	■ 95 J	■ 112 J	■ 106 J	■ 100 J
K3.1	K3.2	K3.3	K4.1	K4.2	K4.3	K4.4	K4.5	K5.1	K5.2	K5.3	N1.1	N1.2	N1.3
■ 113 J	■ 103 J	■ 84 J	■ 95 L	■ 76 L	■ 65 V	■ 63 V	■ 58 V	■ 95 J	■ 84 J	■ 79 J	◪ 221 J	■ 208 J	■ 200 J
N2.1	N2.2	N2.3	N3.1	N3.2	N3.3	S1.1	S1.2	S1.3	S2.1	S2.2	S3.1	S3.2	S4.1
■ 200 J	■ 194 L	■ 147 J	■ 126 G	■ 147 H	■ 137 F	■ 37 D	■ 32 B	◪ 26 B	◪ 32 B	◪ 23 B	◪ 26 C	◪ 11 B	◪ 26 C
S4.2													
◪ 11 B													

DCON MS tolerance h6.

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LU (mm)	LS (mm)	DCON MS (mm)
RC4123.0	–	3.00	0.1180	54.0	92.0	48.00	36.0	6.00
RC4123.1	–	3.10	0.1220	54.0	92.0	48.00	36.0	6.00
RC4121/8	1/8	3.17	0.1250	54.0	92.0	48.00	36.0	6.00
RC4123.2	–	3.20	0.1260	54.0	92.0	48.00	36.0	6.00
RC4123.3	–	3.30	0.1300	54.0	92.0	48.00	36.0	6.00
RC4123.4	–	3.40	0.1340	54.0	92.0	48.00	36.0	6.00
RC4123.5	–	3.50	0.1380	54.0	92.0	48.00	36.0	6.00
RC4129/64	9/64	3.57	0.1410	54.0	92.0	48.00	36.0	6.00
RC4123.6	–	3.60	0.1420	54.0	92.0	48.00	36.0	6.00
RC4123.7	–	3.70	0.1460	54.0	92.0	48.00	36.0	6.00
RC4123.8	–	3.80	0.1500	64.0	102.0	56.00	36.0	6.00
RC4123.9	–	3.90	0.1540	64.0	102.0	56.00	36.0	6.00
RC4125/32	5/32	3.97	0.1560	64.0	102.0	56.00	36.0	6.00
RC4124.0	–	4.00	0.1570	64.0	102.0	56.00	36.0	6.00
RC4124.1	–	4.10	0.1610	64.0	102.0	56.00	36.0	6.00
RC4124.2	–	4.20	0.1650	64.0	102.0	56.00	36.0	6.00
RC4124.3	–	4.30	0.1690	64.0	102.0	56.00	36.0	6.00
RC41211/64	11/64	4.37	0.1720	64.0	102.0	56.00	36.0	6.00
RC4124.4	–	4.40	0.1730	64.0	102.0	56.00	36.0	6.00
RC4124.5	–	4.50	0.1770	64.0	102.0	56.00	36.0	6.00
RC4124.6	–	4.60	0.1810	64.0	102.0	56.00	36.0	6.00
RC4124.7	–	4.70	0.1850	64.0	102.0	56.00	36.0	6.00
RC4123/16	3/16	4.76	0.1880	83.0	121.0	74.00	36.0	6.00

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LU (mm)	LS (mm)	DCON MS (mm)
RC4124.8	–	4.80	0.1890	83.0	121.0	74.00	36.0	6.00
RC4124.9	–	4.90	0.1930	83.0	121.0	74.00	36.0	6.00
RC4125.0	–	5.00	0.1970	83.0	121.0	74.00	36.0	6.00
RC4125.1	–	5.10	0.2010	83.0	121.0	74.00	36.0	6.00
RC41213/64	13/64	5.16	0.2030	83.0	121.0	74.00	36.0	6.00
RC4125.2	–	5.20	0.2050	83.0	121.0	74.00	36.0	6.00
RC4125.3	–	5.30	0.2090	83.0	121.0	74.00	36.0	6.00
RC4125.4	–	5.40	0.2130	83.0	121.0	74.00	36.0	6.00
RC4125.5	–	5.50	0.2170	83.0	121.0	74.00	36.0	6.00
RC4125.55	–	5.55	0.2190	83.0	121.0	74.00	36.0	6.00
RC4127/32	7/32	5.56	0.2190	83.0	121.0	74.00	36.0	6.00
RC4125.6	–	5.60	0.2200	83.0	121.0	74.00	36.0	6.00
RC4125.7	–	5.70	0.2240	83.0	121.0	74.00	36.0	6.00
RC4125.8	–	5.80	0.2280	83.0	121.0	74.00	36.0	6.00
RC4125.9	–	5.90	0.2320	83.0	121.0	74.00	36.0	6.00
RC4126.0	–	6.00	0.2360	83.0	121.0	74.00	36.0	6.00
RC4126.1	–	6.10	0.2400	110.0	148.0	98.00	36.0	8.00
RC4126.2	–	6.20	0.2440	110.0	148.0	98.00	36.0	8.00
RC4126.3	–	6.30	0.2480	110.0	148.0	98.00	36.0	8.00
RC4121/4	1/4	6.35	0.2500	110.0	148.0	98.00	36.0	8.00
RC4126.4	–	6.40	0.2520	110.0	148.0	98.00	36.0	8.00
RC4126.5	–	6.50	0.2560	110.0	148.0	98.00	36.0	8.00
RC4126.6	–	6.60	0.2600	110.0	148.0	98.00	36.0	8.00

Product	DC	DC	DC	LCF	OAL	LU	LS	DCON MS
	(inch)	(mm)	(inch)	(mm)	(mm)	(mm)	(mm)	(mm)
RC4126.7	–	6.70	0.2640	110.0	148.0	98.00	36.0	8.00
RC41217/64	17/64	6.75	0.2660	110.0	148.0	98.00	36.0	8.00
RC4126.8	–	6.80	0.2680	110.0	148.0	98.00	36.0	8.00
RC4126.9	–	6.90	0.2720	110.0	148.0	98.00	36.0	8.00
RC4127.0	–	7.00	0.2760	110.0	148.0	98.00	36.0	8.00
RC4127.1	–	7.10	0.2800	110.0	148.0	98.00	36.0	8.00
RC4129/32	9/32	7.14	0.2810	110.0	148.0	98.00	36.0	8.00
RC4127.2	–	7.20	0.2830	110.0	148.0	98.00	36.0	8.00
RC4127.3	–	7.30	0.2870	110.0	148.0	98.00	36.0	8.00
RC4127.4	–	7.40	0.2910	110.0	148.0	98.00	36.0	8.00
RC4127.5	–	7.50	0.2950	110.0	148.0	98.00	36.0	8.00
RC41219/64	19/64	7.54	0.2970	110.0	148.0	98.00	36.0	8.00
RC4127.8	–	7.80	0.3070	110.0	148.0	98.00	36.0	8.00
RC4127.9	–	7.90	0.3110	110.0	148.0	98.00	36.0	8.00
RC4125/16	5/16	7.94	0.3130	110.0	148.0	98.00	36.0	8.00
RC4128.0	–	8.00	0.3150	110.0	148.0	98.00	36.0	8.00
RC4128.1	–	8.10	0.3190	138.0	180.0	123.00	40.0	10.00
RC4128.2	–	8.20	0.3230	138.0	180.0	123.00	40.0	10.00
RC4128.3	–	8.30	0.3270	138.0	180.0	123.00	40.0	10.00
RC4128.4	–	8.40	0.3310	138.0	180.0	123.00	40.0	10.00
RC4128.5	–	8.50	0.3350	138.0	180.0	123.00	40.0	10.00
RC4128.6	–	8.60	0.3390	138.0	180.0	123.00	40.0	10.00
RC4128.7	–	8.70	0.3430	138.0	180.0	123.00	40.0	10.00
RC41211/32	11/32	8.73	0.3440	138.0	180.0	123.00	40.0	10.00
RC4128.8	–	8.80	0.3460	138.0	180.0	123.00	40.0	10.00
RC4129.0	–	9.00	0.3540	138.0	180.0	123.00	40.0	10.00
RC41223/64	23/64	9.13	0.3590	138.0	180.0	123.00	40.0	10.00
RC4129.2	–	9.20	0.3620	138.0	180.0	123.00	40.0	10.00
RC4129.3	–	9.30	0.3660	138.0	180.0	123.00	40.0	10.00
RC4129.5	–	9.50	0.3740	138.0	180.0	123.00	40.0	10.00
RC4123/8	3/8	9.53	0.3750	138.0	180.0	123.00	40.0	10.00
RC4129.6	–	9.60	0.3780	138.0	180.0	123.00	40.0	10.00
RC4129.7	–	9.70	0.3820	138.0	180.0	123.00	40.0	10.00
RC4129.8	–	9.80	0.3860	138.0	180.0	123.00	40.0	10.00
RC41225/64	25/64	9.92	0.3910	138.0	180.0	123.00	40.0	10.00
RC41210.0	–	10.00	0.3940	138.0	180.0	123.00	40.0	10.00
RC41210.1	–	10.10	0.3980	158.0	206.0	140.00	45.0	12.00
RC41210.2	–	10.20	0.4020	158.0	206.0	140.00	45.0	12.00
RC41210.3	–	10.30	0.4060	158.0	206.0	140.00	45.0	12.00
RC41213/32	13/32	10.32	0.4060	158.0	206.0	140.00	45.0	12.00

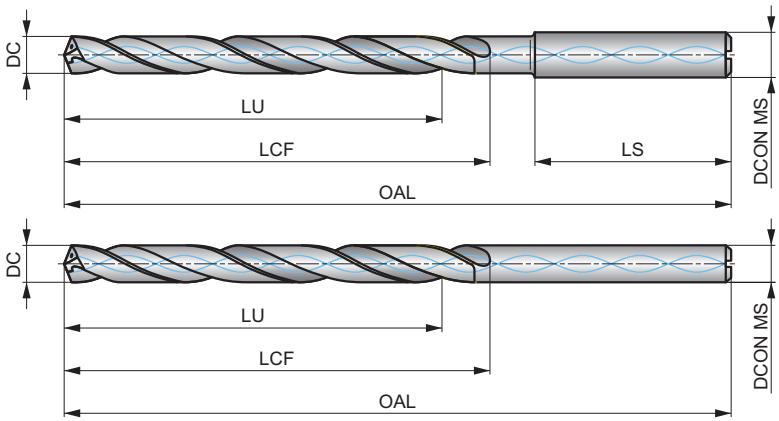
Product	DC	DC	DC	LCF	OAL	LU	LS	DCON MS
	(inch)	(mm)	(inch)	(mm)	(mm)	(mm)	(mm)	(mm)
RC41210.4	–	10.40	0.4090	158.0	206.0	140.00	45.0	12.00
RC41210.5	–	10.50	0.4130	158.0	206.0	140.00	45.0	12.00
RC41227/64	27/64	10.72	0.4220	158.0	206.0	140.00	45.0	12.00
RC41210.8	–	10.80	0.4250	158.0	206.0	140.00	45.0	12.00
RC41211.0	–	11.00	0.4330	158.0	206.0	140.00	45.0	12.00
RC41211.1	–	11.10	0.4370	158.0	206.0	140.00	45.0	12.00
RC4127/16	7/16	11.11	0.4380	158.0	206.0	140.00	45.0	12.00
RC41211.2	–	11.20	0.4410	158.0	206.0	140.00	45.0	12.00
RC41211.5	–	11.50	0.4530	158.0	206.0	140.00	45.0	12.00
RC41229/64	29/64	11.51	0.4530	158.0	206.0	140.00	45.0	12.00
RC41211.7	–	11.70	0.4610	158.0	206.0	140.00	45.0	12.00
RC41211.8	–	11.80	0.4650	158.0	206.0	140.00	45.0	12.00
RC41215/32	15/32	11.91	0.4690	158.0	206.0	140.00	45.0	12.00
RC41212.0	–	12.00	0.4720	158.0	206.0	140.00	45.0	12.00
RC41212.1	–	12.10	0.4760	182.0	230.0	168.00	45.0	14.00
RC41212.2	–	12.20	0.4800	182.0	230.0	168.00	45.0	14.00
RC41212.3	–	12.30	0.4840	182.0	230.0	168.00	45.0	14.00
RC41231/64	31/64	12.30	0.4840	182.0	230.0	168.00	45.0	14.00
RC41212.5	–	12.50	0.4920	182.0	230.0	168.00	45.0	14.00
RC41212.6	–	12.60	0.4960	182.0	230.0	168.00	45.0	14.00
RC41212.7	–	12.70	0.5000	182.0	230.0	168.00	45.0	14.00
RC41213.0	–	13.00	0.5120	182.0	230.0	168.00	45.0	14.00
RC41217/32	17/32	13.49	0.5310	182.0	230.0	168.00	45.0	14.00
RC41213.5	–	13.50	0.5310	182.0	230.0	168.00	45.0	14.00
RC41214.0	–	14.00	0.5510	182.0	230.0	168.00	45.0	14.00
RC4129/16	9/16	14.29	0.5630	208.0	260.0	192.00	48.0	16.00
RC41214.5	–	14.50	0.5710	208.0	260.0	192.00	48.0	16.00
RC41215.0	–	15.00	0.5910	208.0	260.0	192.00	48.0	16.00
RC41215.5	–	15.50	0.6100	208.0	260.0	192.00	48.0	16.00
RC4125/8	5/8	15.88	0.6250	208.0	260.0	192.00	48.0	16.00
RC41216.0	–	16.00	0.6300	208.0	260.0	192.00	48.0	16.00
RC41216.5	–	16.50	0.6500	234.0	285.0	216.00	48.0	18.00
RC41217.0	–	17.00	0.6690	234.0	285.0	216.00	48.0	18.00
RC41217.5	–	17.50	0.6890	234.0	285.0	216.00	48.0	18.00
RC41218.0	–	18.00	0.7090	234.0	285.0	216.00	48.0	18.00
RC41218.5	–	18.50	0.7280	258.0	310.0	238.00	50.0	20.00
RC41219.0	–	19.00	0.7480	258.0	310.0	238.00	50.0	20.00
RC41219.5	–	19.50	0.7680	258.0	310.0	238.00	50.0	20.00
RC41220.0	–	20.00	0.7870	258.0	310.0	238.00	50.0	20.00

RC416

DORMER PRAMET

FORCE Deep Hole Solid Carbide 16XD Drill with Coolant Feed, Nano-Tip Coated

High-performance deep hole drill with a 140° point angle and thinner web design for drilling up to 16xD without pecking. Designed for rapid penetration and precise guidance, ensuring excellent positional accuracy. Internal coolant enhances chip evacuation, and Nano-Tip multilayer coating delivers superior thermal stability and wear resistance for extended tool life.



HM	DIN 6535	16×D
140°	Nano-Tip	DIN 6535HA
R	DC h7	

Workpiece material group suitability, starting values for cutting speed (m/min) and feed Alpha Code. Tables with feed per revolution can be found starting from page 39.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
■ 110 H	■ 112 H	■ 115 H	■ 108 H	■ 100 H	■ 95 G	■ 108 H	■ 80 G	■ 45 E	■ 72 G	■ 80 G	■ 30 E	■ 95 H	■ 90 H
M2.1	**M2.2**	**M2.3**	**M3.1**	**M3.2**	**M3.3**	**M4.1**	**M4.2**	**K1.1**	**K1.2**	**K1.3**	**K2.1**	**K2.2**	**K2.3**
◪ 45 F	◪ 42 F	◪ 40 F	◪ 39 D	◪ 38 D	◪ 35 D	◪ 30 C	◪ 35 D	■ 105 J	■ 100 J	■ 90 J	■ 107 J	■ 101 J	■ 95 J
K3.1	**K3.2**	**K3.3**	**K4.1**	**K4.2**	**K4.3**	**K4.4**	**K4.5**	**K5.1**	**K5.2**	**K5.3**	**N1.1**	**N1.2**	**N1.3**
■ 108 J	■ 98 J	■ 80 J	■ 90 J	■ 72 L	■ 62 V	■ 60 V	■ 55 V	■ 90 J	■ 80 J	■ 75 J	◪ 210 L	■ 198 L	■ 190 L
N2.1	**N2.2**	**N2.3**	**N3.1**	**N3.2**	**N3.3**	**S1.1**	**S1.2**	**S1.3**	**S2.1**	**S2.2**	**S3.1**	**S3.2**	**S4.1**
■ 190 L	■ 185 L	■ 140 L	■ 120 G	■ 140 H	■ 130 F	■ 35 D	■ 30 B	◪ 25 B	◪ 30 C	◪ 22 A	◪ 25 B	◪ 10 B	◪ 25 B
S4.2													
◪ 10 B													

DCON MS tolerance h6.

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LU (mm)	LS (mm)	DCON MS (mm)
RC4163.0	–	3.00	0.1180	57.0	89.0	52.00	28.0	4.00
RC4161/8	1/8	3.17	0.1250	66.0	98.0	60.00	28.0	4.00
RC4163.5	–	3.50	0.1380	78.0	110.0	72.00	28.0	4.00
RC4169/64	9/64	3.57	0.1410	78.0	110.0	72.00	28.0	4.00
RC4165/32	5/32	3.97	0.1560	78.0	110.0	72.00	28.0	4.00
RC4164.0	–	4.00	0.1570	78.0	110.0	72.00	28.0	4.00
RC4164.5	–	4.50	0.1770	100.0	132.0	93.00	28.0	5.00
RC4163/16	3/16	4.76	0.1880	100.0	132.0	92.00	28.0	5.00
RC4164.8	–	4.80	0.1890	100.0	132.0	92.00	28.0	5.00
RC4165.0	–	5.00	0.1970	100.0	132.0	92.00	28.0	5.00
RC4165.5	–	5.50	0.2170	110.0	150.0	101.00	36.0	6.00
RC4167/32	7/32	5.56	0.2190	120.0	160.0	111.00	36.0	6.00
RC4165.8	–	5.80	0.2280	120.0	160.0	111.00	36.0	6.00
RC4166.0	–	6.00	0.2360	120.0	160.0	111.00	36.0	6.00
RC4166.1	–	6.10	0.2400	135.0	175.0	124.00	36.0	8.00
RC4161/4	1/4	6.35	0.2500	135.0	175.0	124.00	36.0	8.00
RC4166.5	–	6.50	0.2560	135.0	175.0	124.00	36.0	8.00
RC41617/64	17/64	6.75	0.2660	135.0	175.0	124.00	36.0	8.00
RC4166.8	–	6.80	0.2680	135.0	175.0	124.00	36.0	8.00
RC4167.0	–	7.00	0.2760	135.0	175.0	124.00	36.0	8.00
RC4169/32	9/32	7.14	0.2810	152.0	192.0	140.00	36.0	8.00
RC4167.4	–	7.40	0.2910	152.0	192.0	140.00	36.0	8.00
RC4167.5	–	7.50	0.2950	152.0	192.0	140.00	36.0	8.00

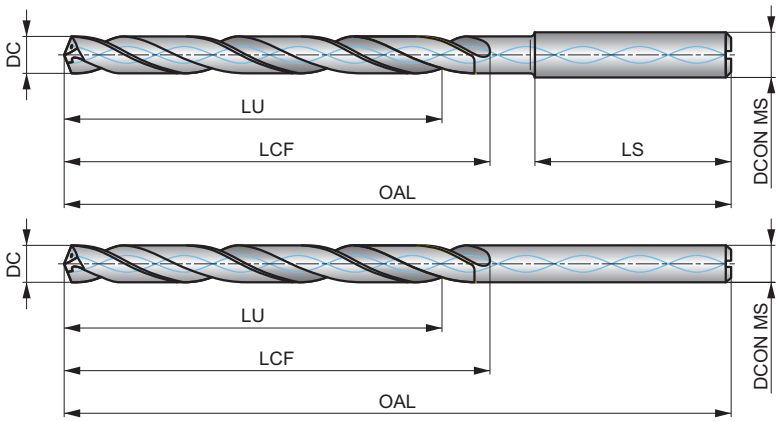
Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LU (mm)	LS (mm)	DCON MS (mm)
RC4165/16	5/16	7.94	0.3130	152.0	192.0	140.00	36.0	8.00
RC4168.0	–	8.00	0.3150	152.0	192.0	140.00	36.0	8.00
RC4168.3	–	8.30	0.3270	162.0	206.0	148.00	40.0	10.00
RC4168.5	–	8.50	0.3350	162.0	206.0	148.00	40.0	10.00
RC41611/32	11/32	8.73	0.3440	162.0	206.0	148.00	40.0	10.00
RC4169.0	–	9.00	0.3540	162.0	206.0	148.00	40.0	10.00
RC4163/8	3/8	9.53	0.3750	180.0	224.0	165.00	40.0	10.00
RC4169.8	–	9.80	0.3860	180.0	224.0	165.00	40.0	10.00
RC41610.0	–	10.00	0.3940	180.0	224.0	165.00	40.0	10.00
RC41610.2	–	10.20	0.4020	198.0	247.0	181.00	45.0	12.00
RC41613/32	13/32	10.32	0.4060	198.0	247.0	181.00	45.0	12.00
RC41611.0	–	11.00	0.4330	198.0	247.0	181.00	45.0	12.00
RC4167/16	7/16	11.11	0.4380	216.0	265.0	198.00	45.0	12.00
RC41611.5	–	11.50	0.4530	216.0	265.0	198.00	45.0	12.00
RC41611.8	–	11.80	0.4650	216.0	265.0	198.00	45.0	12.00
RC41615/32	15/32	11.91	0.4690	216.0	265.0	198.00	45.0	12.00
RC41612.0	–	12.00	0.4720	216.0	265.0	198.00	45.0	12.00
RC41612.7	–	12.70	0.5000	252.0	301.0	238.00	45.0	14.00
RC41613.0	–	13.00	0.5120	252.0	301.0	238.00	45.0	14.00
RC41614.0	–	14.00	0.5510	252.0	301.0	238.00	45.0	14.00
RC4169/16	9/16	14.29	0.5630	288.0	340.0	272.00	48.0	16.00
RC41615.0	–	15.00	0.5910	288.0	340.0	272.00	48.0	16.00
RC41616.0	–	16.00	0.6300	288.0	340.0	272.00	48.0	16.00

RC420

DORMER PRAMET

FORCE Deep Hole Solid Carbide 20XD Drill with Coolant Feed, Nano-Tip Coated

High-performance deep hole drill with a 140° point angle and thinner web design for drilling up to 20xD without pecking. Designed for rapid penetration and precise guidance, ensuring excellent positional accuracy. Internal coolant enhances chip evacuation, and Nano-Tip multilayer coating delivers superior thermal stability and wear resistance for extended tool life.



HM	DIN 6535	20×D
140°	Nano-Tip	DIN 6535HA
R	DC h7	

Workpiece material group suitability, starting values for cutting speed (m/min) and feed Alpha Code. Tables with feed per revolution can be found starting from page 39.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
■ 105 H	■ 106 H	■ 109 H	■ 103 G	■ 95 G	■ 90 F	■ 103 G	■ 76 F	■ 43 E	■ 68 F	■ 76 F	■ 29 E	■ 90 G	■ 86 G
M2.1	**M2.2**	**M2.3**	**M3.1**	**M3.2**	**M3.3**	**M4.1**	**M4.2**	**K1.1**	**K1.2**	**K1.3**	**K2.1**	**K2.2**	**K2.3**
◪ 43 E	◪ 40 E	◪ 38 E	◪ 37 C	◪ 36 C	◪ 33 C	◪ 29 B	◪ 33 D	■ 100 J	■ 95 J	■ 86 J	■ 102 J	■ 96 H	■ 90 H
K3.1	**K3.2**	**K3.3**	**K4.1**	**K4.2**	**K4.3**	**K4.4**	**K4.5**	**K5.1**	**K5.2**	**K5.3**	**N1.1**	**N1.2**	**N1.3**
■ 103 H	■ 93 H	■ 76 H	■ 86 J	■ 68 J	■ 59 V	■ 57 V	■ 52 V	■ 86 J	■ 76 J	■ 71 J	◪ 200 L	■ 188 L	■ 181 L
N2.1	**N2.2**	**N2.3**	**N3.1**	**N3.2**	**N3.3**	**S1.1**	**S1.2**	**S1.3**	**S2.1**	**S2.2**	**S3.1**	**S3.2**	**S4.1**
■ 181 L	■ 176 L	■ 133 J	■ 114 G	■ 133 G	■ 124 E	■ 33 D	■ 29 B	◪ 24 B	◪ 29 B	◪ 21 A	◪ 24 B	◪ 10 A	◪ 24 B
S4.2													
◪ 10 A													

DCON MS tolerance h6.

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LU (mm)	LS (mm)	DCON MS (mm)
RC4203.0	–	3.00	0.1180	65.0	97.0	60.00	28.0	4.00
RC4201/8	1/8	3.17	0.1250	80.0	112.0	74.00	28.0	4.00
RC4203.5	–	3.50	0.1380	92.0	124.0	86.00	28.0	4.00
RC4209/64	9/64	3.57	0.1410	92.0	124.0	86.00	28.0	4.00
RC4205/32	5/32	3.97	0.1560	92.0	124.0	86.00	28.0	4.00
RC4204.0	–	4.00	0.1570	92.0	124.0	86.00	28.0	4.00
RC4204.5	–	4.50	0.1770	118.0	150.0	111.00	28.0	5.00
RC4203/16	3/16	4.76	0.1880	118.0	150.0	110.00	28.0	5.00
RC4204.8	–	4.80	0.1890	118.0	150.0	110.00	28.0	5.00
RC4205.0	–	5.00	0.1970	118.0	150.0	110.00	28.0	5.00
RC4205.5	–	5.50	0.2170	132.0	170.0	123.00	36.0	6.00
RC4207/32	7/32	5.56	0.2190	144.0	182.0	135.00	36.0	6.00
RC4205.8	–	5.80	0.2280	144.0	182.0	135.00	36.0	6.00
RC4206.0	–	6.00	0.2360	144.0	182.0	135.00	36.0	6.00
RC4206.1	–	6.10	0.2400	162.0	200.0	151.00	36.0	8.00
RC4201/4	1/4	6.35	0.2500	162.0	200.0	151.00	36.0	8.00
RC4206.5	–	6.50	0.2560	162.0	200.0	151.00	36.0	8.00
RC42017/64	17/64	6.75	0.2660	162.0	200.0	151.00	36.0	8.00
RC4206.8	–	6.80	0.2680	162.0	200.0	151.00	36.0	8.00
RC4207.0	–	7.00	0.2760	162.0	200.0	151.00	36.0	8.00
RC4209/32	9/32	7.14	0.2810	184.0	222.0	172.00	36.0	8.00
RC4207.4	–	7.40	0.2910	184.0	222.0	172.00	36.0	8.00
RC4207.5	–	7.50	0.2950	184.0	222.0	172.00	36.0	8.00

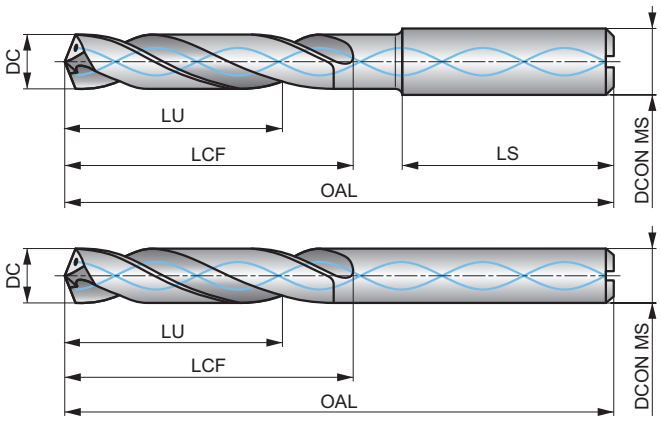
Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LU (mm)	LS (mm)	DCON MS (mm)
RC4205/16	5/16	7.94	0.3130	184.0	222.0	172.00	36.0	8.00
RC4208.0	–	8.00	0.3150	184.0	222.0	172.00	36.0	8.00
RC4208.3	–	8.30	0.3270	198.0	240.0	184.00	40.0	10.00
RC4208.5	–	8.50	0.3350	198.0	240.0	184.00	40.0	10.00
RC42011/32	11/32	8.73	0.3440	198.0	240.0	184.00	40.0	10.00
RC4209.0	–	9.00	0.3540	198.0	240.0	184.00	40.0	10.00
RC4203/8	3/8	9.53	0.3750	220.0	262.0	205.00	40.0	10.00
RC4209.8	–	9.80	0.3860	220.0	262.0	205.00	40.0	10.00
RC42010.0	–	10.00	0.3940	220.0	262.0	205.00	40.0	10.00
RC42010.2	–	10.20	0.4020	242.0	289.0	225.00	45.0	12.00
RC42013/32	13/32	10.32	0.4060	242.0	289.0	225.00	45.0	12.00
RC42011.0	–	11.00	0.4330	242.0	289.0	225.00	45.0	12.00
RC4207/16	7/16	11.11	0.4380	264.0	311.0	246.00	45.0	12.00
RC42011.5	–	11.50	0.4530	264.0	311.0	246.00	45.0	12.00
RC42011.8	–	11.80	0.4650	264.0	311.0	246.00	45.0	12.00
RC42015/32	15/32	11.91	0.4690	264.0	311.0	246.00	45.0	12.00
RC42012.0	–	12.00	0.4720	264.0	311.0	246.00	45.0	12.00
RC42012.7	–	12.70	0.5000	308.0	357.0	294.00	45.0	14.00
RC42013.0	–	13.00	0.5120	308.0	357.0	294.00	45.0	14.00
RC42014.0	–	14.00	0.5510	308.0	357.0	294.00	45.0	14.00
RC4209/16	9/16	14.29	0.5630	352.0	404.0	336.00	48.0	16.00
RC42015.0	–	15.00	0.5910	352.0	404.0	336.00	48.0	16.00
RC42016.0	–	16.00	0.6300	352.0	404.0	336.00	48.0	16.00

RC4P

DORMER PRAMET

FORCE Pilot Solid Carbide Drill 2xD with Coolant Feed, Multi TiAlN Coated

Specially designed pilot drill for precise hole positioning when using Force deep hole drills 16xD and 20xD. Features a 150° point angle and slightly larger drill tolerance p7 for accurate drilling of pilot holes up to 2xD. High quality solid carbide substrate and internal coolant channels provide enhanced cooling efficiency. TiAlN multilayer coating minimizes friction.



HM	DIN 6535	2×D
150°	Multi TiAlN	DIN 6535HA
R	DC p7	

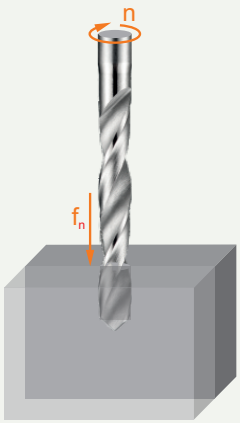
Workpiece material group suitability, starting values for cutting speed (m/min) and feed Alpha Code. Tables with feed per revolution can be found starting from page 39.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
■ 110 I	■ 112 I	■ 108 I	■ 115 G	■ 100 H	■ 90 H	■ 85 H	■ 80 H	■ 70 F	■ 80 G	■ 63 G	■ 50 E	■ 79 H	■ 75 H
M2.1	M2.2	M2.3	M3.1	M3.2	M3.3	M4.1	M4.2	K1.1	K1.2	K1.3	K2.1	K2.2	K2.3
◪ 65 F	◪ 60 F	◪ 58 F	◪ 42 D	◪ 40 D	◪ 38 D	◪ 40 C	◪ 35 D	■ 121 L	■ 120 L	■ 110 J	■ 120 L	■ 110 J	■ 100 J
K3.1	K3.2	K3.3	K4.1	K4.2	K4.3	K4.4	K4.5	K5.1	K5.2	K5.3	N1.1	N1.2	N1.3
■ 80 L	■ 70 J	■ 68 J	■ 100 L	■ 80 L	■ 70 V	■ 60 V	■ 50 V	■ 80 J	■ 75 J	■ 70 J	◪ 302 J	■ 300 J	■ 290 J
N2.1	N2.2	N2.3	N3.1	N3.2	N3.3	S1.1	S1.2	S1.3	S2.1	S2.2	S3.1	S3.2	S4.1
■ 250 J	■ 220 L	■ 200 J	■ 160 G	■ 120 H	■ 110 F	■ 45 D	■ 32 B	◪ 28 B	◪ 32 B	◪ 30 B	◪ 30 C	◪ 11 B	◪ 30 C
S4.2													
◪ 11 B													

DCON MS tolerance h6.

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LU (mm)	LS (mm)	DCON MS (mm)
RC4P3.0	–	3.00	0.1180	20.0	66.0	14.00	36.0	6.00
RC4P1/8	1/8	3.17	0.1250	20.0	66.0	14.00	36.0	6.00
RC4P3.5	–	3.50	0.1380	20.0	66.0	14.00	36.0	6.00
RC4P9/64	9/64	3.57	0.1410	20.0	66.0	14.00	36.0	6.00
RC4P5/32	5/32	3.97	0.1560	24.0	74.0	16.00	36.0	6.00
RC4P4.0	–	4.00	0.1570	24.0	74.0	16.00	36.0	6.00
RC4P4.5	–	4.50	0.1770	24.0	74.0	16.00	36.0	6.00
RC4P3/16	3/16	4.76	0.1880	28.0	82.0	19.00	36.0	6.00
RC4P4.8	–	4.80	0.1890	28.0	82.0	19.00	36.0	6.00
RC4P5.0	–	5.00	0.1970	28.0	82.0	19.00	36.0	6.00
RC4P5.5	–	5.50	0.2170	28.0	82.0	19.00	36.0	6.00
RC4P7/32	7/32	5.56	0.2190	28.0	82.0	19.00	36.0	6.00
RC4P5.8	–	5.80	0.2280	28.0	82.0	19.00	36.0	6.00
RC4P6.0	–	6.00	0.2360	28.0	82.0	19.00	36.0	6.00
RC4P6.1	–	6.10	0.2400	34.0	91.0	23.00	36.0	8.00
RC4P1/4	1/4	6.35	0.2500	34.0	91.0	23.00	36.0	8.00
RC4P6.5	–	6.50	0.2560	34.0	91.0	23.00	36.0	8.00
RC4P6.8	–	6.80	0.2680	34.0	91.0	23.00	36.0	8.00
RC4P7.0	–	7.00	0.2760	34.0	91.0	23.00	36.0	8.00
RC4P9/32	9/32	7.14	0.2810	41.0	91.0	29.00	36.0	8.00
RC4P7.4	–	7.40	0.2910	41.0	91.0	29.00	36.0	8.00
RC4P7.5	–	7.50	0.2950	41.0	91.0	29.00	36.0	8.00
RC4P5/16	5/16	7.94	0.3130	41.0	91.0	29.00	36.0	8.00

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LU (mm)	LS (mm)	DCON MS (mm)
RC4P8.0	–	8.00	0.3150	41.0	91.0	29.00	36.0	8.00
RC4P8.3	–	8.30	0.3270	47.0	103.0	32.00	40.0	10.00
RC4P8.5	–	8.50	0.3350	47.0	103.0	32.00	40.0	10.00
RC4P11/32	11/32	8.73	0.3440	47.0	103.0	32.00	40.0	10.00
RC4P9.0	–	9.00	0.3540	47.0	103.0	32.00	40.0	10.00
RC4P3/8	3/8	9.53	0.3750	47.0	103.0	32.00	40.0	10.00
RC4P9.8	–	9.80	0.3860	47.0	103.0	32.00	40.0	10.00
RC4P10.0	–	10.00	0.3940	47.0	103.0	32.00	40.0	10.00
RC4P10.2	–	10.20	0.4020	55.0	118.0	37.00	45.0	12.00
RC4P13/32	13/32	10.32	0.4060	55.0	118.0	37.00	45.0	12.00
RC4P11.0	–	11.00	0.4330	55.0	118.0	37.00	45.0	12.00
RC4P7/16	7/16	11.11	0.4380	55.0	118.0	37.00	45.0	12.00
RC4P11.5	–	11.50	0.4530	55.0	118.0	37.00	45.0	12.00
RC4P11.8	–	11.80	0.4650	55.0	118.0	37.00	45.0	12.00
RC4P15/32	15/32	11.91	0.4690	55.0	118.0	37.00	45.0	12.00
RC4P12.0	–	12.00	0.4720	55.0	118.0	37.00	45.0	12.00
RC4P1/2	1/2	12.70	0.5000	60.0	124.0	46.00	45.0	14.00
RC4P13.0	–	13.00	0.5120	60.0	124.0	46.00	45.0	14.00
RC4P14.0	–	14.00	0.5510	60.0	124.0	46.00	45.0	14.00
RC4P9/16	9/16	14.29	0.5630	65.0	133.0	49.00	48.0	16.00
RC4P15.0	–	15.00	0.5910	65.0	133.0	49.00	48.0	16.00
RC4P16.0	–	16.00	0.6300	65.0	133.0	49.00	48.0	16.00



Feed per revolution f_n (mm/rev)
Depending on the working conditions it might be necessary to adjust these values ± 25 %.

How to use this table to find the feed per revolution f_n:

1. Find your Alpha Code on the product page (example: 46J, "**J**" is the Alpha Code).
2. Find the closest diameter for your cutting application in the top row of the table.
3. Find your Alpha Code in the left column of the table.
4. The intersection (cell) of the Diameter and Alpha Code is the feed per revolution f_n.

Feed rates (mm/rev)	ø DC (mm)																		
	0.15	0.5	1.0	2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0	15.0	16.0	20.0	25.0	30.0	40.0	50.0	100
A	0.003	0.006	0.012	0.023	0.029	0.032	0.036	0.042	0.054	0.062	0.069	0.082	0.086	0.110	0.125	0.135	0.155	0.175	0.263
B	0.004	0.007	0.014	0.028	0.037	0.041	0.046	0.053	0.067	0.080	0.090	0.103	0.108	0.135	0.153	0.165	0.188	0.208	0.312
C	0.004	0.008	0.015	0.032	0.044	0.050	0.056	0.064	0.080	0.098	0.110	0.125	0.130	0.160	0.180	0.195	0.220	0.240	0.360
D	0.004	0.008	0.016	0.038	0.053	0.060	0.068	0.078	0.098	0.119	0.130	0.149	0.155	0.188	0.210	0.228	0.253	0.275	0.413
E	0.004	0.009	0.017	0.043	0.062	0.071	0.080	0.092	0.115	0.140	0.150	0.173	0.180	0.215	0.240	0.260	0.285	0.310	0.465
F	0.005	0.009	0.018	0.050	0.073	0.084	0.095	0.109	0.138	0.165	0.178	0.202	0.210	0.248	0.275	0.295	0.320	0.343	0.515
G	0.005	0.010	0.019	0.056	0.084	0.096	0.109	0.126	0.160	0.190	0.205	0.231	0.240	0.280	0.310	0.330	0.355	0.375	0.563
H	0.005	0.010	0.020	0.066	0.102	0.116	0.130	0.150	0.190	0.228	0.243	0.271	0.280	0.320	0.355	0.375	0.398	0.418	0.627
I	0.005	0.011	0.021	0.076	0.119	0.134	0.150	0.173	0.220	0.265	0.280	0.310	0.320	0.360	0.400	0.420	0.440	0.460	0.690
J	0.006	0.012	0.024	0.084	0.135	0.152	0.170	0.197	0.250	0.298	0.315	0.349	0.360	0.405	0.445	0.465	0.485	0.503	0.755
K	0.007	0.013	0.026	0.092	0.150	0.170	0.190	0.220	0.280	0.330	0.350	0.388	0.400	0.450	0.490	0.510	0.530	0.545	0.818
L	0.007	0.014	0.028	0.101	0.165	0.186	0.208	0.240	0.305	0.360	0.385	0.419	0.430	0.485	0.525	0.545	0.568	0.588	0.882
M	0.008	0.015	0.030	0.110	0.180	0.202	0.225	0.260	0.330	0.390	0.420	0.450	0.460	0.520	0.560	0.580	0.605	0.630	0.945
N	0.008	0.016	0.032	0.119	0.195	0.218	0.242	0.280	0.355	0.420	0.455	0.481	0.490	0.555	0.595	0.615	0.642	0.672	1.008
S	0.002	0.004	0.008	0.014	0.020	0.025	0.030	0.037	0.050	0.080	0.100	0.123	0.130	0.150	0.170	0.190	0.220	0.240	–
T	0.004	0.008	0.015	0.028	0.040	0.050	0.060	0.070	0.090	0.110	0.130	0.160	0.170	0.190	0.210	0.230	0.260	0.275	–
U	0.007	0.013	0.026	0.048	0.070	0.080	0.090	0.107	0.140	0.170	0.200	0.223	0.230	0.240	0.270	0.300	0.360	0.375	–
V	0.010	0.019	0.038	0.069	0.100	0.115	0.130	0.153	0.200	0.250	0.280	0.310	0.320	0.340	0.400	0.440	0.510	0.530	–
W	0.012	0.025	0.049	0.089	0.130	0.150	0.170	0.200	0.260	0.330	0.380	0.418	0.430	0.450	0.470	0.490	0.520	0.540	–
X	0.014	0.028	0.056	0.103	0.150	0.180	0.210	0.250	0.330	0.420	0.480	0.533	0.550	0.580	–	–	–	–	–
Y	0.017	0.034	0.068	0.124	0.180	0.220	0.260	0.317	0.430	0.550	0.700	0.700	0.700	0.740	–	–	–	–	–
Z	0.024	0.047	0.094	0.172	0.250	0.325	0.400	0.533	0.800	1.000	1.100	1.175	1.200	1.200	–	–	–	–	–

Solid carbide multi-material micro drills

Enhanced process reliability in small-diameter applications

The new Force Micro drills deliver exceptional performance for micro applications with diameters ranging from 0.7 to 2.95 mm.

Engineered for utmost accuracy and long tool life, they operate smoothly at speeds above 15 000 RPM, featuring a 140°-point angle, advanced coating, and optimized flute design for reliable chip evacuation across multiple materials.

Related products

RC305

5xD

0.7 – 2.95 mm

AlCrN Coated, **Coolant feed**

Features and benefits

Micro diameters from 0.7 to 2.95 mm with through-coolant capabilities.	**Exceptional precision** in micro applications with superior tool performance.
140°-point angle and fine cutting edges.	**Excellent hole quality** and smooth surface finish.
Internal coolant and optimized flute geometry.	**High process reliability** for effective chip evacuation and consistent results.
Advanced AlCrN coating.	**Extended tool life** with excellent wear resistance and thermal stability.
Suitable for angular exits up to 20°.	**Versatile drills** for complex drilling applications.

Boost productivity with significantly longer tool life in ISO-P and ISO-M drilling.

Extensive testing against multiple competitors has demonstrated superior durability.

Features and benefits

Ultrafine carbide substrate

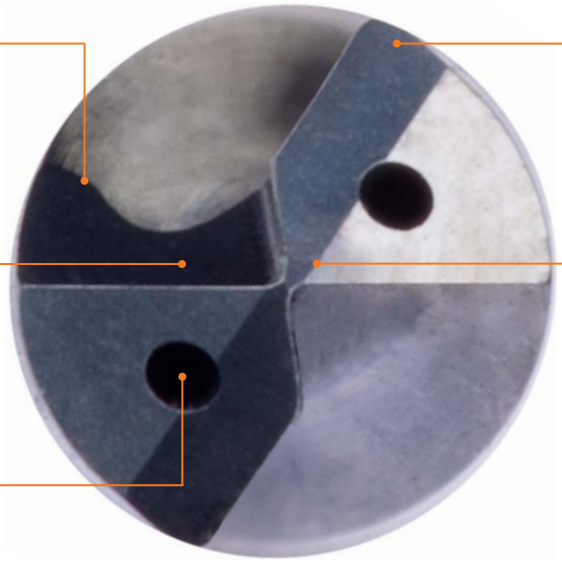
- Assist curling the chips
- Prevents the chips from breaking the wall

Web design

- Strong web design
- Optimized flute space

Coolant through

- Ensure cooling at the cutting zone
- Enhance chip evacuation

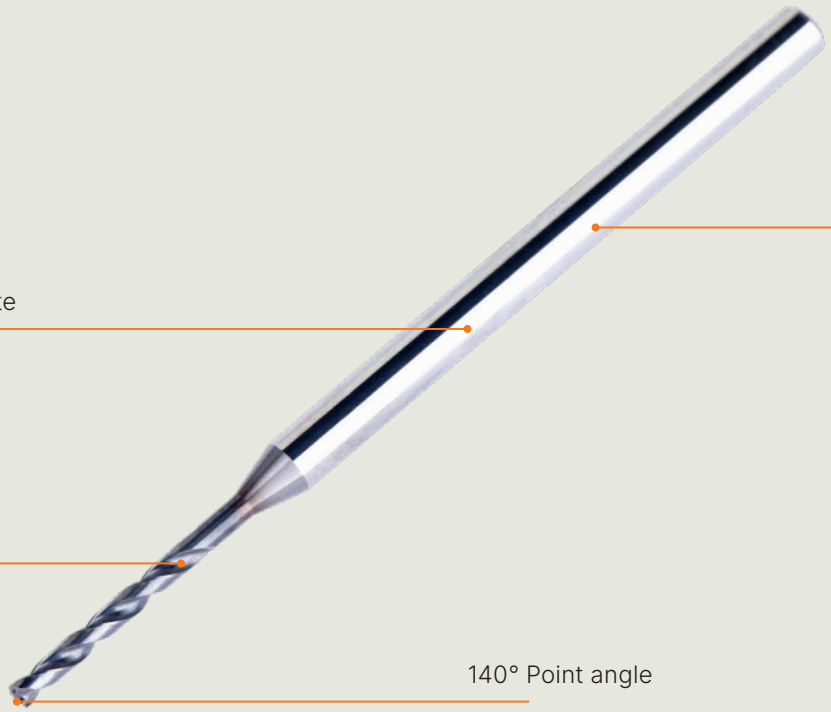


Outer corner design

- Increases stability
- Improve hole quality

4-facet split point

- Good positional accuracy and tolerance
- Stronger edges
- Improved chip-formation
- Better force distribution

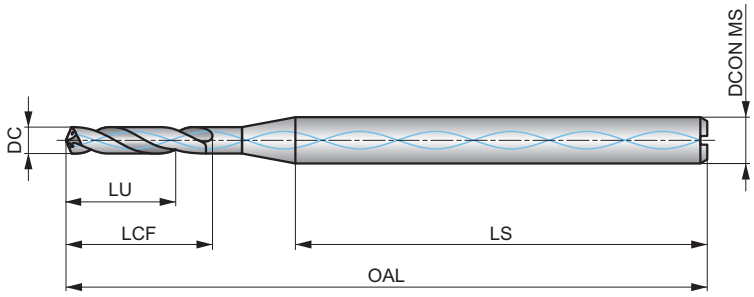


RC305

DORMER PRAMET

FORCE Micro Solid Carbide 5XD Drill with Coolant Feed, AlCrN Coated

High-performance micro drill designed for precision applications, featuring a 140° point angle and capable of drilling up to 5xD. Engineered with finely prepared cutting edges to ensure excellent surface quality. Internal coolant enhances chip evacuation, while the advanced AlCrN coating provides outstanding wear resistance, thermal stability, and process reliability.



HM	DIN 6535	5×D
140°	AlCrN	DIN 6535HA
R	DC m7	

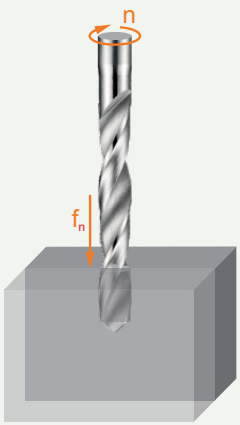
Workpiece material group suitability, starting values for cutting speed (m/min) and feed Alpha Code. Tables with feed per revolution can be found starting from page 46.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
100 J	105 J	108 J	102 J	82 J	80 J	80 J	63 H	40 E	70 G	63 H	40 E	65 J	63 J
M2.1	M2.2	M2.3	M3.1	M3.2	M3.3	M4.1	M4.2	K1.1	K1.2	K1.3	K2.1	K2.2	K2.3
60 G	63 G	63 G	40 F	37 F	35 F	25 E	25 E	105 L	100 L	95 L	105 J	65 J	63 J
K3.1	K3.2	K3.3	K4.1	K4.2	K4.3	K4.4	K4.5	K5.1	K5.2	K5.3	N1.1	N1.2	N1.3
65 J	63 J	60 J	80 J	75 J	60 U	58 U	55 U	80 J	70 J	65 J	125 Y	120 Y	119 Y
N2.1	N2.2	N2.3	N3.1	N3.2	N3.3	S1.1	S1.2	S1.3	S2.1	S2.2	S3.1	S3.2	S4.1
125 Y	120 L	119 L	80 G	75 J	74 E	40 E	25 C	25 C	32 E	20 C	25 D	16 D	25 D
S4.2													
16 D													

DCON MS tolerance h6.

Product	DC (inch)	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	LU (mm)	LS (mm)	DCON MS (mm)
RC3050.7	–	0.70	0.0280	6.0	48.0	4.90	30.0	3.00
RC3050.75	–	0.75	0.0300	7.0	48.0	5.80	30.0	3.00
RC3051/32	1/32	0.79	0.0310	7.0	48.0	5.80	30.0	3.00
RC3050.8	–	0.80	0.0310	7.0	48.0	5.80	30.0	3.00
RC3050.85	–	0.85	0.0330	8.0	50.0	6.60	30.0	3.00
RC3050.9	–	0.90	0.0350	8.0	50.0	6.60	30.0	3.00
RC3050.95	–	0.95	0.0370	9.0	50.0	7.50	30.0	3.00
RC3051.0	–	1.00	0.0390	9.0	50.0	7.50	30.0	3.00
RC3051.05	–	1.05	0.0410	9.0	51.0	7.00	30.0	3.00
RC3051.1	–	1.10	0.0430	9.0	51.0	7.00	30.0	3.00
RC3051.15	–	1.15	0.0450	10.0	51.0	8.00	30.0	3.00
RC3053/64	3/64	1.19	0.0470	10.0	51.0	8.00	30.0	3.00
RC3051.2	–	1.20	0.0470	10.0	51.0	8.00	30.0	3.00
RC3051.25	–	1.25	0.0490	11.0	51.0	9.00	30.0	3.00
RC3051.3	–	1.30	0.0510	11.0	53.0	9.00	30.0	3.00
RC3051.35	–	1.35	0.0530	12.0	53.0	9.00	30.0	3.00
RC3051.4	–	1.40	0.0550	12.0	53.0	9.00	30.0	3.00
RC3051.45	–	1.45	0.0570	13.0	53.0	10.00	30.0	3.00
RC3051.5	–	1.50	0.0590	13.0	53.0	10.00	30.0	3.00
RC3051.55	–	1.55	0.0610	14.0	54.0	11.00	30.0	3.00
RC3051/16	1/16	1.59	0.0630	14.0	54.0	11.00	30.0	3.00
RC3051.6	–	1.60	0.0630	14.0	54.0	11.00	30.0	3.00
RC3051.65	–	1.65	0.0650	14.0	54.0	11.00	30.0	3.00

Product	DC	DC	DC	LCF	OAL	LU	LS	DCON MS
	(inch)	(mm)	(inch)	(mm)	(mm)	(mm)	(mm)	(mm)
RC3051.7	–	1.70	0.0670	14.0	54.0	11.00	30.0	3.00
RC3051.75	–	1.75	0.0690	15.0	54.0	12.00	30.0	3.00
RC3051.8	–	1.80	0.0710	15.0	54.0	12.00	30.0	3.00
RC3051.85	–	1.85	0.0730	16.0	57.0	13.00	30.0	3.00
RC3051.9	–	1.90	0.0750	16.0	57.0	13.00	30.0	3.00
RC3051.95	–	1.95	0.0770	17.0	57.0	14.00	30.0	3.00
RC3055/64	5/64	1.98	0.0780	17.0	57.0	14.00	30.0	3.00
RC3052.0	–	2.00	0.0790	17.0	57.0	14.00	30.0	3.00
RC3052.05	–	2.05	0.0810	18.0	57.0	14.00	30.0	3.00
RC3052.1	–	2.10	0.0830	18.0	57.0	14.00	30.0	3.00
RC3052.15	–	2.15	0.0850	19.0	57.0	15.00	30.0	3.00
RC3052.2	–	2.20	0.0870	19.0	57.0	15.00	30.0	3.00
RC3052.25	–	2.25	0.0890	20.0	59.0	16.00	30.0	3.00
RC3052.3	–	2.30	0.0910	20.0	59.0	16.00	30.0	3.00
RC3052.35	–	2.35	0.0930	20.0	59.0	16.00	30.0	3.00
RC3053/32	3/32	2.38	0.0940	20.0	59.0	16.00	30.0	3.00
RC3052.4	–	2.40	0.0940	20.0	59.0	16.00	30.0	3.00
RC3052.45	–	2.45	0.0960	21.0	59.0	17.00	30.0	3.00
RC3052.5	–	2.50	0.0980	21.0	59.0	17.00	30.0	3.00
RC3052.55	–	2.55	0.1000	22.0	62.0	18.00	30.0	3.00
RC3052.6	–	2.60	0.1020	22.0	62.0	18.00	30.0	3.00
RC3052.65	–	2.65	0.1040	23.0	62.0	18.00	30.0	3.00
RC3052.7	–	2.70	0.1060	23.0	62.0	18.00	30.0	3.00
RC3052.75	–	2.75	0.1080	24.0	62.0	19.00	30.0	3.00
RC3057/64	7/64	2.78	0.1090	24.0	62.0	19.00	30.0	3.00
RC3052.8	–	2.80	0.1100	24.0	62.0	19.00	30.0	3.00
RC3052.85	–	2.85	0.1120	25.0	62.0	20.00	30.0	3.00
RC3052.9	–	2.90	0.1140	25.0	62.0	20.00	30.0	3.00
RC3052.95	–	2.95	0.1160	25.0	62.0	20.00	30.0	3.00



Feed per revolution f_n (mm/rev)
Depending on the working conditions it might be necessary to adjust these values ± 25 %.

How to use this table to find the feed per revolution f_n:

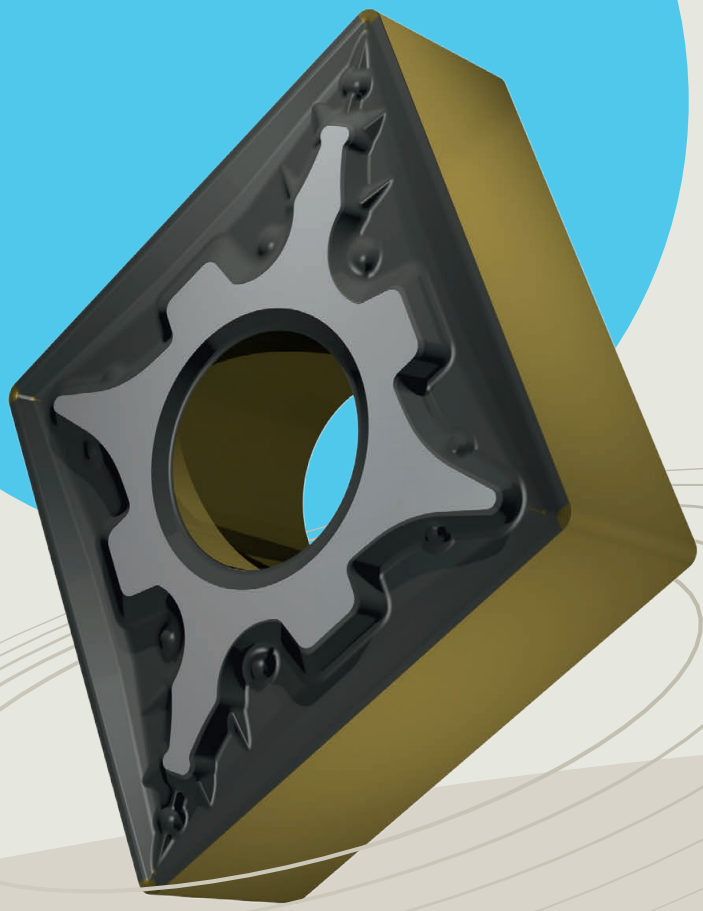
1. Find your Alpha Code on the product page (example: 46J, "**J**" is the Alpha Code).
2. Find the closest diameter for your cutting application in the top row of the table.
3. Find your Alpha Code in the left column of the table.
4. The intersection (cell) of the Diameter and Alpha Code is the feed per revolution f_n.

Feed rates (mm/rev)	ø DC (mm)											
	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80
C	0.011	0.012	0.014	0.015	0.017	0.018	0.020	0.022	0.024	0.025	0.027	0.029
D	0.011	0.013	0.014	0.016	0.018	0.020	0.023	0.025	0.027	0.029	0.031	0.034
E	0.012	0.014	0.015	0.017	0.020	0.022	0.025	0.027	0.030	0.033	0.035	0.038
F	0.013	0.014	0.016	0.018	0.021	0.024	0.028	0.031	0.034	0.037	0.040	0.044
G	0.013	0.015	0.017	0.019	0.023	0.026	0.030	0.034	0.038	0.041	0.045	0.049
H	0.014	0.016	0.018	0.020	0.025	0.029	0.034	0.038	0.043	0.048	0.052	0.057
J	0.017	0.019	0.022	0.024	0.030	0.036	0.042	0.048	0.054	0.060	0.066	0.072
L	0.020	0.022	0.025	0.028	0.035	0.043	0.050	0.057	0.065	0.072	0.079	0.086
U	0.018	0.021	0.023	0.026	0.028	0.030	0.033	0.035	0.037	0.039	0.041	0.044
Y	0.048	0.054	0.061	0.068	0.074	0.079	0.085	0.090	0.096	0.102	0.107	0.113
	ø DC (mm)											
	1.90	2.00	2.10	2.20	2.30	2.40	2.50	2.60	2.70	2.80	2.90	2.95
C	0.030	0.032	0.033	0.034	0.036	0.037	0.038	0.039	0.040	0.042	0.043	0.043
D	0.036	0.038	0.040	0.041	0.042	0.044	0.045	0.047	0.048	0.050	0.051	0.052
E	0.040	0.043	0.045	0.047	0.049	0.051	0.053	0.054	0.056	0.058	0.060	0.061
F	0.047	0.050	0.052	0.055	0.057	0.059	0.062	0.064	0.066	0.068	0.071	0.072
G	0.052	0.056	0.059	0.062	0.064	0.067	0.070	0.073	0.076	0.078	0.081	0.083
H	0.061	0.066	0.070	0.073	0.077	0.080	0.084	0.088	0.091	0.095	0.098	0.100
J	0.078	0.084	0.089	0.094	0.099	0.104	0.110	0.115	0.120	0.125	0.130	0.132
L	0.094	0.101	0.107	0.114	0.120	0.127	0.133	0.139	0.146	0.152	0.159	0.162
U	0.046	0.048	0.050	0.052	0.055	0.057	0.059	0.061	0.063	0.066	0.068	0.069
Y	0.118	0.124	0.130	0.135	0.141	0.146	0.152	0.158	0.163	0.169	0.174	0.177

DORMER PRAMET™

T5405 grade

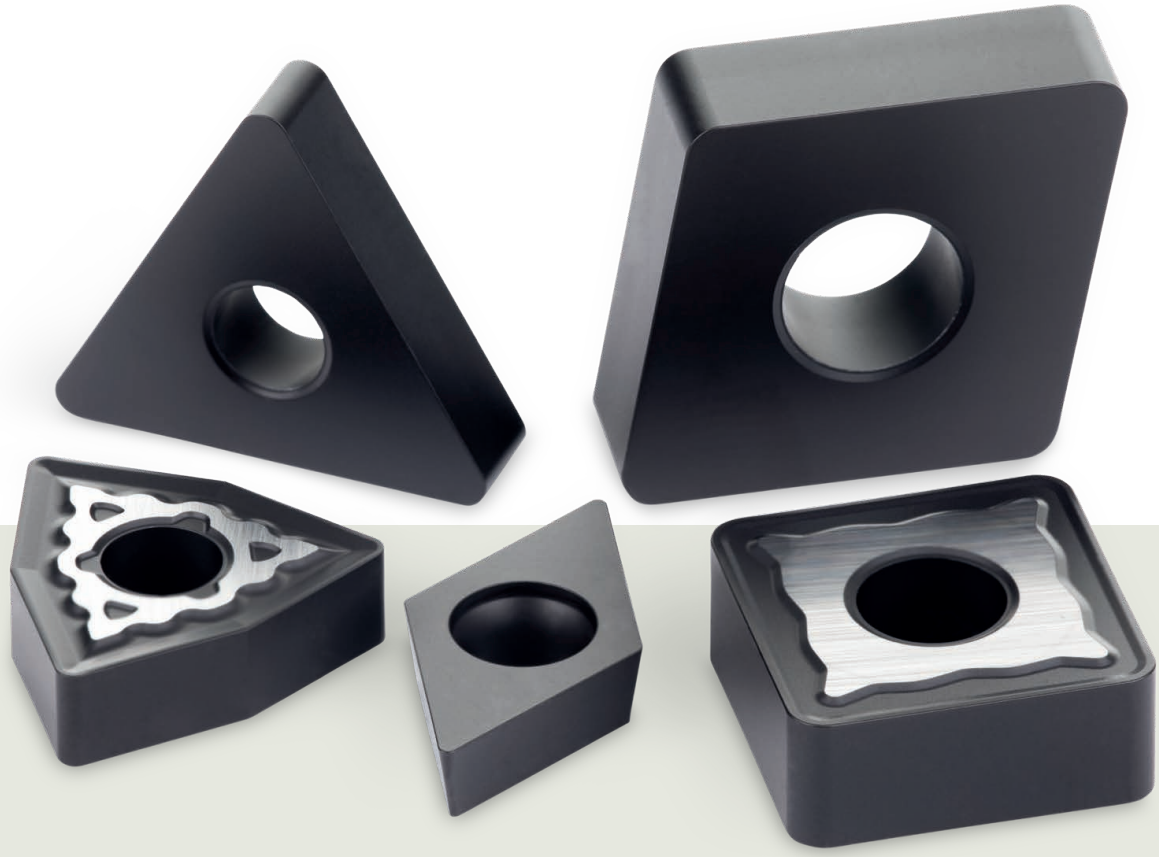
Maximize your productivity in gray cast iron



Certainty
at every turn™

New CVD grade for gray cast iron

Maximize your productivity in gray cast iron

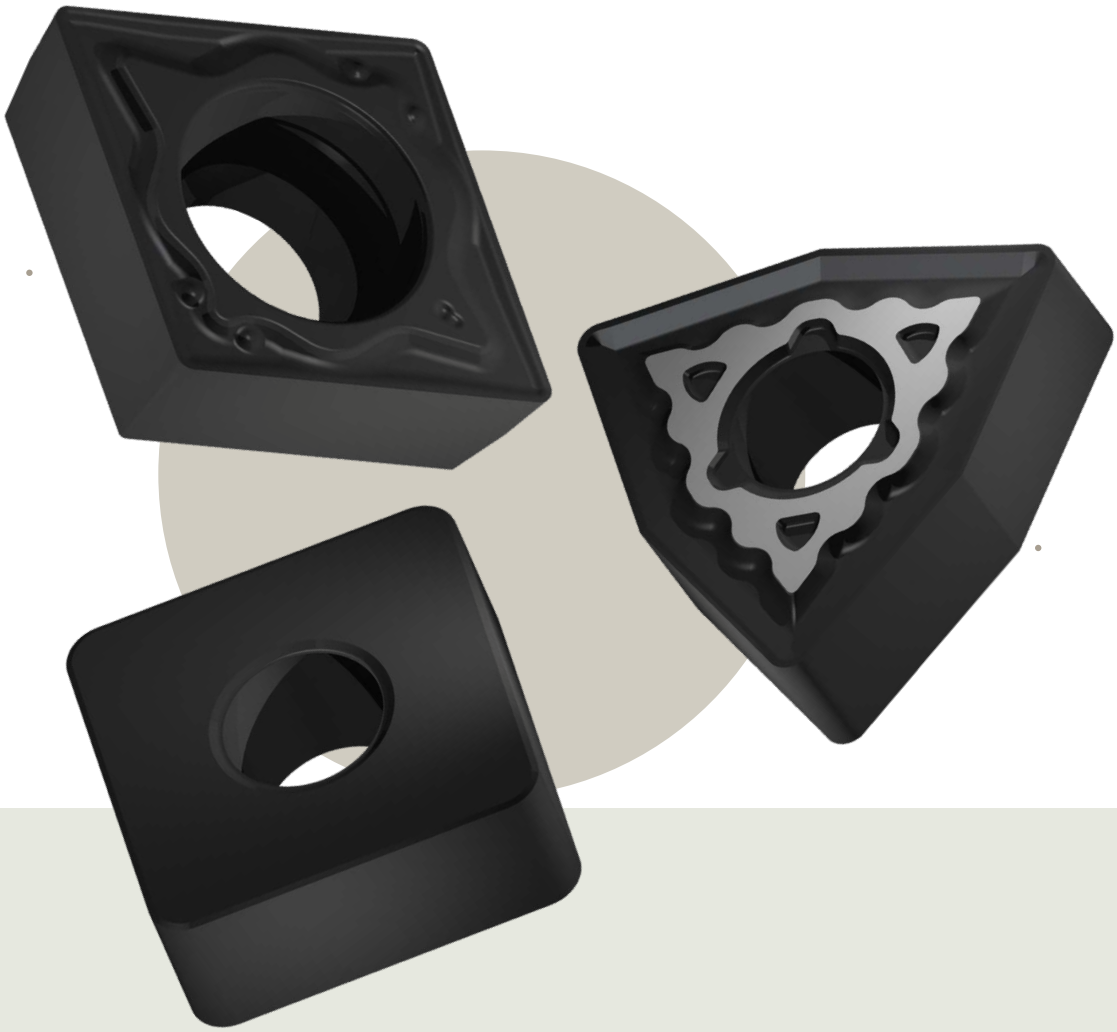


The new T5405 CVD turning grade provides excellent tool life in gray cast iron applications, thanks to its advanced α-Al_2O_3 coating technology.

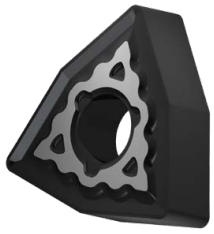
Key features and benefits include outstanding performance at high cutting speeds, a precision-ground seating face for improved stability, and additional suitability for white cast iron.

The T5405 is a reliable and efficient solution for high-productivity machining environments where durability and performance matter most.

Related products



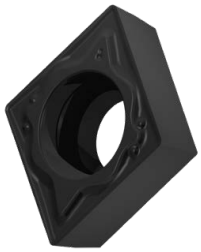
T5405



Negative inserts

Gray cast iron

T5405



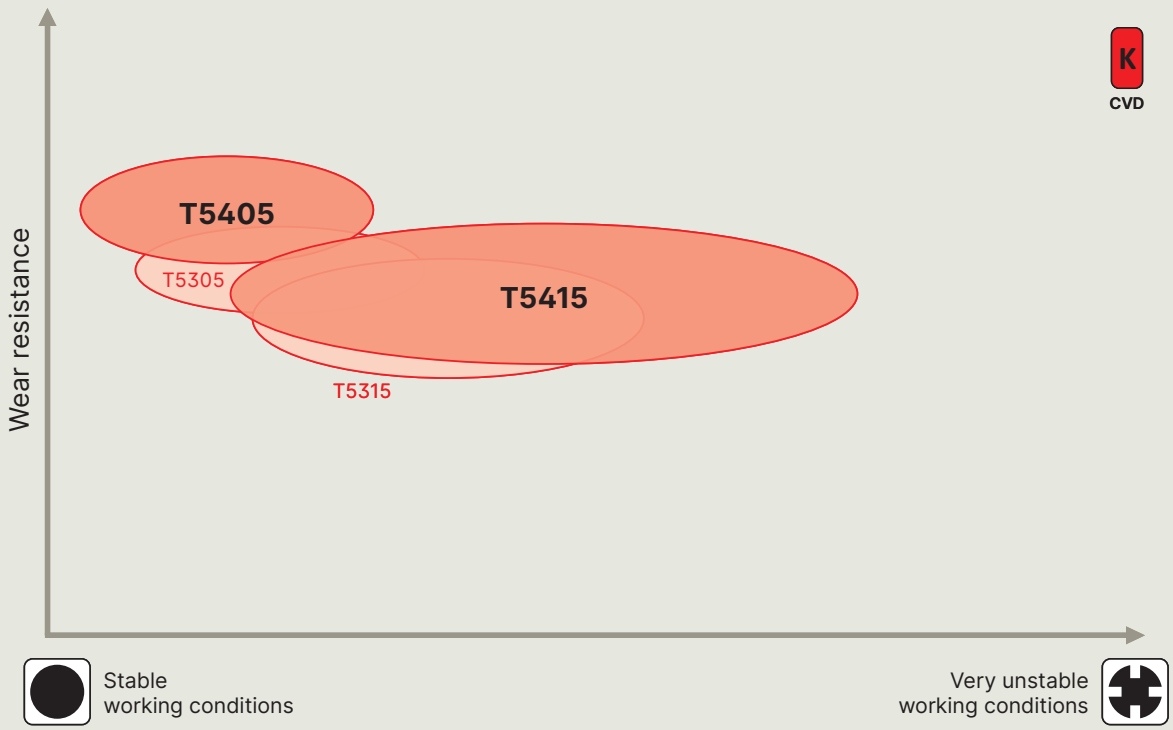
Positive inserts

Gray cast iron

Features & benefits

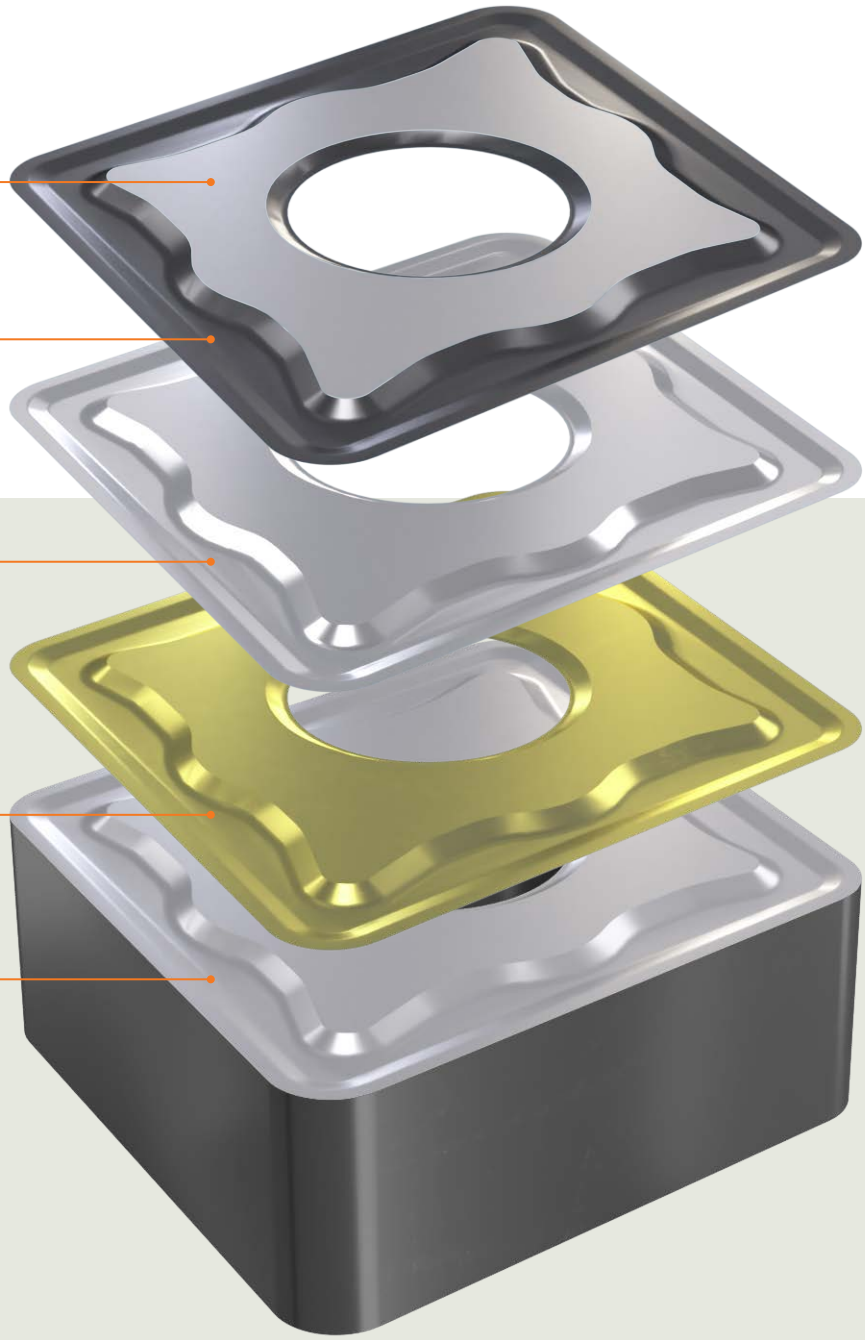
New CVD coating platform with enhanced layer thickness.	**Significantly boosts tool life** and productivity.
Advanced α-Al_2O_3 coating provides superior wear resistance.	**Reliable performance** and extended tool life in stable cutting conditions.
The highly textured α-Al_2O_3 coating provides increased heat stability.	**Increased productivity** at high cutting speeds.
Ground seating face provides larger contact area and optimizes heat transfer.	**Improved seating stability** ensures consistent high-quality performance.

Application area of T5405 turning grades



Grade composition

Thick and highly textured α-Al_2O_3 coating for maximum durability



Success stories

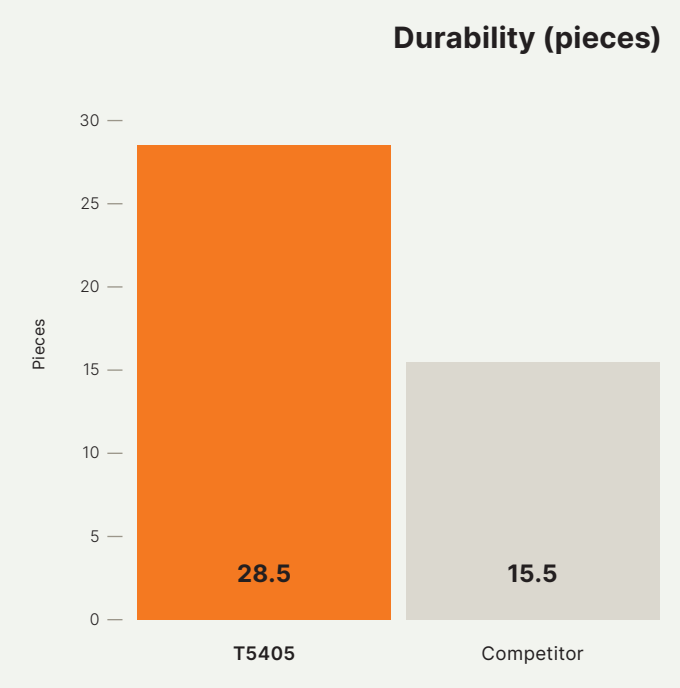
Enhance durability by **84%** in cast iron machining

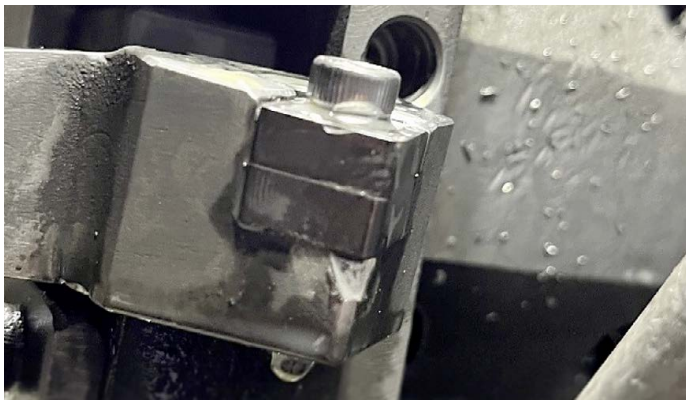
Customer result: The T5405 grade achieved an average tool life of 28.5 pieces, clearly outperforming the competitor's grade (15.5 pieces). Under cutting parameters of 432 m/min, 0.5 mm/rev, 4 mm depth of cut, the T5405 reached up to 42 pieces, proving its reliability in high-speed, high-productivity operations.
These results demonstrate the exceptional performance of the T5405 grade and durability in machining truck engine sleeves.

Segment	Automotive
Component	Truck engine sleeve
Application	Turning
Material	EN-GJS-400-15 (GG40)
Coolant	No
Dormer Pramet solution	SNMA 150616S:T5405

Machining data		
v_c	f_n	a_p
432	0.5	4.0

K1.3





v_c = cutting speed (m/min), f_n = feed per revolution (mm/rev), a_p = axial depth of cut (mm)

Success stories

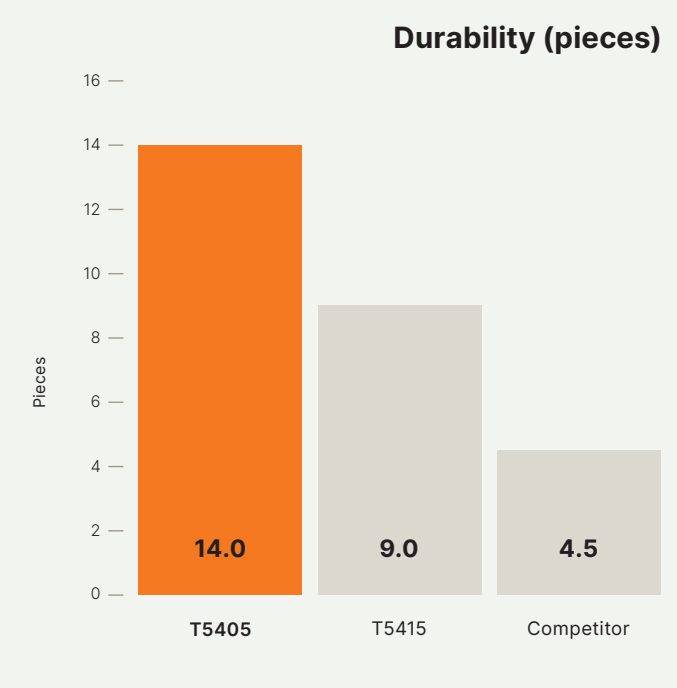
Achieve **211%** longer tool life in demanding operations

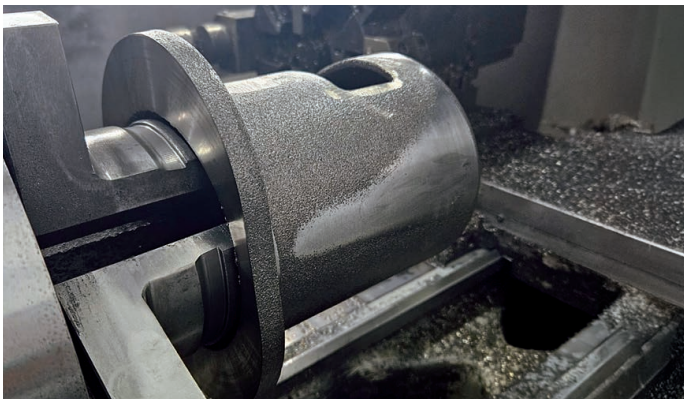
Customer result: The T5405 achieved an average tool life of 14 pieces, over three times more than the competitor's tool (4.5 pieces). At 320 m/min, 0.22 mm/rev, and 0.8 mm depth of cut, the T5405 outperformed T5415 as well, delivering 55% longer tool life.
This proves the T5405 as a reliable solution in demanding environments.

Segment	Agriculture
Component	Harvester sleeve
Application	Turning
Material	EN-GJS-500-7 (GGG50)
Coolant	Yes
Dormer Pramet solution	WNMA 080412:T5405

Machining data		
v_c	f_n	a_p
320	0.22	0.8

K3.1





v_c = cutting speed (m/min), f_n = feed per revolution (mm/rev), a_p = axial depth of cut (mm)

Machining examples

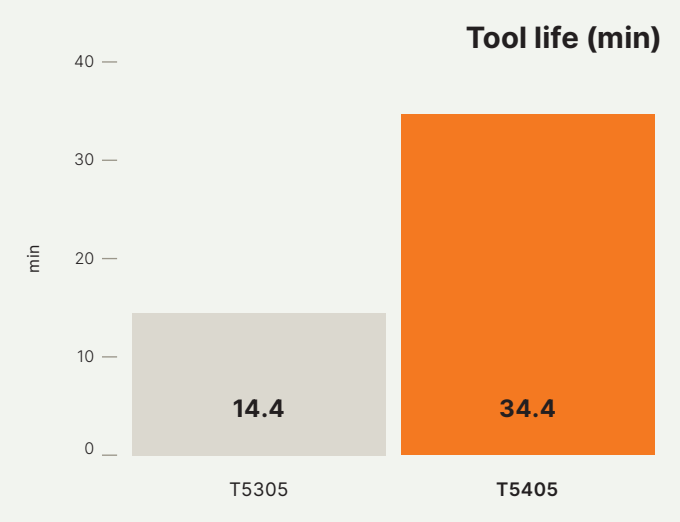
Boost tool life by **139%** in gray cast iron face turning

The tests in our testing rooms confirmed an outstanding improvement in durability against the previous grade. The new T5405 grade achieved a tool life of 34.4 minutes in face turning operations – 139% longer than the previous T5305 grade.

Application	Face turning
Material	GG25
Coolant	No
Dormer Pramet solution	CNMA 120408:T5405

Machining data		
v_c	f_n	a_p
330	0.3	2.0

K1.2



T5305

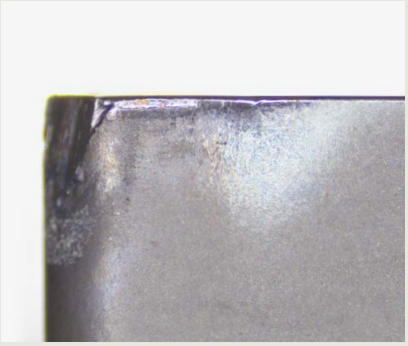


Photo taken after 14.4 minutes

T5405

Photo taken after 14.4 minutes

T5405

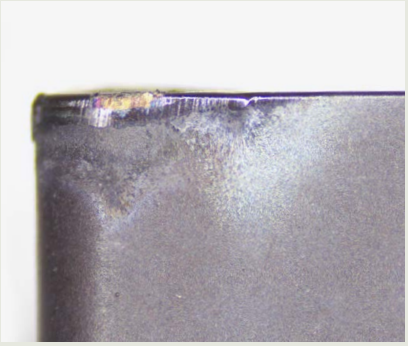


Photo taken after 31 minutes

v_c = cutting speed (m/min), f_n = feed per revolution (mm/rev), a_p = axial depth of cut (mm)

Machining examples

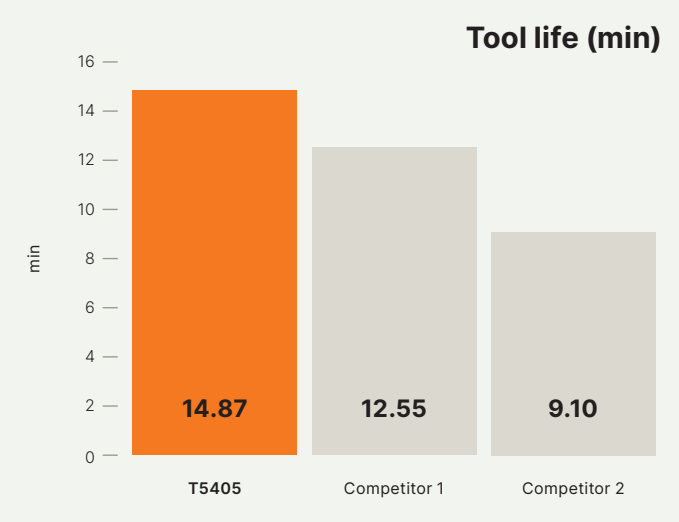
Significant higher tool life against the best competitor

In demanding combined operations the new T5405 grade delivered 14.9 minutes of tool life, which was higher than any competitor. The grade maintained consistent performance throughout both operations while outperforming all tested competitors by at least 18.5%.

Application	Combined face turning and longitudinal turning
Material	GG25
Coolant	Yes
Dormer Pramet solution	CNMA 120408:T5405

Machining data		
v_c	f_n	a_p
530	0.3	2.0

K1.2



T5405

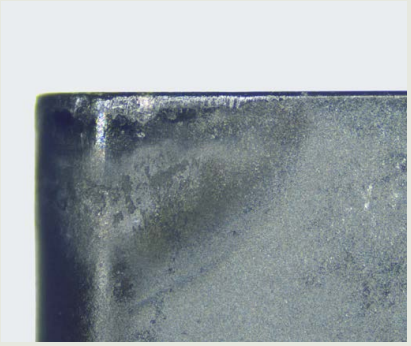


Photo taken after 12 minutes

Competitor 1

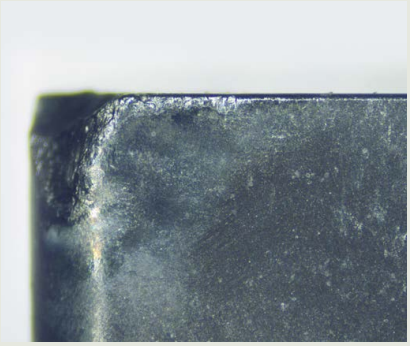


Photo taken after 12 minutes

Competitor 2

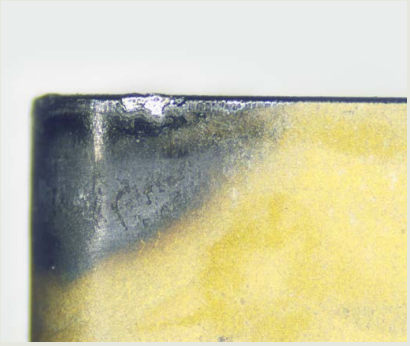


Photo taken after 9 minutes

v_c = cutting speed (m/min), f_n = feed per revolution (mm/rev), a_p = axial depth of cut (mm)

Technical information

Chipbreakers for negative T5405 inserts

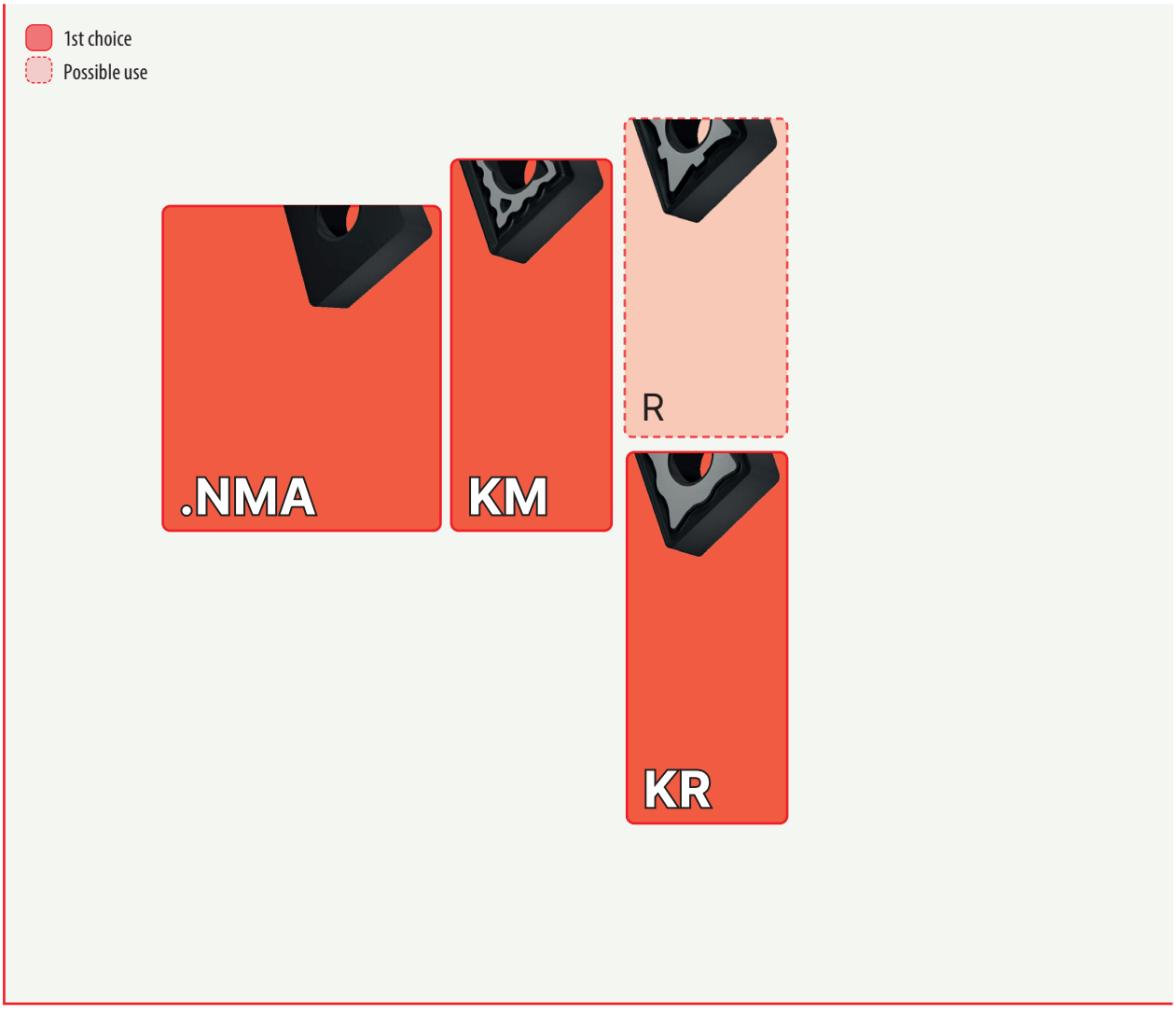
K

Very unstable working conditions

Unstable working conditions

Stable working conditions

Thin -walled and slim workpieces



	FF	F	M	R	HR
f	0.05 – 0.2 mm/rev		0.2 – 0.4 mm/rev	0.4 – 1.0 mm/rev	> 1.0 mm/rev
a_p	0.05 – 2 mm		2 – 4 mm	4 – 10 mm	> 10 mm

Technical information

Chipbreakers for positive T5405 inserts

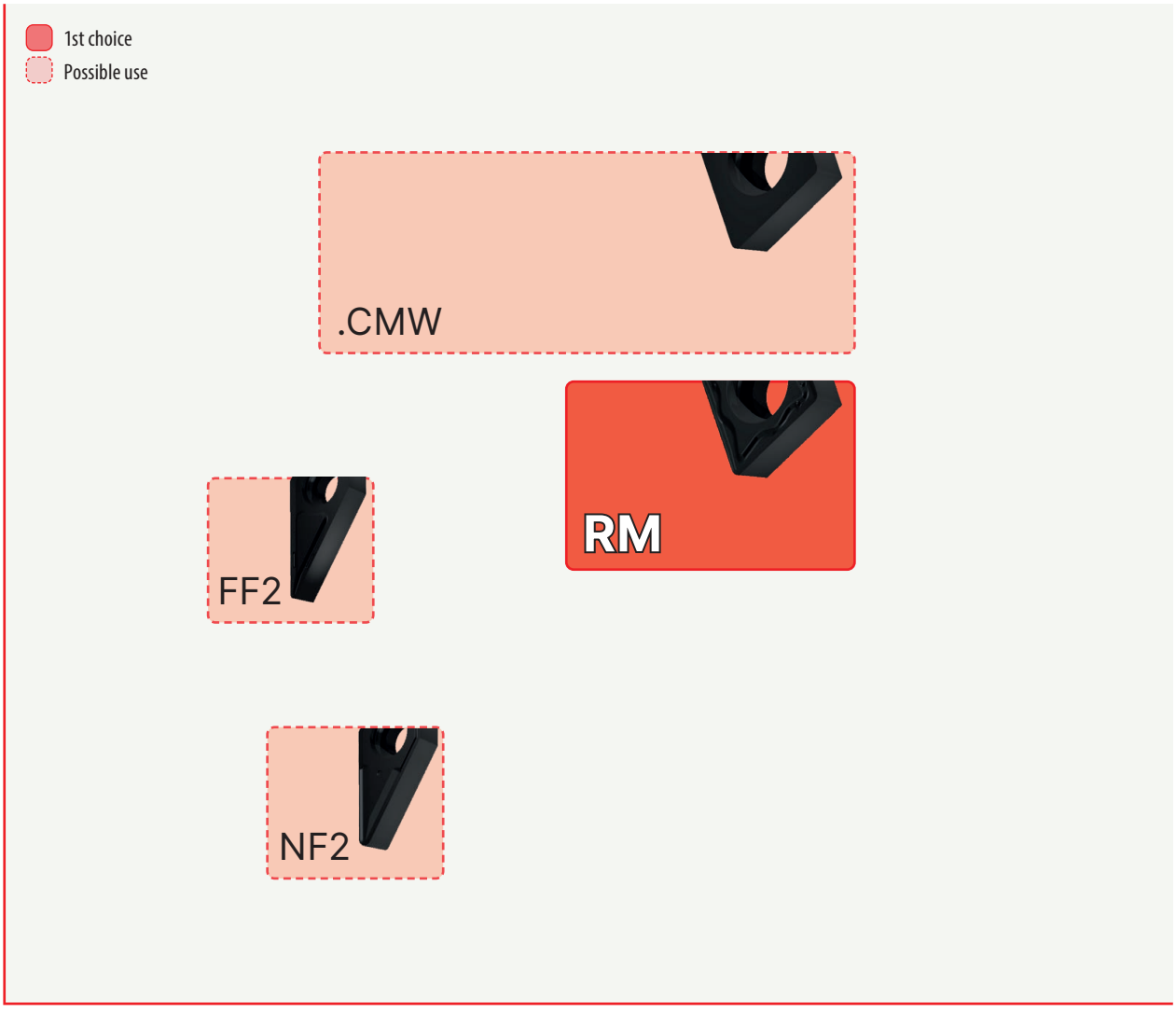
K

Very unstable working conditions

Unstable working conditions

Stable working conditions

Thin -walled and slim workpieces



	FF	F	M	R	HR
f	0.05 – 0.2 mm/rev		0.2 – 0.4 mm/rev	0.4 – 1.0 mm/rev	> 1.0 mm/rev
a_p	0.05 – 2 mm		2 – 4 mm	4 – 10 mm	> 10 mm

Technical information

T5405 application range and material compatibility

Grade identification	Area of application	Application	Feed	Cutting speed	Resistance to adverse working conditions	Coating	Colour	Substrate	Coolant benefit	Grade description
T5405	P05 - P15	◪				MT-CVD		H	+	This wear resistant material is primarily intended for finishing and semi-roughing turning of cast iron parts (especially gray) at very high cutting speeds under stable cutting conditions. It is conditionally possible to use this material for machining steels.
	K01 - K15	■								

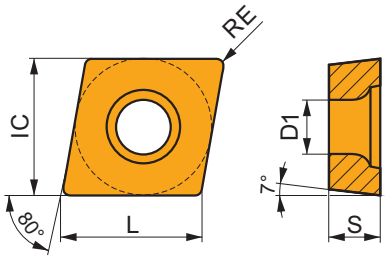
■ Primary use ◪ Possible use

Recommended grades by ISO material group

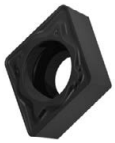
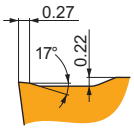
Group	Cemented carbide with MTCVD			Cemented carbide with PVD		Uncoated carbide	CER
K01	T5405						TC100
K05	T5405						TC100
K10	T5405						TC100
K15	T5405	T5415	T9425	T8415		HF7	TC100
K20		T5415	T9425	T8415		HF7	
K25		T5415	T9425	T8415		HF7	
K30			T9425		T8430		
K35			T9425		T8430		
K40					T8430		
K45							
50							

CCMT

	IC (mm)	D1 (mm)	L (mm)	S (mm)
09T3	9.525	4.40	9.70	3.97
1204	12.700	5.50	12.90	4.76

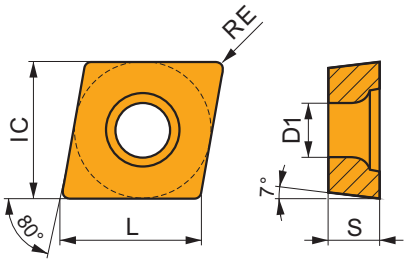


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 	**RM** chip breaker is robust and the first choice for roughing of Steels and Cast irons. It features positive rake angle and stable, wide T-land. It's also suitable for Stainless steels, and conditionally for Super-alloys and Hard materials.																			
CCMT 09T304E-RM:T5405	●	0.4	◪	325	0.25	2.2	–	–	–	■	305	0.25	2.2	–	–	–	–	–	–	–	–	–
CCMT 09T308E-RM:T5405	⇕	0.8	◪	365	0.30	2.2	–	–	–	■	345	0.30	2.2	–	–	–	–	–	–	–	–	–
CCMT 120408E-RM:T5405	⇕	0.8	◪	355	0.30	2.7	–	–	–	■	335	0.30	2.7	–	–	–	–	–	–	–	–	–

CCMW

	IC (mm)	D1 (mm)	L (mm)	S (mm)
0602	6.350	2.80	6.40	2.38
09T3	9.525	4.40	9.70	3.97
1204	12.700	5.50	12.90	4.76

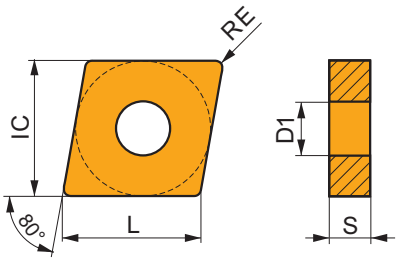


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

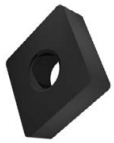
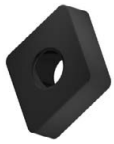
Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
	.CMW flat insert is designed for medium machining of Cast irons. It features neutral rake angle without T-land. It's also conditionally suitable for Hard materials.																			
CCMW 060202:T5405	●	0.2	–	–	–	–	–	–	■	270	0.08	2.0	–	–	–	–	–	–	–	–	–	–
CCMW 060204:T5405	●	0.4	–	–	–	–	–	–	■	270	0.10	2.0	–	–	–	–	–	–	–	–	–	–
CCMW 09T304:T5405	●	0.4	–	–	–	–	–	–	■	205	0.20	3.0	–	–	–	–	–	–	–	–	–	–
CCMW 09T308:T5405	●	0.8	–	–	–	–	–	–	■	245	0.20	3.0	–	–	–	–	–	–	–	–	–	–
CCMW 120404:T5405	●	0.4	–	–	–	–	–	–	■	245	0.10	4.0	–	–	–	–	–	–	–	–	–	–
CCMW 120408:T5405	⇕	0.8	–	–	–	–	–	–	■	235	0.20	4.0	–	–	–	–	–	–	–	–	–	–

CNMA

	IC (mm)	D1 (mm)	L (mm)	S (mm)
1204	12.700	5.16	12.90	4.76
1606	15.875	6.35	16.10	6.35
1906	19.050	7.94	19.30	6.35



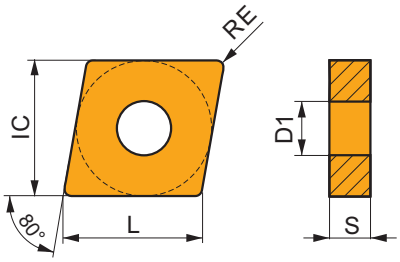
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
																				
.NMA flat insert is designed for medium machining of Cast irons. It features neutral rake angle without T-land. It's also conditionally suitable for Hard materials.																				
CNMA 120404:T5405	●	0.4	–	–	–	–	–	–	■ 275	0.10	4.0	–	–	–	–	–	–	–	–	–
CNMA 120408:T5405	⬌	0.8	–	–	–	–	–	–	■ 265	0.20	4.0	–	–	–	–	–	–	–	–	–
CNMA 120412:T5405	⬌	1.2	–	–	–	–	–	–	■ 245	0.30	4.0	–	–	–	–	–	–	–	–	–
CNMA 120416:T5405	⬌	1.6	–	–	–	–	–	–	■ 235	0.40	4.0	–	–	–	–	–	–	–	–	–
CNMA 160612:T5405	⬌	1.2	–	–	–	–	–	–	■ 240	0.30	5.0	–	–	–	–	–	–	–	–	–
CNMA 160616:T5405	⬌	1.6	–	–	–	–	–	–	■ 230	0.40	5.0	–	–	–	–	–	–	–	–	–
CNMA 190612:T5405	⬌	1.2	–	–	–	–	–	–	■ 235	0.30	6.0	–	–	–	–	–	–	–	–	–
CNMA 190616:T5405	⬌	1.6	–	–	–	–	–	–	■ 225	0.40	6.0	–	–	–	–	–	–	–	–	–
																				
.NMA..S flat insert is designed for medium machining of Cast irons. It features neutral rake angle and negative, moderate T-land. It's also conditionally suitable for Hard materials.																				
CNMA 120408S:T5405	⬌	0.8	–	–	–	–	–	–	■ 265	0.20	4.0	–	–	–	–	–	–	–	–	–
CNMA 120412S:T5405	⬌	1.2	–	–	–	–	–	–	■ 245	0.30	4.0	–	–	–	–	–	–	–	–	–
CNMA 160612S:T5405	⬌	1.2	–	–	–	–	–	–	■ 240	0.30	5.0	–	–	–	–	–	–	–	–	–
CNMA 190616S:T5405	⬌	1.6	–	–	–	–	–	–	■ 225	0.40	6.0	–	–	–	–	–	–	–	–	–

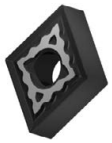
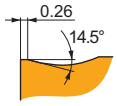
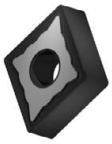
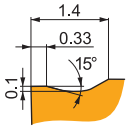
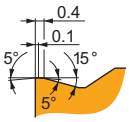
● Stable working conditions ⬌ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

CNMG

	IC (mm)	D1 (mm)	L (mm)	S (mm)
1204	12.700	5.16	12.90	4.76
1606	15.875	6.35	16.10	6.35
1906	19.050	7.94	19.30	6.35



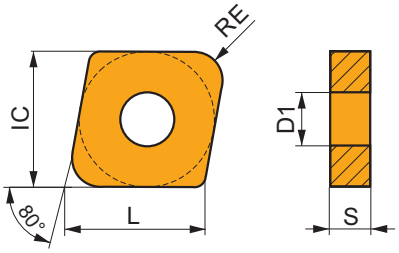
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
KM chip breaker is versatile and the first choice for medium machining of Cast irons. It features slightly positive rake angle and stable, wide T-land. It's also conditionally suitable for Steels and Hard materials.																				
CNMG 120404-KM:T5405	●	0.4	◪ 340	0.20	2.1	–	–	–	■ 320	0.20	2.1	–	–	–	–	–	–	–	–	–
CNMG 120408-KM:T5405	⬌	0.8	◪ 350	0.32	2.1	–	–	–	■ 330	0.32	2.1	–	–	–	–	–	–	–	–	–
CNMG 120412-KM:T5405	⬌	1.2	◪ 345	0.40	2.1	–	–	–	■ 325	0.40	2.1	–	–	–	–	–	–	–	–	–
 																				
KR chip breaker is robust and the first choice for roughing of Cast irons. It features slightly positive rake angle and , wide T-land. It's also suitable for Steels, and conditionally for Hard materials.																				
CNMG 120408E-KR:T5405	⬌	0.8	◪ 300	0.40	4.0	–	–	–	■ 285	0.40	4.0	–	–	–	–	–	–	–	–	–
CNMG 120412E-KR:T5405	⬌	1.2	◪ 345	0.40	2.1	–	–	–	■ 325	0.40	2.1	–	–	–	–	–	–	–	–	–
CNMG 120416E-KR:T5405	⬌	1.6	◪ 360	0.40	2.1	–	–	–	■ 340	0.40	2.1	–	–	–	–	–	–	–	–	–
CNMG 160608E-KR:T5405	⬌	0.8	◪ 310	0.35	4.5	–	–	–	■ 290	0.35	4.5	–	–	–	–	–	–	–	–	–
CNMG 160612E-KR:T5405	⬌	1.2	◪ 305	0.45	4.5	–	–	–	■ 285	0.45	4.5	–	–	–	–	–	–	–	–	–
CNMG 160616E-KR:T5405	⬌	1.6	◪ 305	0.50	4.5	–	–	–	■ 285	0.50	4.5	–	–	–	–	–	–	–	–	–
CNMG 190608E-KR:T5405	⬌	0.8	◪ 295	0.35	7.0	–	–	–	■ 280	0.35	7.0	–	–	–	–	–	–	–	–	–
CNMG 190612E-KR:T5405	⬌	1.2	◪ 290	0.45	7.0	–	–	–	■ 275	0.45	7.0	–	–	–	–	–	–	–	–	–
CNMG 190616E-KR:T5405	⬌	1.6	◪ 295	0.50	7.0	–	–	–	■ 280	0.50	7.0	–	–	–	–	–	–	–	–	–
																				
R chip breaker is robust and designed for roughing of Steels and Cast irons. It features slightly positive rake angle and negative/stable, extra-wide double T-land. It's also conditionally suitable for Hard materials.																				
CNMG 120408E-R:T5405	⬌	0.8	◪ 300	0.40	4.0	–	–	–	■ 285	0.40	4.0	–	–	–	–	–	–	–	–	–
CNMG 160612E-R:T5405	⬌	1.2	◪ 300	0.45	5.5	–	–	–	■ 285	0.45	5.5	–	–	–	–	–	–	–	–	–
CNMG 160616E-R:T5405	⬌	1.6	◪ 300	0.50	5.5	–	–	–	■ 285	0.50	5.5	–	–	–	–	–	–	–	–	–
CNMG 190612E-R:T5405	⬌	1.2	◪ 290	0.45	7.0	–	–	–	■ 275	0.45	7.0	–	–	–	–	–	–	–	–	–

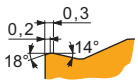
● Stable working conditions ⬌ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

CNMX 19

	IC (mm)	D1 (mm)	L (mm)	S (mm)
1907	19.050	7.75	19.30	7.94



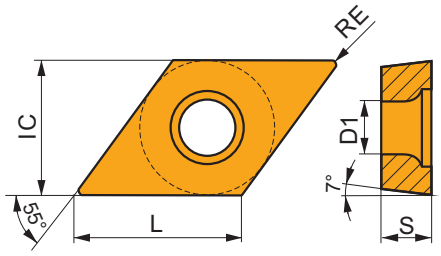
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
																				
CNMX 190740SN-RF:T5405	✱	4.0	◪ 125	0.85	4.0	–	–	–	■ 115	0.85	4.0	–	–	–	–	–	–	–	–	–

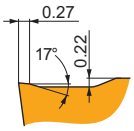
RF geometry for semi-rough to rough machining, and continuous to interrupted cuts.

DCMT

	IC (mm)	D1 (mm)	L (mm)	S (mm)
11T3	9.525	4.40	11.60	3.97



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

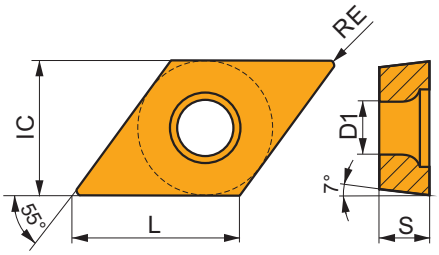
Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
																				
DCMT 11T304E-RM:T5405	●	0.4	◪ 305	0.20	1.0	–	–	–	■ 285	0.20	1.0	–	–	–	–	–	–	–	–	–
DCMT 11T308E-RM:T5405	●	0.8	◪ 340	0.27	0.8	–	–	–	■ 320	0.27	0.8	–	–	–	–	–	–	–	–	–

RM chip breaker is robust and the first choice for roughing of Steels and Cast irons. It features positive rake angle and stable, wide T-land. It's also suitable for Stainless steels, and conditionally for Super-alloys and Hard materials.

● Stable working conditions ⇕ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

DCMW

	IC (mm)	D1 (mm)	L (mm)	S (mm)
0702	6.350	2.80	7.80	2.38
11T3	9.525	4.40	11.60	3.97



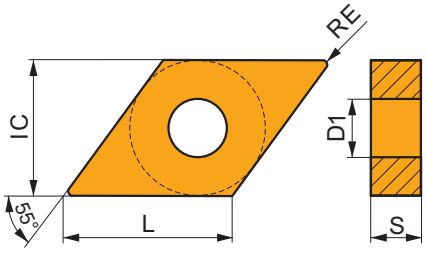
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
DCMW 070202:T5405	●	0.2	–	–	–	–	–	–	■ 235	0.08	0.8	–	–	–	–	–	–	–	–	–
DCMW 070204:T5405	●	0.4	–	–	–	–	–	–	■ 235	0.10	0.8	–	–	–	–	–	–	–	–	–
DCMW 11T304:T5405	●	0.4	–	–	–	–	–	–	■ 225	0.10	1.2	–	–	–	–	–	–	–	–	–
DCMW 11T308:T5405	●	0.8	–	–	–	–	–	–	■ 225	0.18	1.2	–	–	–	–	–	–	–	–	–

.CMW flat insert is designed for medium machining of Cast irons. It features neutral rake angle without T-land. It's also conditionally suitable for Hard materials.

DNMA

	IC (mm)	D1 (mm)	L (mm)	S (mm)
1504	12.700	5.16	15.50	4.76
1506	12.700	5.16	15.50	6.35



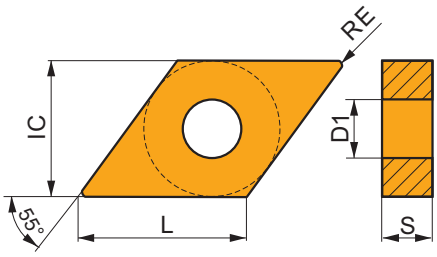
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
DNMA 150408:T5405	●	0.8	–	–	–	–	–	–	■ 230	0.20	1.7	–	–	–	–	–	–	–	–	–
DNMA 150604:T5405	●	0.4	–	–	–	–	–	–	■ 240	0.10	1.7	–	–	–	–	–	–	–	–	–
DNMA 150608:T5405	●	0.8	–	–	–	–	–	–	■ 230	0.20	1.7	–	–	–	–	–	–	–	–	–
DNMA 150612:T5405	⬌	1.2	–	–	–	–	–	–	■ 245	0.20	1.7	–	–	–	–	–	–	–	–	–

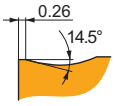
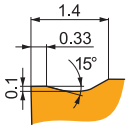
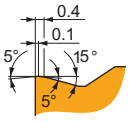
.NMA flat insert is designed for medium machining of Cast irons. It features neutral rake angle without T-land. It's also conditionally suitable for Hard materials.

DNMG

	IC (mm)	D1 (mm)	L (mm)	S (mm)
1504	12.700	5.16	15.50	4.76
1506	12.700	5.16	15.50	6.35



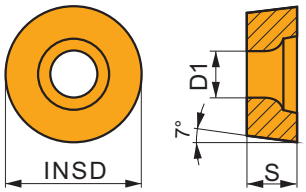
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
																				
KM chip breaker is versatile and the first choice for medium machining of Cast irons. It features slightly positive rake angle and stable, wide T-land. It's also conditionally suitable for Steels and Hard materials.																				
DNMG 150404-KM:T5405	●	0.4	◪ 275	0.20	1.9	–	–	–	■ 260	0.20	1.9	–	–	–	–	–	–	–	–	–
DNMG 150412-KM:T5405	⬌	1.2	◪ 280	0.40	1.9	–	–	–	■ 265	0.40	1.9	–	–	–	–	–	–	–	–	–
DNMG 150608-KM:T5405	●	0.8	◪ 285	0.30	1.9	–	–	–	■ 270	0.30	1.9	–	–	–	–	–	–	–	–	–
																				
KR chip breaker is robust and the first choice for roughing of Cast irons. It features slightly positive rake angle and , wide T-land. It's also suitable for Steels, and conditionally for Hard materials.																				
DNMG 150608E-KR:T5405	●	0.8	◪ 260	0.35	3.0	–	–	–	■ 245	0.35	3.0	–	–	–	–	–	–	–	–	–
DNMG 150612E-KR:T5405	⬌	1.2	◪ 260	0.40	3.0	–	–	–	■ 245	0.40	3.0	–	–	–	–	–	–	–	–	–
DNMG 150616E-KR:T5405	⬌	1.6	◪ 260	0.50	3.0	–	–	–	■ 245	0.50	3.0	–	–	–	–	–	–	–	–	–
																				
R chip breaker is robust and designed for roughing of Steels and Cast irons. It features slightly positive rake angle and negative/stable, extra-wide double T-land. It's also conditionally suitable for Hard materials.																				
DNMG 150608E-R:T5405	⬌	0.8	◪ 250	0.40	3.0	–	–	–	■ 235	0.40	3.0	–	–	–	–	–	–	–	–	–
DNMG 150616E-R:T5405	⬌	1.6	◪ 275	0.40	3.0	–	–	–	■ 260	0.40	3.0	–	–	–	–	–	–	–	–	–

● Stable working conditions ⬌ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

RCMW

	D1 (mm)	S (mm)
0602	2.80	2.38
0803	3.40	3.18
10T3	4.40	3.97
1204	4.40	4.76



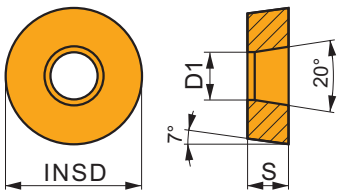
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇔ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
HFC E																				
RCMW 0602M0:T5405	⇔	–	–	–	–	–	–	–	■ 355	0.25	0.6	–	–	–	–	–	–	–	–	–
RCMW 0803M0:T5405	⇔	–	–	–	–	–	–	–	■ 320	0.30	0.8	–	–	–	–	–	–	–	–	–
RCMW 10T3M0:T5405	⇔	–	–	–	–	–	–	–	■ 285	0.40	1.0	–	–	–	–	–	–	–	–	–
RCMW 1204M0:T5405	⇔	–	–	–	–	–	–	–	■ 270	0.45	1.2	–	–	–	–	–	–	–	–	–

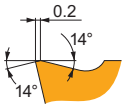
.CMW flat insert is designed for medium machining of Cast irons. It features neutral rake angle without T-land. It's also conditionally suitable for Hard materials.

RCMX

	D1 (mm)	S (mm)
2006	6.50	6.35



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

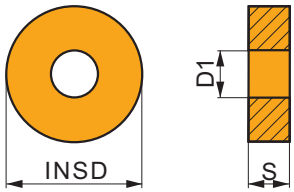
Product	● ⇔ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 ✱ HFC S																				
RCMX 2006M0-RF1:T5405	⇔	–	◪ 155	0.80	3.5	–	–	–	◪ 145	0.80	3.5	–	–	–	–	–	–	–	–	–

RF1 geometry for finish to semi-rough machining, and continuous to interrupted cuts.

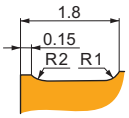
● Stable working conditions ⇔ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

RNMG

	D1 (mm)	S (mm)
1204	5.16	4.76
1506	6.35	6.35

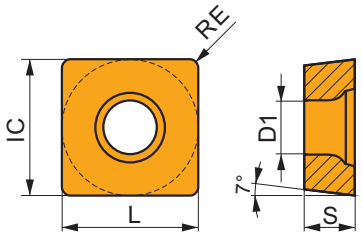


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

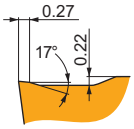
Product	●	⚙	✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 **08** geometry for semi-rough to heavy-rough machining, and continuous to interrupted cuts.																					
RNMG 120400E-08:T5405	●		–	◪	255	0.70	3.0	–	–	–	◪	240	0.70	3.0	–	–	–	–	–	–	–	–	–
RNMG 150600E-08:T5405	●		–	◪	255	0.70	3.0	–	–	–	◪	240	0.70	3.0	–	–	–	–	–	–	–	–	–

SCMT

	IC (mm)	D1 (mm)	L (mm)	S (mm)
09T3	9.525	4.40	9.53	3.97
1204	12.700	5.50	12.70	4.76



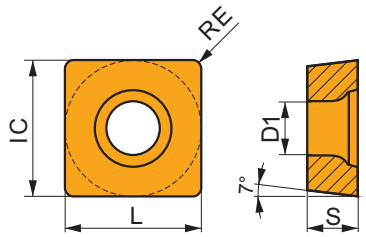
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	●	⚙	✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 **RM** chip breaker is robust and the first choice for roughing of Steels and Cast irons. It features positive rake angle and stable, wide T-land. It's also suitable for Stainless steels, and conditionally for Super-alloys and Hard materials.																						
SCMT 09T308E-RM:T5405		⚙		0.8	◪	390	0.30	2.0	–	–	–	■	370	0.30	2.0	–	–	–	–	–	–	–	–	–
SCMT 120408E-RM:T5405		⚙		0.8	◪	385	0.30	2.3	–	–	–	■	365	0.30	2.3	–	–	–	–	–	–	–	–	–

● Stable working conditions ⚙ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

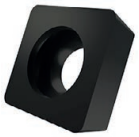
SCMW

	IC (mm)	D1 (mm)	L (mm)	S (mm)
09T3	9.525	4.40	9.53	3.97
1204	12.700	5.50	12.70	4.76



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

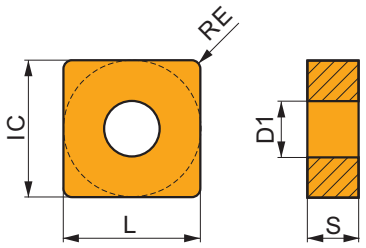
Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
SCMW 09T304:T5405	●	0.4	–	–	–	–	–	–	■ 285	0.10	2.0	–	–	–	–	–	–	–	–	–
SCMW 09T308:T5405	⇕	0.8	–	–	–	–	–	–	■ 270	0.20	2.0	–	–	–	–	–	–	–	–	–
SCMW 120408:T5405	⇕	0.8	–	–	–	–	–	–	■ 250	0.20	4.0	–	–	–	–	–	–	–	–	–



.CMW flat insert is designed for medium machining of Cast irons. It features neutral rake angle without T-land. It's also conditionally suitable for Hard materials.

SNMA

	IC (mm)	D1 (mm)	L (mm)	S (mm)
1204	12.700	5.16	12.70	4.76
1506	15.875	6.35	15.88	6.35
1906	19.050	7.94	19.05	6.35
2507	25.400	9.12	25.40	7.94
2509	25.400	9.12	25.40	9.53



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
SNMA 120408:T5405	⇕	0.8	–	–	–	–	–	–	■ 280	0.20	4.0	–	–	–	–	–	–	–	–	–
SNMA 120412:T5405	⇕	1.2	–	–	–	–	–	–	■ 260	0.30	4.0	–	–	–	–	–	–	–	–	–
SNMA 150612:T5405	⇕	1.2	–	–	–	–	–	–	■ 255	0.30	5.0	–	–	–	–	–	–	–	–	–
SNMA 190612:T5405	⇕	1.2	–	–	–	–	–	–	■ 245	0.30	6.0	–	–	–	–	–	–	–	–	–
SNMA 190616:T5405	⇕	1.6	–	–	–	–	–	–	■ 240	0.40	6.0	–	–	–	–	–	–	–	–	–
SNMA 250724:T5405	⇕	2.4	–	–	–	–	–	–	■ 135	0.60	8.0	–	–	–	–	–	–	–	–	–
SNMA 250924:T5405	⇕	2.4	–	–	–	–	–	–	■ 135	0.60	8.0	–	–	–	–	–	–	–	–	–

.NMA flat insert is designed for medium machining of Cast irons. It features neutral rake angle without T-land. It's also conditionally suitable for Hard materials.

.NMA..S flat insert is designed for medium machining of Cast irons. It features neutral rake angle and negative, moderate T-land. It's also conditionally suitable for Hard materials.

SNMA 120412S:T5405	⇕	1.2	–	–	–	–	–	–	■ 260	0.30	4.0	–	–	–	–	–	–	–	–	–

● Stable working conditions ⇕ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

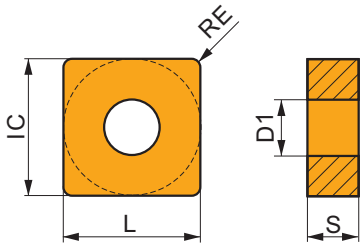
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	●	⇕	✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
SNMA 150616S:T5405		⇕		1.6	–	–	–	–	–	–	■ 270	0.30	5.0	–	–	–	–	–	–	–	–	–
SNMA 190616S:T5405		⇕		1.6	–	–	–	–	–	–	■ 240	0.40	6.0	–	–	–	–	–	–	–	–	–
SNMA 250724S:T5405		⇕		2.4	–	–	–	–	–	–	■ 135	0.60	8.0	–	–	–	–	–	–	–	–	–
SNMA 250924S:T5405		⇕		2.4	–	–	–	–	–	–	■ 135	0.60	8.0	–	–	–	–	–	–	–	–	–

.NMA..S flat insert is designed for medium machining of Cast irons. It features neutral rake angle and negative, moderate T-land. It's also conditionally suitable for Hard materials.

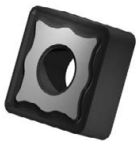
SNMG

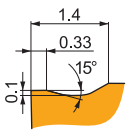
	IC (mm)	D1 (mm)	L (mm)	S (mm)
1204	12.700	5.16	12.70	4.76
1506	15.875	6.35	15.88	6.35
1906	19.050	7.94	19.05	6.35



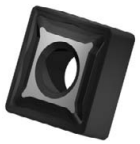
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

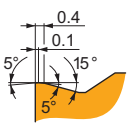
Product	●	⇕	✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
SNMG 120408E-KR:T5405		⇕		0.8	◪ 330	0.35	3.8	–	–	–	■ 310	0.35	3.8	–	–	–	–	–	–	–	–	–
SNMG 120412E-KR:T5405		⇕		1.2	◪ 340	0.40	3.8	–	–	–	■ 320	0.40	3.8	–	–	–	–	–	–	–	–	–
SNMG 120416E-KR:T5405		⇕		1.6	◪ 340	0.45	3.8	–	–	–	■ 320	0.45	3.8	–	–	–	–	–	–	–	–	–
SNMG 150612E-KR:T5405		⇕		1.2	◪ 320	0.45	4.5	–	–	–	■ 300	0.45	4.5	–	–	–	–	–	–	–	–	–
SNMG 150616E-KR:T5405		⇕		1.6	◪ 325	0.50	4.5	–	–	–	■ 305	0.50	4.5	–	–	–	–	–	–	–	–	–
SNMG 190612E-KR:T5405		⇕		1.2	◪ 300	0.45	7.0	–	–	–	■ 285	0.45	7.0	–	–	–	–	–	–	–	–	–
SNMG 190616E-KR:T5405		⇕		1.6	◪ 310	0.50	7.0	–	–	–	■ 290	0.50	7.0	–	–	–	–	–	–	–	–	–





KR chip breaker is robust and the first choice for roughing of Cast irons. It features slightly positive rake angle and , wide T-land. It's also suitable for Steels, and conditionally for Hard materials.





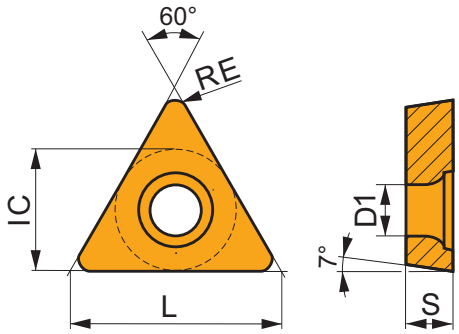
R chip breaker is robust and designed for roughing of Steels and Cast irons. It features slightly positive rake angle and negative/stable, extra-wide double T-land. It's also conditionally suitable for Hard materials.

SNMG 120408E-R:T5405		⇕		0.8	◪ 320	0.40	3.8	–	–	–	■ 300	0.40	3.8	–	–	–	–	–	–	–	–	–

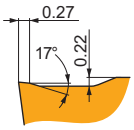
● Stable working conditions ⇕ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

TCMT

	IC (mm)	D1 (mm)	L (mm)	S (mm)
16T3	9.525	4.40	16.50	3.97



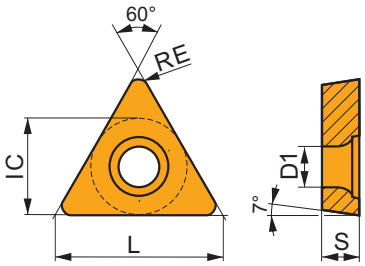
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
																				
TCMT 16T308E-RM:T5405	●	0.8	◪ 330	0.27	1.9	–	–	–	■ 310	0.27	1.9	–	–	–	–	–	–	–	–	–
TCMT 16T312E-RM:T5405	●	1.2	◪ 345	0.27	1.9	–	–	–	■ 325	0.27	1.9	–	–	–	–	–	–	–	–	–

RM chip breaker is robust and the first choice for roughing of Steels and Cast irons. It features positive rake angle and stable, wide T-land. It's also suitable for Stainless steels, and conditionally for Super-alloys and Hard materials.

TCMW

	IC (mm)	D1 (mm)	L (mm)	S (mm)
1102	6.350	2.80	11.00	2.38
16T3	9.525	4.40	16.50	3.97



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

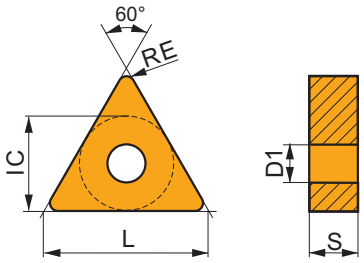
Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
TCMW 110204:T5405	●	0.4	–	–	–	–	–	–	■ 240	0.10	1.2	–	–	–	–	–	–	–	–	–
TCMW 16T304:T5405	●	0.4	–	–	–	–	–	–	■ 235	0.10	1.5	–	–	–	–	–	–	–	–	–
TCMW 16T308:T5405	●	0.8	–	–	–	–	–	–	■ 230	0.18	1.5	–	–	–	–	–	–	–	–	–

.CMW flat insert is designed for medium machining of Cast irons. It features neutral rake angle without T-land. It's also conditionally suitable for Hard materials.

● Stable working conditions ⬌ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

TNMA

	IC (mm)	D1 (mm)	L (mm)	S (mm)
1604	9.525	3.81	16.50	4.76
2204	12.700	5.16	22.00	4.76

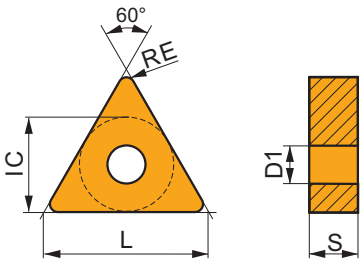


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

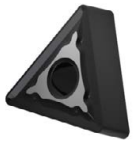
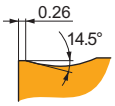
Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
.NMA flat insert is designed for medium machining of Cast irons. It features neutral rake angle without T-land. It's also conditionally suitable for Hard materials.																				
TNMA 160404:T5405	●	0.4	–	–	–	–	–	–	■ 260	0.10	1.5	–	–	–	–	–	–	–	–	–
TNMA 160408:T5405	●	0.8	–	–	–	–	–	–	■ 250	0.20	1.5	–	–	–	–	–	–	–	–	–
TNMA 160412:T5405	⬌	1.2	–	–	–	–	–	–	■ 265	0.20	1.5	–	–	–	–	–	–	–	–	–
TNMA 220408:T5405	●	0.8	–	–	–	–	–	–	■ 245	0.20	2.0	–	–	–	–	–	–	–	–	–
TNMA 220412:T5405	⬌	1.2	–	–	–	–	–	–	■ 255	0.20	2.0	–	–	–	–	–	–	–	–	–
.NMA..S flat insert is designed for medium machining of Cast irons. It features neutral rake angle and negative, moderate T-land. It's also conditionally suitable for Hard materials.																				
TNMA 160408S:T5405	⬌	0.8	–	–	–	–	–	–	■ 250	0.20	1.5	–	–	–	–	–	–	–	–	–

TNMG

	IC (mm)	D1 (mm)	L (mm)	S (mm)
1604	9.525	3.81	16.50	4.76
2204	12.700	5.16	22.00	4.76

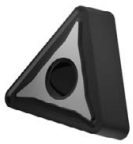
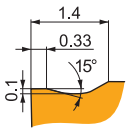


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
KM chip breaker is versatile and the first choice for medium machining of Cast irons. It features slightly positive rake angle and stable, wide T-land. It's also conditionally suitable for Steels and Hard materials.																				
TNMG 160408-KM:T5405	●	0.8	◪ 300	0.30	2.1	–	–	–	■ 285	0.30	2.1	–	–	–	–	–	–	–	–	–

● Stable working conditions ⬌ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

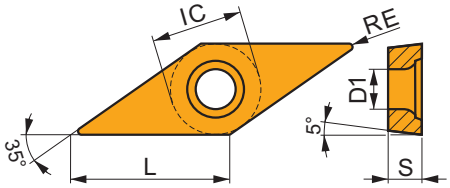
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
																				
TNMG 160408E-KR:T5405	●	0.8	◩ 275	0.35	3.0	–	–	–	■ 260	0.35	3.0	–	–	–	–	–	–	–	–	–
TNMG 160412E-KR:T5405	⇕	1.2	◩ 280	0.40	3.0	–	–	–	■ 265	0.40	3.0	–	–	–	–	–	–	–	–	–
TNMG 220408E-KR:T5405	●	0.8	◩ 270	0.35	4.0	–	–	–	■ 255	0.35	4.0	–	–	–	–	–	–	–	–	–
TNMG 220412E-KR:T5405	⇕	1.2	◩ 270	0.40	4.0	–	–	–	■ 255	0.40	4.0	–	–	–	–	–	–	–	–	–

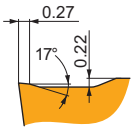
KR chip breaker is robust and the first choice for roughing of Cast irons. It features slightly positive rake angle and , wide T-land. It's also suitable for Steels, and conditionally for Hard materials.

VBMT

	IC (mm)	D1 (mm)	L (mm)	S (mm)
1604	9.525	4.40	16.60	4.76



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

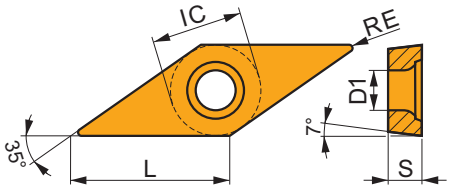
Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
																				
VBMT 160404E-RM:T5405	●	0.4	◩ 320	0.12	1.2	–	–	–	■ 300	0.12	1.2	–	–	–	–	–	–	–	–	–
VBMT 160408E-RM:T5405	●	0.8	◩ 345	0.17	1.2	–	–	–	■ 325	0.17	1.2	–	–	–	–	–	–	–	–	–

RM chip breaker is robust and the first choice for roughing of Steels and Cast irons. It features positive rake angle and stable, wide T-land. It's also suitable for Stainless steels, and conditionally for Super-alloys and Hard materials.

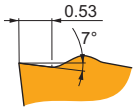
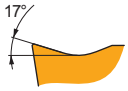
● Stable working conditions ⇕ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◩ Possible use

VCGT

	IC (mm)	D1 (mm)	L (mm)	S (mm)
1303	7.940	3.40	13.80	3.18

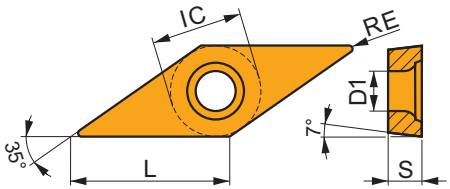


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
																				
FF2 chip breaker is sharp and the first choice for fine-finishing of Steels. It features slightly positive rake angle without T-land. It's also suitable for Cast irons.																				
VCGT 130302E-FF2:T5405	●	0.2	◪ 330	0.05	1.0	–	–	–	■ 310	0.05	1.0	–	–	–	–	–	–	–	–	–
VCGT 130304E-FF2:T5405	●	0.4	◪ 270	0.12	1.0	–	–	–	■ 255	0.12	1.0	–	–	–	–	–	–	–	–	–
																				
NF2 chip breaker is sharp and the first choice for finishing of Stainless steels. It features positive rake angle without T-land. It's also suitable for Super-alloys, and conditionally for Steels, Cast irons and Non-ferrous alloys.																				
VCGT 130304E-NF2:T5405	●	0.4	◪ 270	0.12	1.0	–	–	–	◪ 255	0.12	1.0	–	–	–	–	–	–	–	–	–
VCGT 130308E-NF2:T5405	●	0.8	◪ 290	0.17	1.0	–	–	–	◪ 275	0.17	1.0	–	–	–	–	–	–	–	–	–

VCGW

	IC (mm)	D1 (mm)	L (mm)	S (mm)
1303	7.940	3.40	13.80	3.18



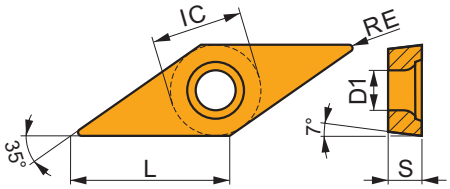
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
.CMW flat insert is designed for medium machining of Cast irons. It features neutral rake angle without T-land. It's also conditionally suitable for Hard materials.																				
VCGW 130302:T5405	●	0.2	–	–	–	–	–	–	■ 195	0.08	1.3	–	–	–	–	–	–	–	–	–
VCGW 130304:T5405	●	0.4	–	–	–	–	–	–	■ 190	0.10	1.3	–	–	–	–	–	–	–	–	–
VCGW 130308:T5405	●	0.8	–	–	–	–	–	–	■ 190	0.18	1.3	–	–	–	–	–	–	–	–	–

● Stable working conditions ⇕ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

VCMW

	IC (mm)	D1 (mm)	L (mm)	S (mm)
1103	6.350	2.80	11.10	3.18
1604	9.525	4.40	16.60	4.76



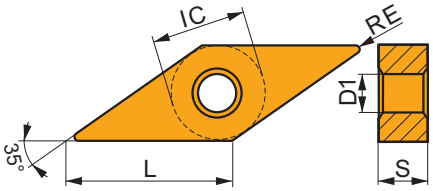
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
VCMW 110302:T5405	●	0.2	–	–	–	–	–	–	■ 195	0.08	1.2	–	–	–	–	–	–	–	–	–
VCMW 110304:T5405	●	0.4	–	–	–	–	–	–	■ 195	0.10	1.2	–	–	–	–	–	–	–	–	–
VCMW 160404:T5405	●	0.4	–	–	–	–	–	–	■ 190	0.10	1.5	–	–	–	–	–	–	–	–	–
VCMW 160408:T5405	●	0.8	–	–	–	–	–	–	■ 190	0.18	1.5	–	–	–	–	–	–	–	–	–

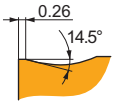
.CMW flat insert is designed for medium machining of Cast irons. It features neutral rake angle without T-land. It's also conditionally suitable for Hard materials.

VNMG

	IC (mm)	D1 (mm)	L (mm)	S (mm)
1604	9.525	3.81	16.60	4.76



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

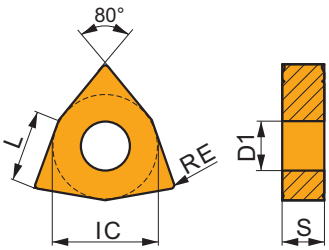
Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
																				
VNMG 160408-KM:T5405	●	0.8	◪ 260	0.30	1.4	–	–	–	■ 245	0.30	1.4	–	–	–	–	–	–	–	–	–

KM chip breaker is versatile and the first choice for medium machining of Cast irons. It features slightly positive rake angle and stable, wide T-land. It's also conditionally suitable for Steels and Hard materials.

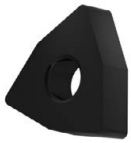
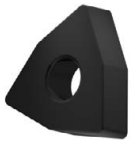
● Stable working conditions ⬌ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

WNMA

	IC (mm)	D1 (mm)	L (mm)	S (mm)
0804	12.700	5.16	8.70	4.76

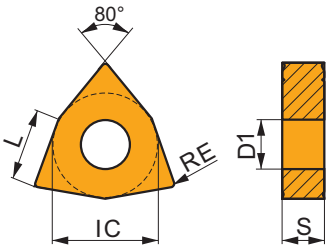


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

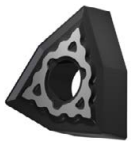
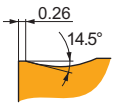
Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
																				
.NMA flat insert is designed for medium machining of Cast irons. It features neutral rake angle without T-land. It's also conditionally suitable for Hard materials.																				
WNMA 080404:T5405	●	0.4	–	–	–	–	–	–	■ 275	0.10	4.0	–	–	–	–	–	–	–	–	–
WNMA 080408:T5405	⇕	0.8	–	–	–	–	–	–	■ 265	0.20	4.0	–	–	–	–	–	–	–	–	–
WNMA 080412:T5405	⇕	1.2	–	–	–	–	–	–	■ 245	0.30	4.0	–	–	–	–	–	–	–	–	–
																				
.NMA..S flat insert is designed for medium machining of Cast irons. It features neutral rake angle and negative, moderate T-land. It's also conditionally suitable for Hard materials.																				
WNMA 080408S:T5405	⇕	0.8	–	–	–	–	–	–	■ 265	0.20	4.0	–	–	–	–	–	–	–	–	–

WNMG

	IC (mm)	D1 (mm)	L (mm)	S (mm)
0604	9.525	3.81	6.50	4.76
0804	12.700	5.16	8.70	4.76

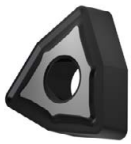
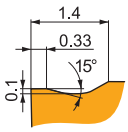
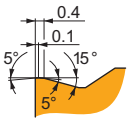


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
KM chip breaker is versatile and the first choice for medium machining of Cast irons. It features slightly positive rake angle and stable, wide T-land. It's also conditionally suitable for Steels and Hard materials.																				
WNMG 060404-KM:T5405	●	0.4	◪ 345	0.20	1.8	–	–	–	■ 325	0.20	1.8	–	–	–	–	–	–	–	–	–
WNMG 080404-KM:T5405	●	0.4	◪ 340	0.20	2.1	–	–	–	■ 320	0.20	2.1	–	–	–	–	–	–	–	–	–
WNMG 080408-KM:T5405	⇕	0.8	◪ 350	0.32	2.1	–	–	–	■ 330	0.32	2.1	–	–	–	–	–	–	–	–	–
WNMG 080412-KM:T5405	⇕	1.2	◪ 345	0.40	2.1	–	–	–	■ 325	0.40	2.1	–	–	–	–	–	–	–	–	–

● Stable working conditions ⇕ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

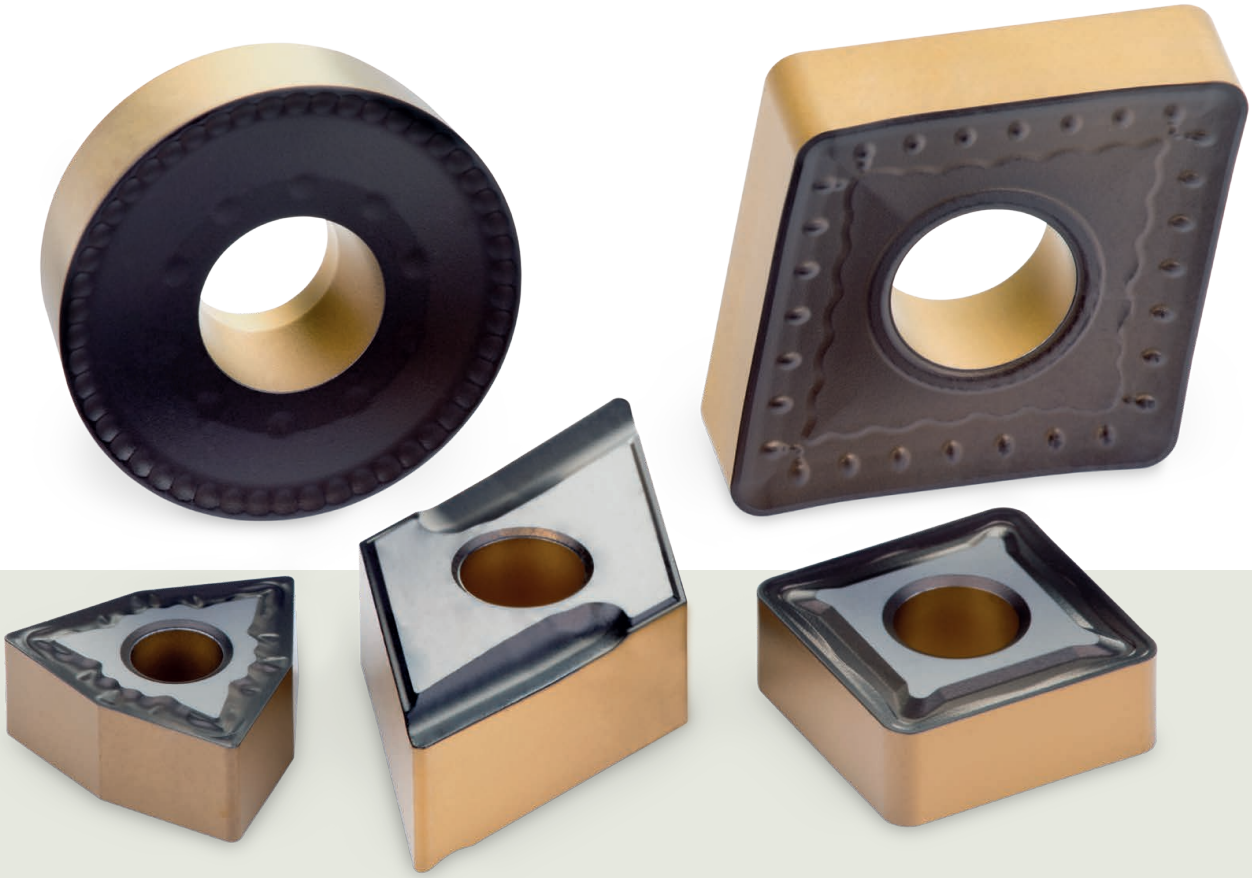
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇔ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 	**KR** chip breaker is robust and the first choice for roughing of Cast irons. It features slightly positive rake angle and , wide T-land. It's also suitable for Steels, and conditionally for Hard materials.																			
WNMG 080408E-KR:T5405	⇔	0.8	◪ 320	0.35	3.5	–	–	–	■ 300	0.35	3.5	–	–	–	–	–	–	–	–	–
WNMG 080412E-KR:T5405	⇔	1.2	◪ 325	0.40	3.5	–	–	–	■ 305	0.40	3.5	–	–	–	–	–	–	–	–	–
WNMG 080416E-KR:T5405	⇔	1.6	◪ 320	0.50	3.5	–	–	–	■ 300	0.50	3.5	–	–	–	–	–	–	–	–	–
	**R** chip breaker is robust and designed for roughing of Steels and Cast irons. It features slightly positive rake angle and negative/stable, extra-wide double T-land. It's also conditionally suitable for Hard materials.																			
WNMG 080408E-R:T5405	⇔	0.8	◪ 305	0.40	3.5	–	–	–	■ 285	0.40	3.5	–	–	–	–	–	–	–	–	–
WNMG 080412E-R:T5405	⇔	1.2	◪ 315	0.45	3.5	–	–	–	■ 295	0.45	3.5	–	–	–	–	–	–	–	–	–

● Stable working conditions ⇔ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

New versatile grade for turning of steels

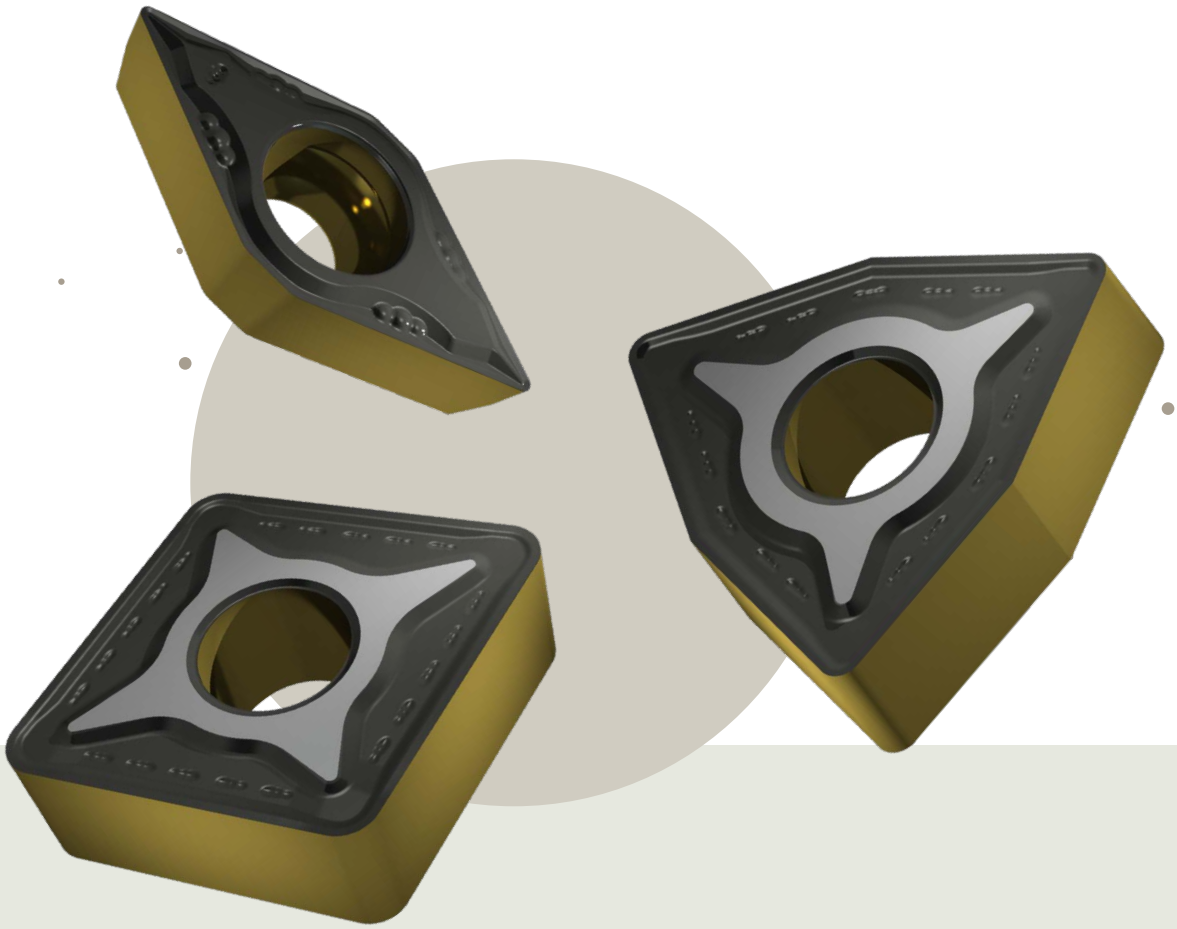
Maximize tool life and process stability in challenging conditions



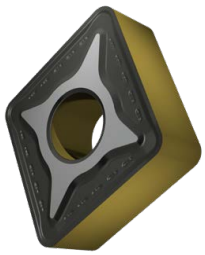
The new T9425 turning grade features a functional gradient substrate and advanced MT-CVD coating for exceptional performance and wear resistance. Its highly textured α-Al_2O_3 layer ensures consistent results in continuous cuts, while post-treatment enhances tool life under unstable conditions.

Golden TiN-coated flanks improve wear detection and reduce downtime, making the T9425 a reliable choice for steel (P), stainless steel (M), and optionally for cast iron (K) applications.

Related products



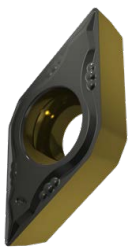
T9425



Negative inserts

Steel (P), stainless steel (M), and cast iron (K) applications

T9425



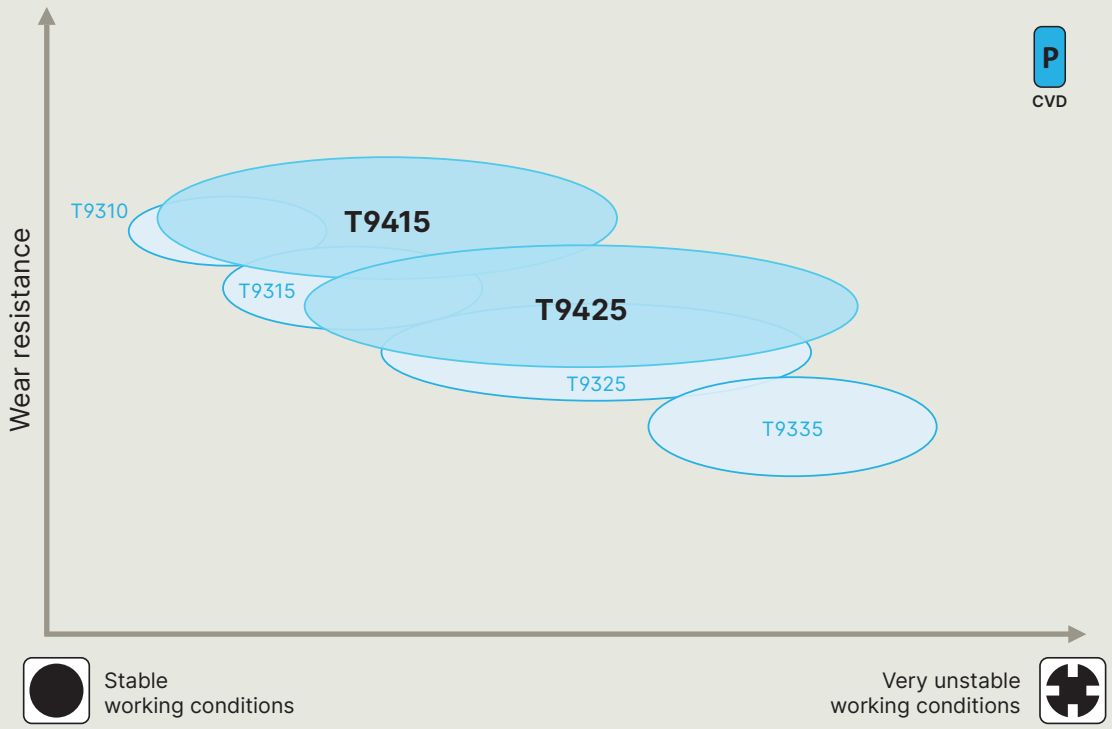
Positive inserts

Steel (P), stainless steel (M), and cast iron (K) applications

Features & benefits

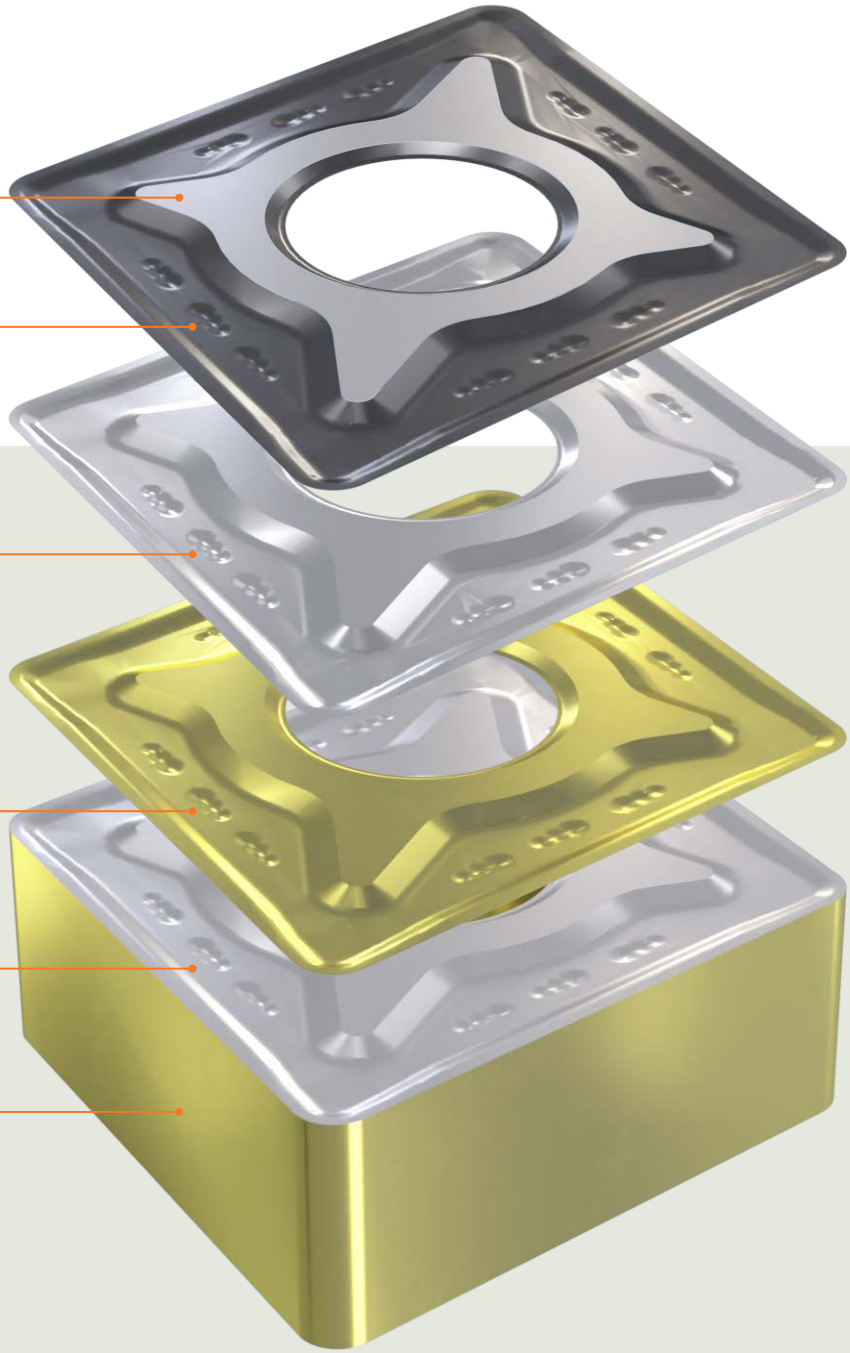
The highly textured α-Al_2O_3 coating provides superior wear resistance and thermal stability.	**Excellent tool life** and increased productivity.
New post-treatment process improves stability of cutting edge.	**Outstanding reliability** especially in unstable machining conditions.
Hard functionally gradient substrate.	**Enhanced durability** in continuous and demanding cutting conditions.
Gold colored TiN coating on flanks helps with monitoring tool condition effectively.	**Easier wear detection** reduces downtime.
Ground seating face after coating.	**Improved heat transfer** provides better stability and extends tool life.

Application area of T9425 turning grades



Grade composition

Advanced grade design for unmatched durability and reliability



Success stories

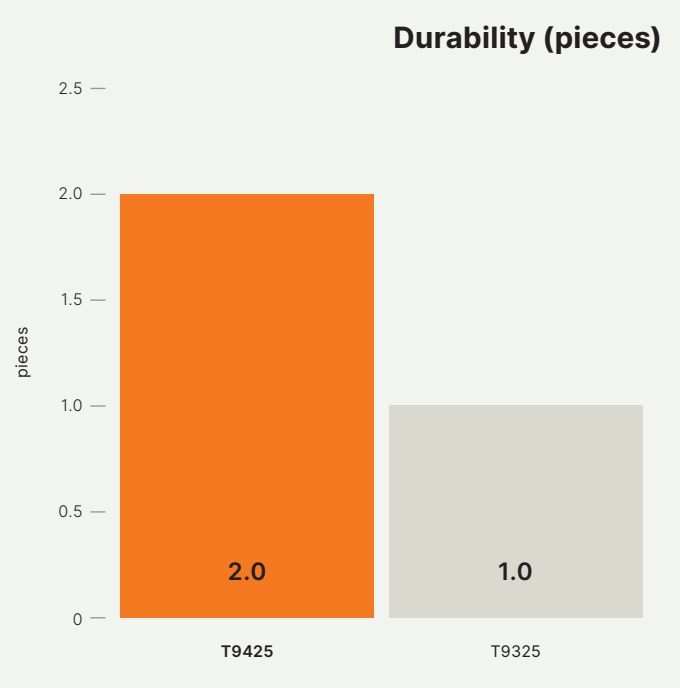
Double the tool life for continuous cutting applications

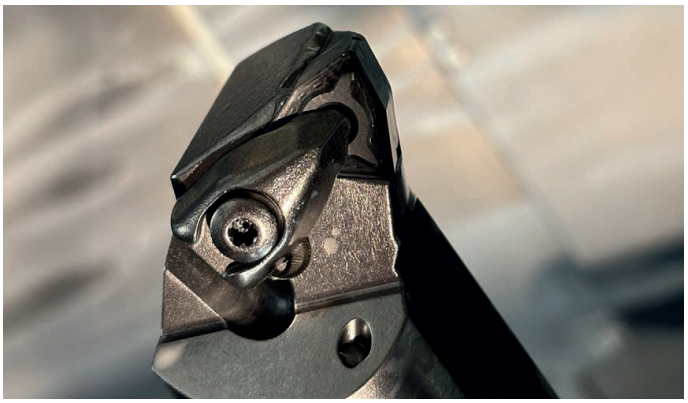
Customer result: The T9425 grade delivered a 100% improvement in tool life, setting a new benchmark for durability in continuous cutting operations. By reducing the need for frequent tool changes and minimizing downtime, the T9425 ensures uninterrupted machining cycles. Its ability to handle challenging conditions makes it the perfect solution for high-precision automotive applications, combining efficiency with consistent, high-quality results.

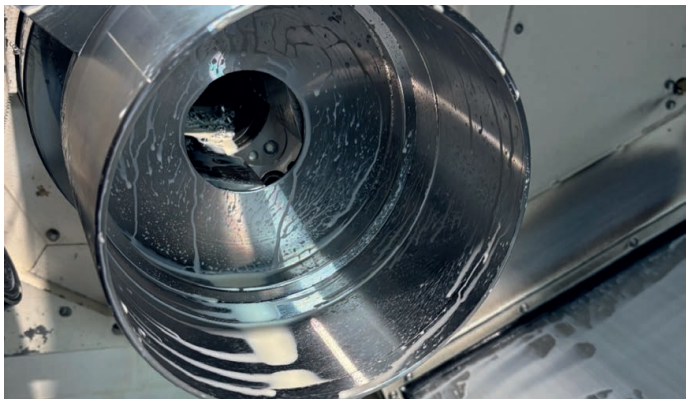
Segment	Automotive
Component	Periphery carrier
Application	Turning
Material	42CrMo4+QT
Coolant	Yes
Dormer Pramet solution	WNMG 080408E-RM:T9425

Machining data		
v_c	f_n	a_p
180	0.3	3.0

P3.3







v_c = cutting speed (m/min), f_n = feed per revolution (mm/rev), a_p = axial depth of cut (mm)

Success stories

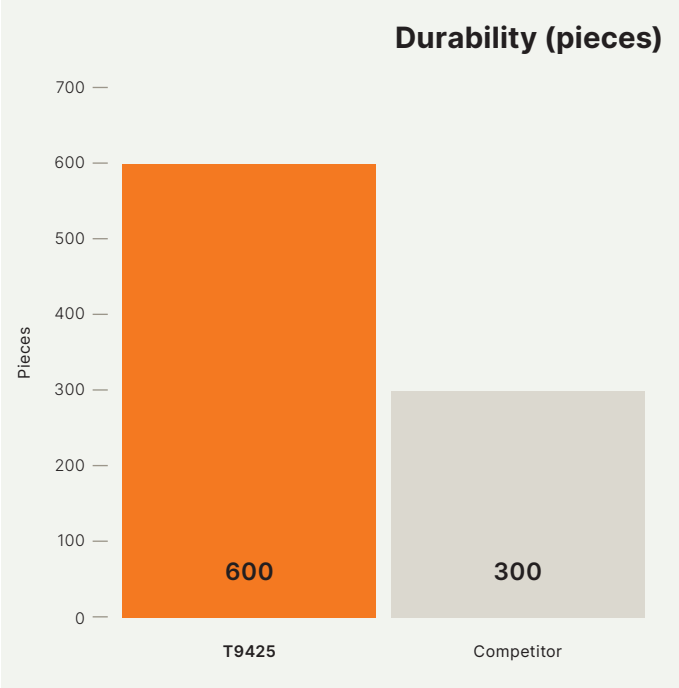
Achieve **100%** tool life improvement

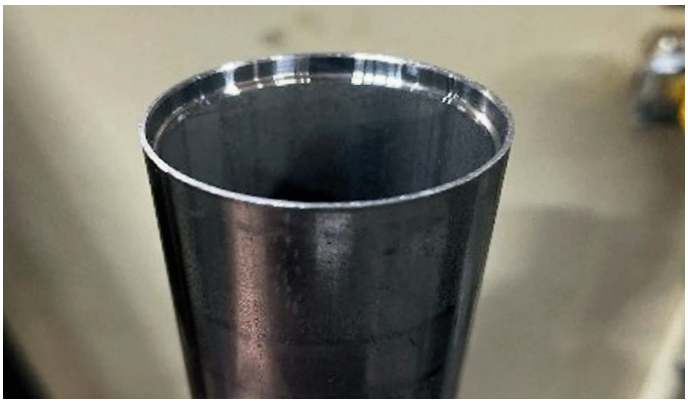
Customer result: The T9425 redefined expectations in automotive machining with a 100% improvement in tool life compared to the competitor. Producing up to 600 parts per tool, the grade significantly reduces costs and downtimes.
Its advanced performance enables extended machining cycles while maintaining consistent, high-quality results, setting a new benchmark.

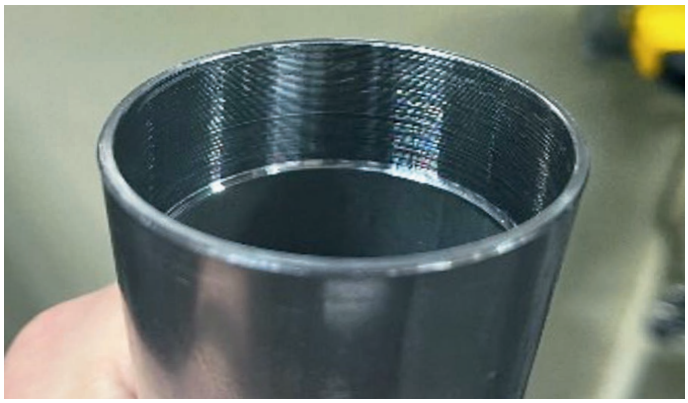
Segment	Automotive
Component	Outer case of shock absorber
Application	Turning
Material	C45
Coolant	No
Dormer Pramet solution	WNMG 08408E-RM:T9425

Machining data		
v_c	f_n	a_p
270	0.35	0.775

P3.3







v_c = cutting speed (m/min), f_n = feed per revolution (mm/rev), a_p = axial depth of cut (mm)

Success stories

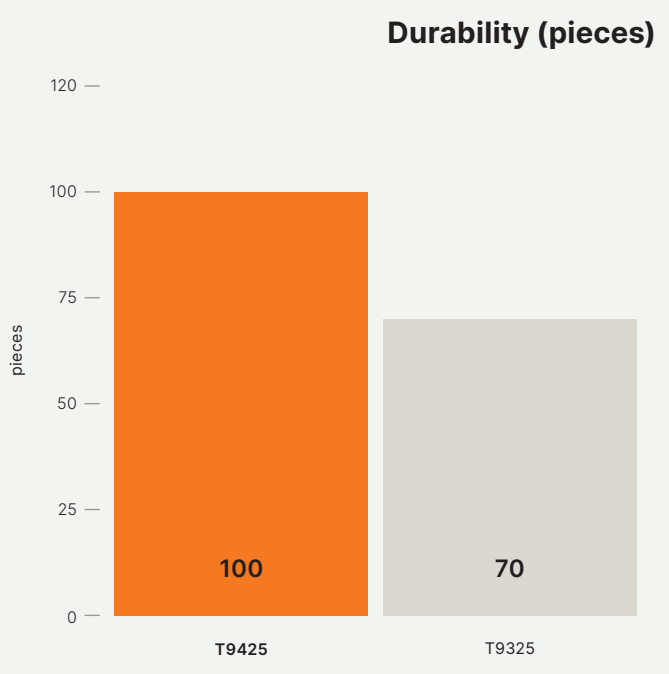
Achieve **43%** higher durability in interrupted cuts

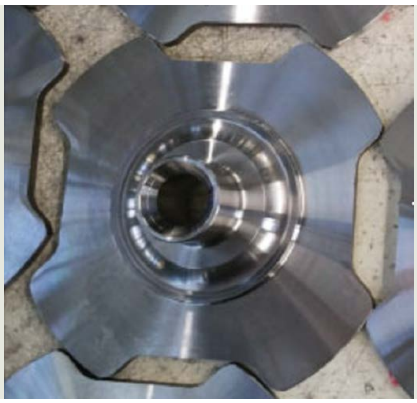
Customer result: With its advanced coating and post-treatment, the T9425 delivered a 43% increase in tool life compared to the T9315 grade.
This improvement allows for significantly fewer disruptions, longer cycles, and higher reliability in demanding machining scenarios.

Segment	General engineering
Component	Flange
Application	Interrupted turning
Material	17NiCrMo6 (HB 180–260)
Coolant	Yes
Dormer Pramet solution	CNMG 120408E-M:T9425

Machining data		
v_c	f_n	a_p
200	0.25	1.5

P3.2





v_c = cutting speed (m/min), f_n = feed per revolution (mm/rev), a_p = axial depth of cut (mm)

Success stories

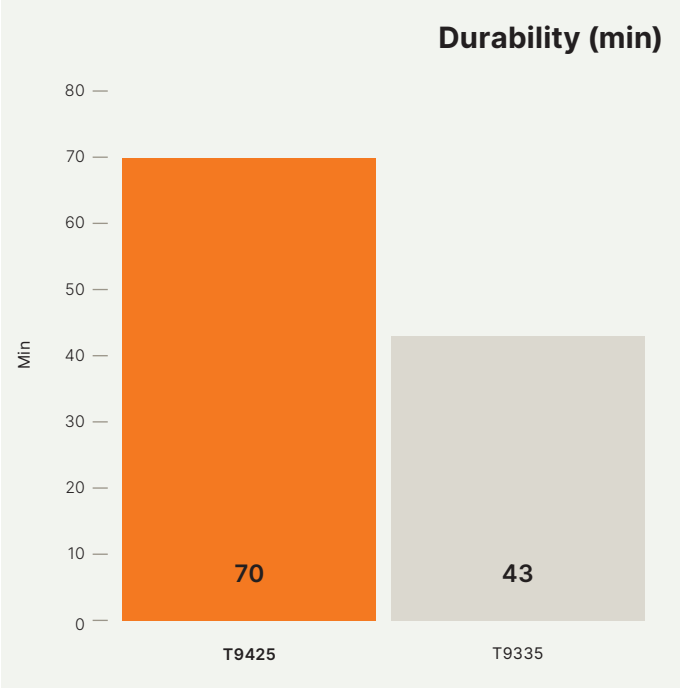
Improve performance by **63%** in agricultural machining

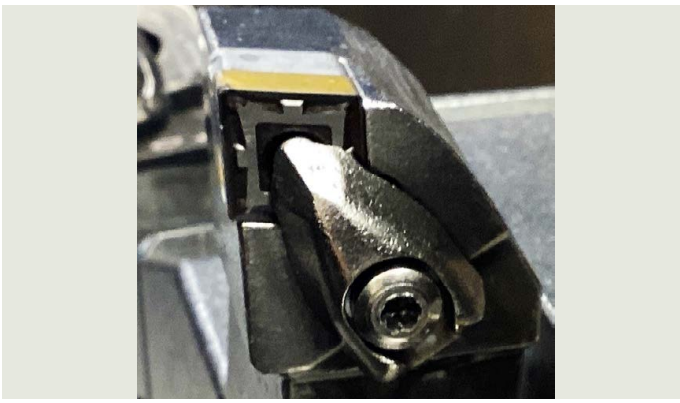
Customer result: The T9425 grade delivered a 63% increase in tool life, demonstrating its effectiveness in agricultural machining tasks. By consistently producing 70 parts per tool compared to 43 with its predecessor the T9425 sets a new standard for durability and reliability. Its ability to maintain precision while reducing downtime makes it ideal for demanding agricultural manufacturing environments.

Segment	Agriculture
Component	Disc ring
Application	Turning
Material	42CrMo
Coolant	Yes
Dormer Pramet solution	CNMG 120408E-M:T9425

Machining data		
v_c	f_n	a_p
120	0.3	2.5

P3.3





v_c = cutting speed (m/min), f_n = feed per revolution (mm/rev), a_p = axial depth of cut (mm)

Success stories

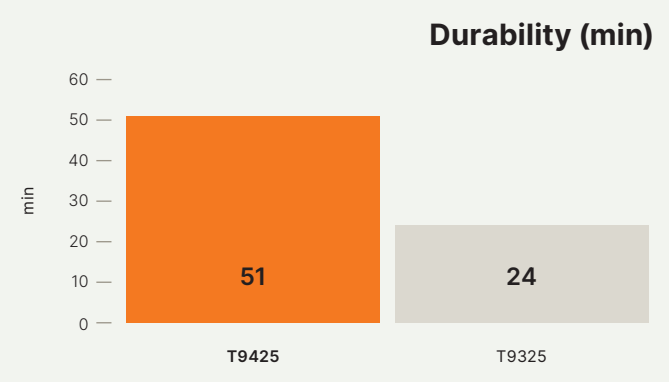
Boost durability by **112.5%** in roughing operations

Customer result: In roughing applications, the T9425 outperformed its predecessor by delivering an 112.5% improvement in tool life. Its ability to handle challenging environments with prolonged durability ensures fewer replacements and consistent machining. This makes the T9425 the go-to choice for steel applications where reliability and cost-efficiency are key priorities.

Segment	Energy
Component	Shaft
Application	Turning
Material	42CrMo (HRC 28–32)
Coolant	Yes
Dormer Pramet solution	CNMM 190616E-OR:T9425

Machining data		
v_c	f_n	a_p
72	0.5	5.0

P3.3



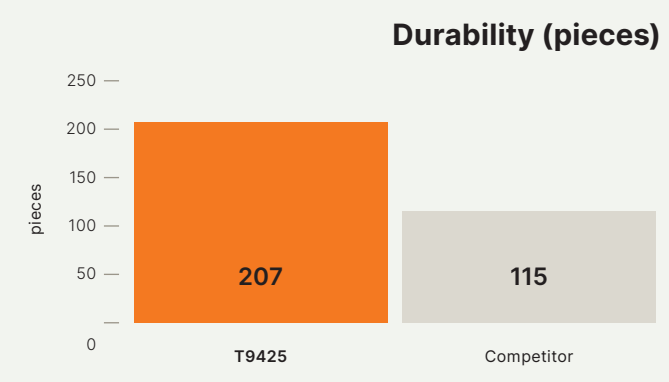
Increase tool life by **80%** in high-volume turning

Customer result: The T9425 extended tool life by 80% compared to a competitor, producing 207 parts per tool during testing. This exceptional performance allows manufacturers to reduce tool changes and extend machining cycles. This way, the T9425 supports cost savings and ensures a smoother production process for large-scale operations.

Segment	General engineering
Component	Pin
Application	Turning
Material	42CrMo
Coolant	Yes
Dormer Pramet solution	CNMM 120408E-SM:T9425

Machining data		
v_c	f_n	a_p
200	0.3	2.5

P3.2



v_c = cutting speed (m/min), f_n = feed per revolution (mm/rev), a_p = axial depth of cut (mm)

Machining examples

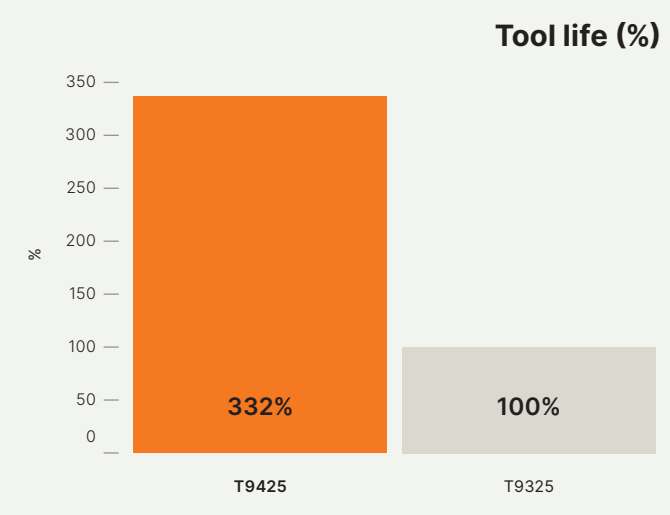
Increase tool life by **232%** in dry turning operations

The new T9425 grade demonstrated superior performance in dry turning of C45 steel, increasing tool life by 232% compared to the T9325 grade. This improvement minimizes the need for tool changes, directly reducing downtime and overall production costs.

Application	Turning
Material	C45
Coolant	No
Dormer Pramet solution	CNMG 120408E-SM:T9425

Machining data		
v_c	f_n	a_p
315	0.25	2.0

P2.1



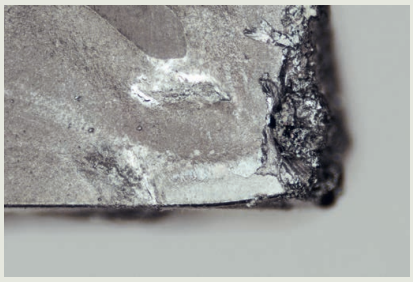
T9425

Photos taken after 50 minutes

T9425

Photos taken after 15 minutes

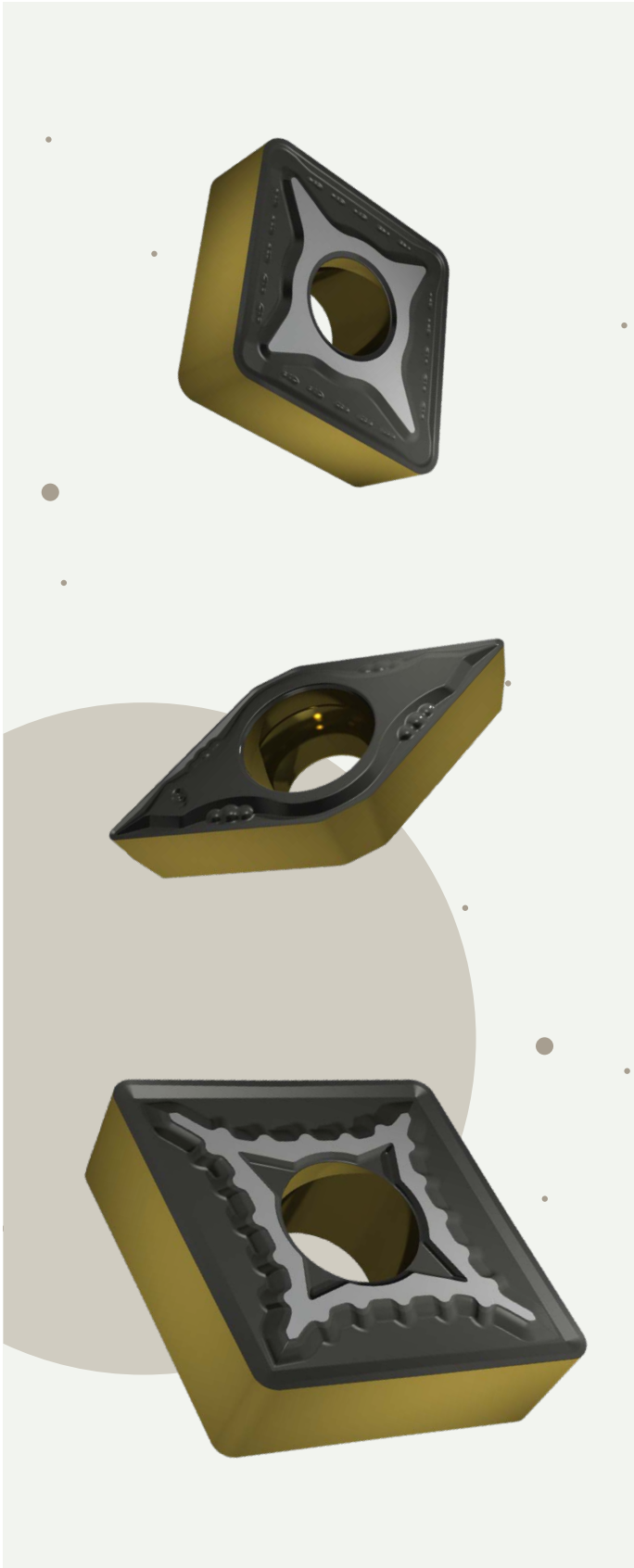
T9325



Photos taken after 15 minutes

v_c = cutting speed (m/min), f_n = feed per revolution (mm/rev), a_p = axial depth of cut (mm)

Machining examples



Exceptional durability in interrupted cutting operations

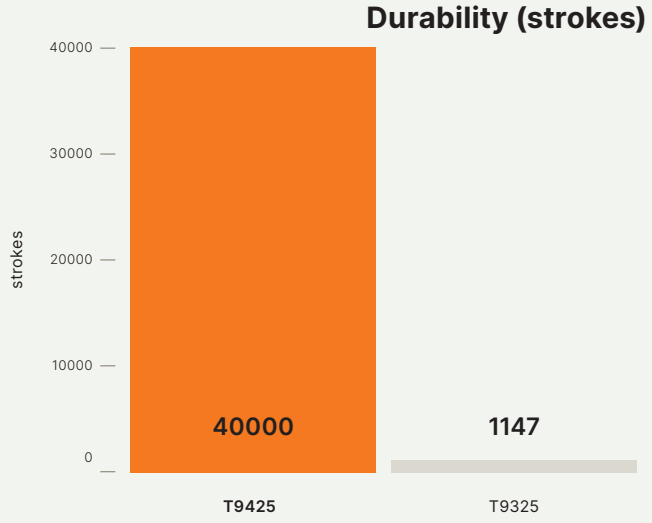
Thanks to a new post-treatment, the T9425 delivered exceptional performance in interrupted cutting applications. This significant improvement enables extended tool life and reduced downtime in challenging machining conditions.

Each T9425 insert reached the high criteria for interrupted cutting applications, which makes this grade extremely reliable.

Application	Interrupted cutting
Material	41Cr4
Coolant	No
Dormer Pramet solution	CNMG 120408E-SM:T9425

Machining data		
v_c	f_n	a_p
130	0.3	1.0

P2.1



v_c = cutting speed (m/min), f_n = feed per revolution (mm/rev), a_p = axial depth of cut (mm)

Technical information

T9425 application range and material compatibility

Grade identification	Area of application	Application	Feed	Cutting speed	Resistance to adverse working conditions	Coating	Colour	Substrate	Coolant benefit	Grade description
T9425	P10 - P35	■				MT-CVD		FGM	++	This is a load-bearing and very versatile material, designed primarily for roughing, semi-roughing and finishing turning of common carbon and alloy steels. It is characterized by very good resistance in adverse cutting conditions, while maintaining very good wear resistance. It is suitable for work with medium to high removal rates. The focus of the application area of these materials is in the area of medium and higher cutting speeds.
	M10 - M30	■								
	K15 - K35	■								
	S10 - S20	◪								

Recommended grades by ISO material group

Group	Cemented carbide with MTCVD	Cemented carbide with PVD	Uncoated carbide	CERMET
P01				TT010
P05	T9415	T8415		
P10	T9415	T8415		
P15	T9415	T8415		
P20	T9425	T8415		
P25	T9425	T8430		TT310
P30	T9425	T8430		TT310
P35	T9425	T8430		TT310
P40		T8430		
P45				
P50				

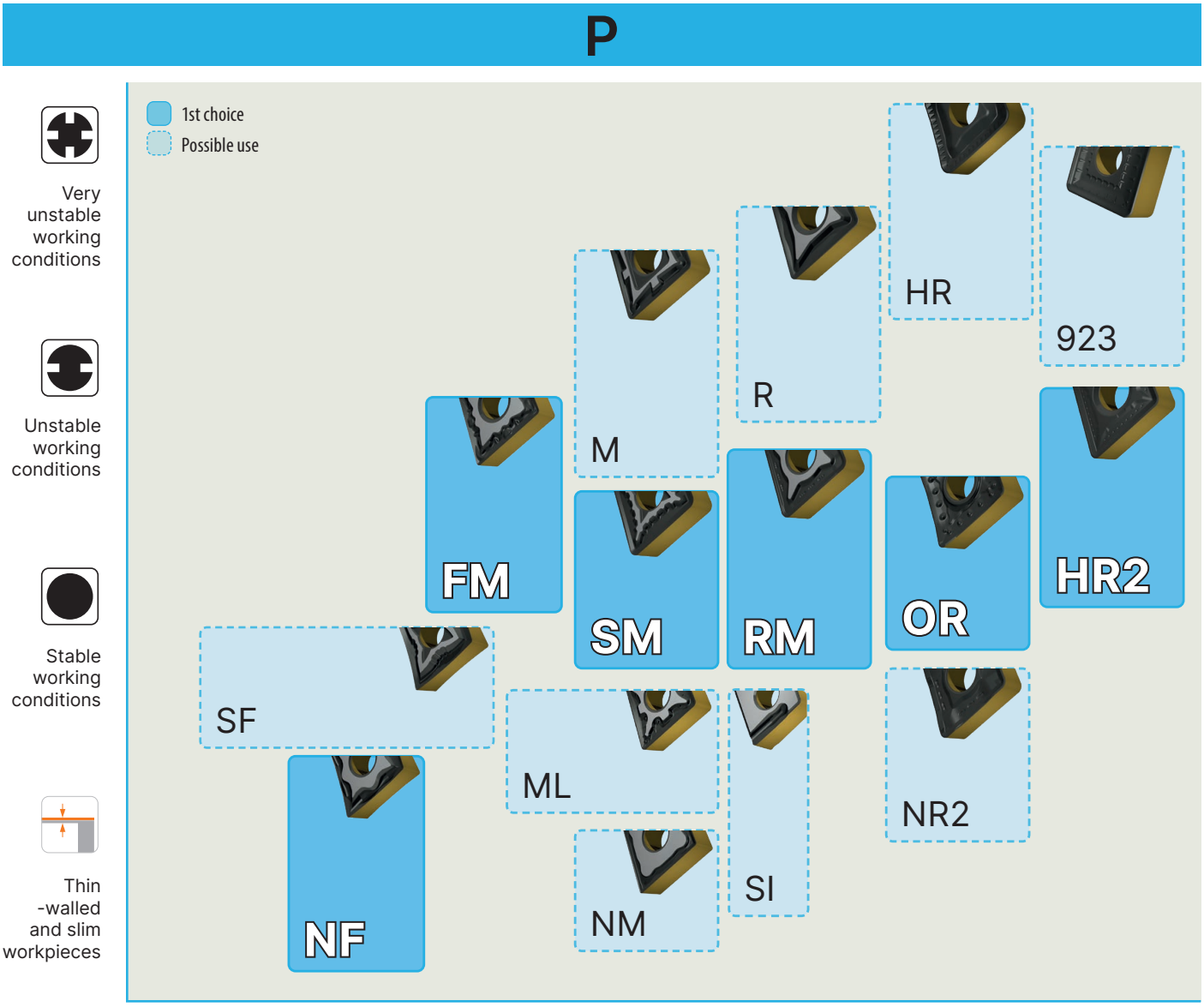
Group	Cemented carbide with MTCVD	Cemented carbide with PVD	Uncoated carbide	CERMET
M01				
M05				
M10	T7325	T8415		
M15	T7325	T8415		
M20	T7335	T8415		
M25	T7335	T8430		
M30	T9425	T8430		
M35	T9425	T8430		
M40				
M45				
M50				

Group	Cemented carbide with MTCVD	Cemented carbide with PVD	Uncoated carbide	CERMET
K01				TC100
K05	T5405	T8415		TC100
K10	T5405	T8415		
K15	T5415	T8415	HF7	
K20	T5415	T8415	HF7	
K25	T9425	T8415	HF7	
K30	T9425	T8430		
K35	T9425	T8430		
K40		T8430		
K45				
K50				

■ Primary use ◪ Possible use

Technical information

Chipbreakers for negative T9425 inserts



	FF	F	M	R	HR
f	0.05 – 0.2 mm/rev		0.2 – 0.4 mm/rev	0.4 – 1.0 mm/rev	> 1.0 mm/rev
a_p	0.05 – 2 mm		2 – 4 mm	4 – 10 mm	> 10 mm

Technical information

Chipbreakers for positive T9425 inserts

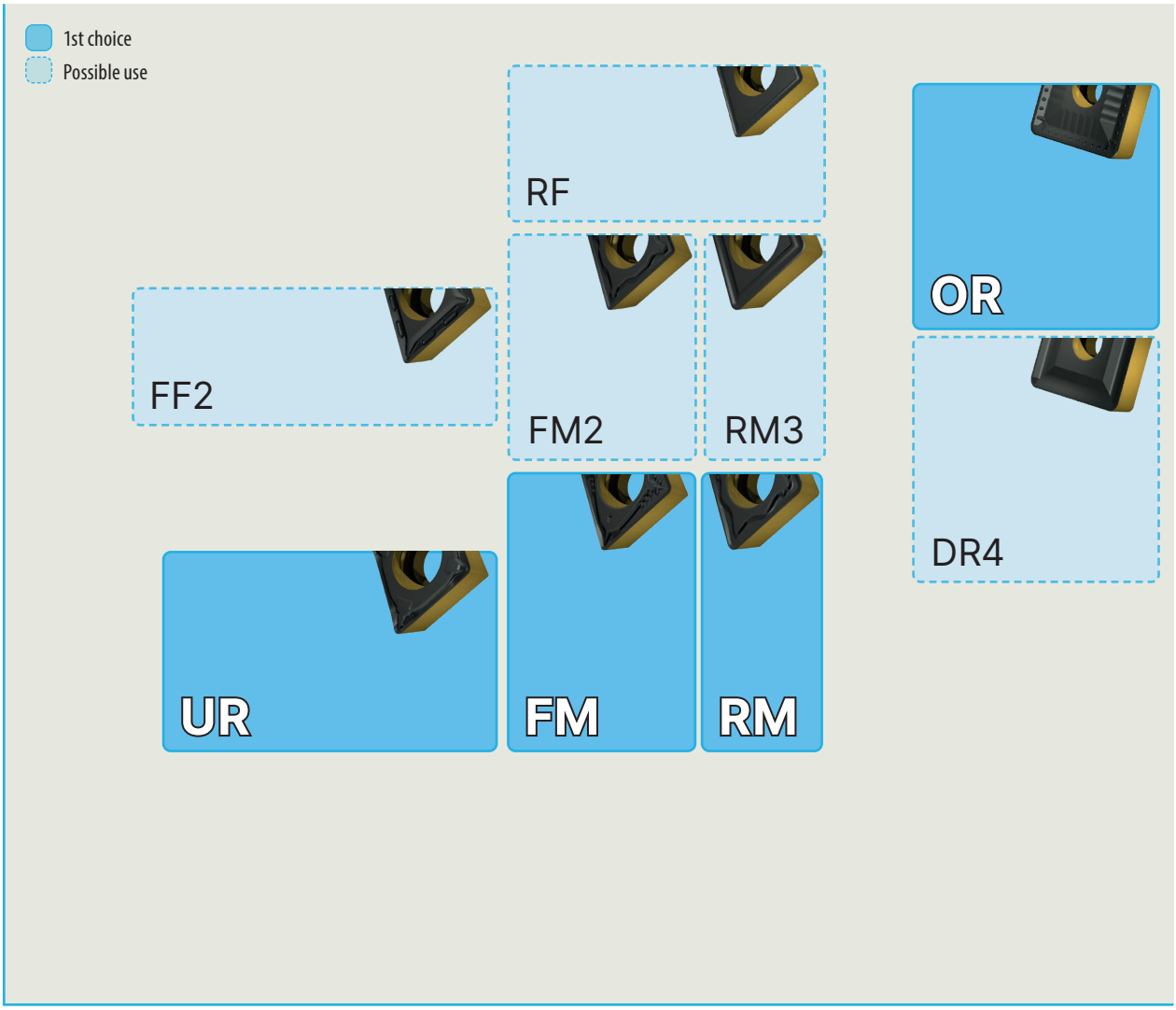
P

Very unstable working conditions

Unstable working conditions

Stable working conditions

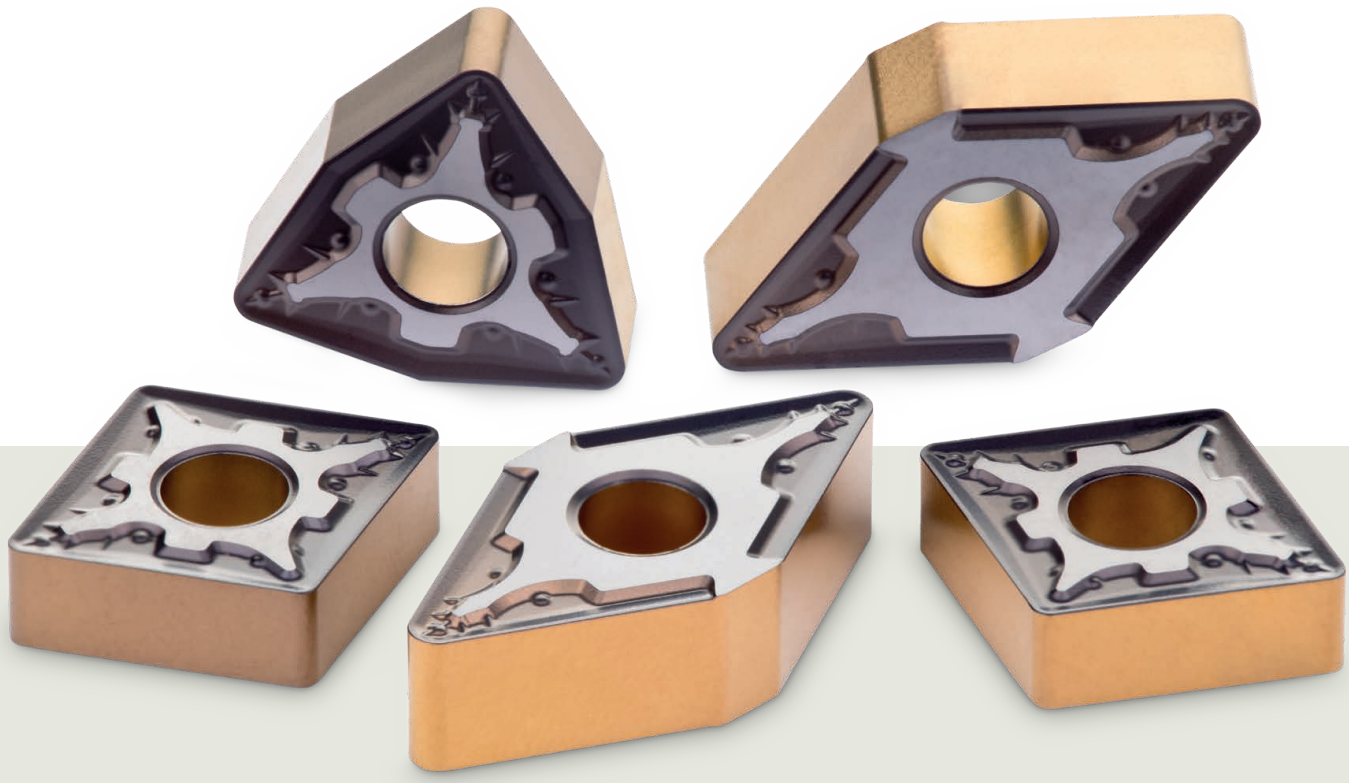
Thin -walled and slim workpieces



	FF	F	M	R	HR
f	0.05 – 0.2 mm/rev		0.2 – 0.4 mm/rev	0.4 – 1.0 mm/rev	> 1.0 mm/rev
a_p	0.05 – 2 mm		2 – 4 mm	4 – 10 mm	> 10 mm

New chipbreaker for turning of steels

Boost your turning performance

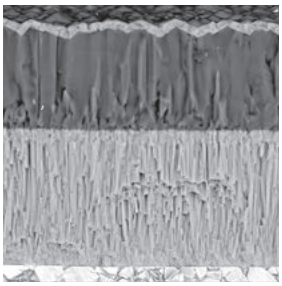


The new ML chipbreaker is engineered for medium applications in steels, offering superior performance in low depths of cut and medium to high feeds. Its specially developed geometry ensures efficient chip control and consistent, smooth machining.

Available with both the new T9425 grade as well as T9415, the ML chipbreaker provides maximum stability, high productivity and reliable performance – ideally suited for bearing, automotive and general engineering applications.

Related products

T9415

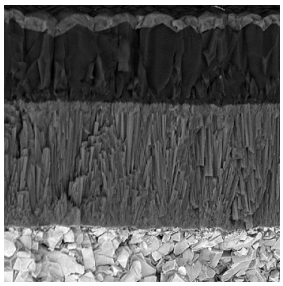


MT-CVD grade

Abrasion + heat resistant α-Al_2O_3 layer

Top TiN coating on flanks

T9425

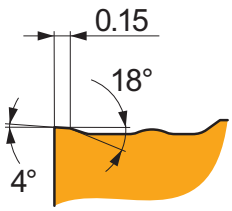


MT-CVD grade

Highly textured α-Al_2O_3 layer

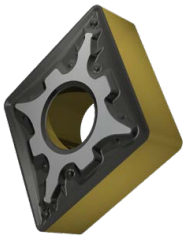
Top TiN coating on flanks

ML



ML chip breaker is versatile and designed for low depth of cut and medium machining of steels. It features positive rake angle and stable, narrow T-land. It's also suitable for cast irons.

CNMG-ML

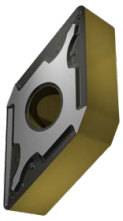


Productive insert

For steels

Medium to semi-rough cuts

DNMG-ML

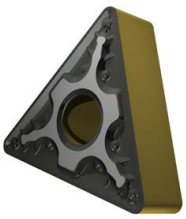


Versatile insert

For steels

Light to medium cuts

TNMG-ML



Versatile insert

For steels

Light to medium cuts

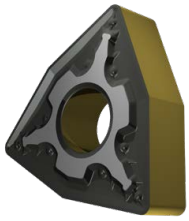
VNMG-ML

Versatile insert

For steels

Light cuts

WNMG-ML



Economical insert

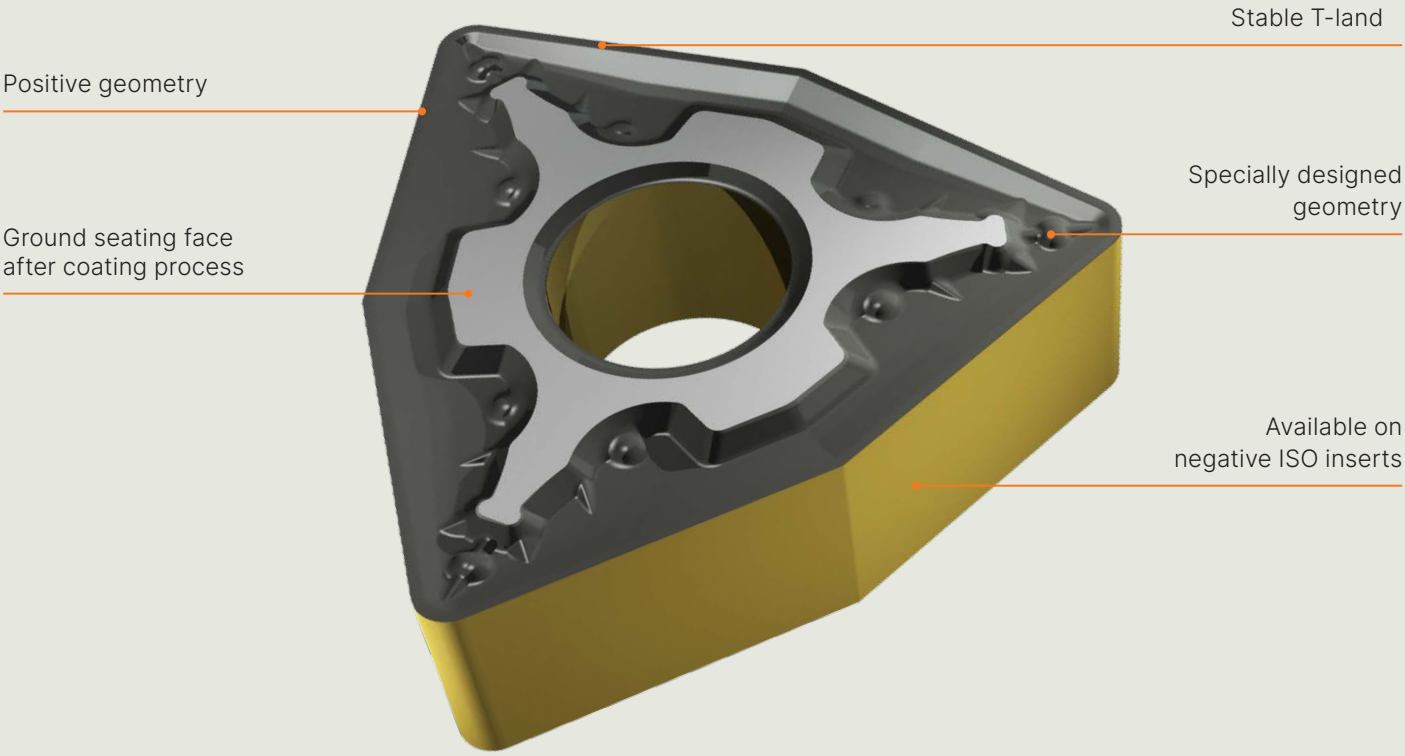
For steels

Medium to semi-rough cuts

Features & benefits

Specially designed geometry enables efficient chip breaking for low depths of cut.	**Improved process reliability and increased tool life** reduce machine downtime.
Stable T-land ensures smooth machining in medium to high feeds.	**Reliable performance** ensures high-quality results in demanding conditions.
Ground seating face after coating process delivers enhanced stability in the holder.	**Consistent results** ensures predictability in every cut.
Available in the latest state of art CVD grades T9425 and T9415.	**Enhanced durability** boosts productivity.

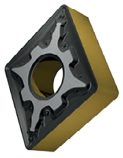
High performance and productivity in ISO-P turning

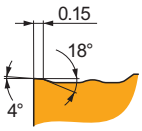


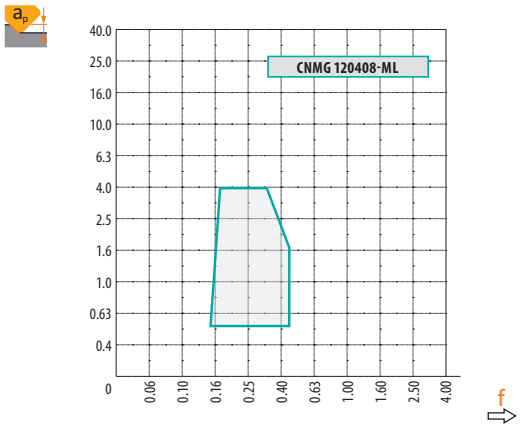
Technical information

ML chipbreaker application range and material compatibility

ML



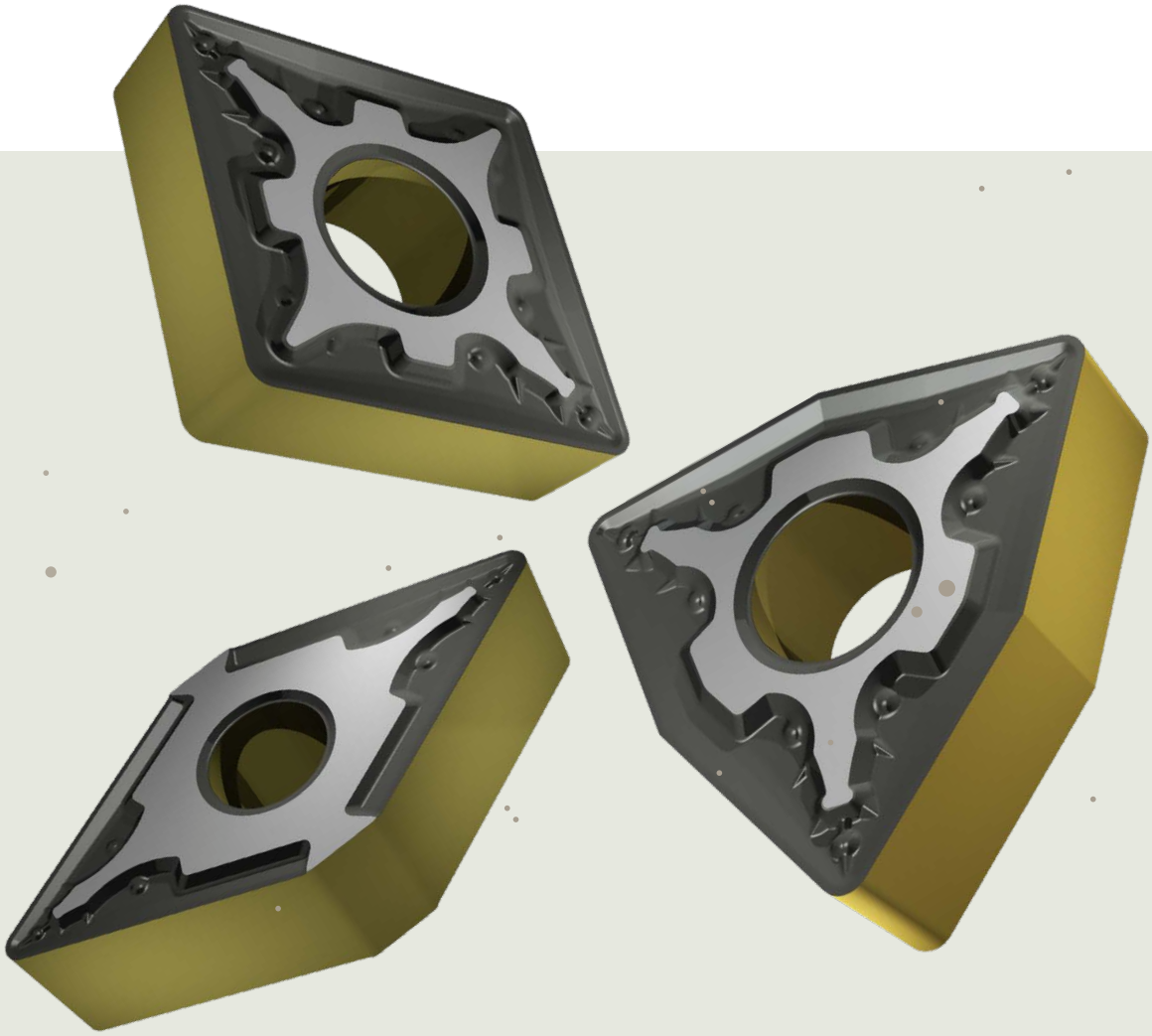




P	M	K	N	S	H
■		■			

f	0.15 – 0.55
a_p	0.3 – 4.0

? CNMG, DNMG, TNMG, VNMG, WNMG



Success stories

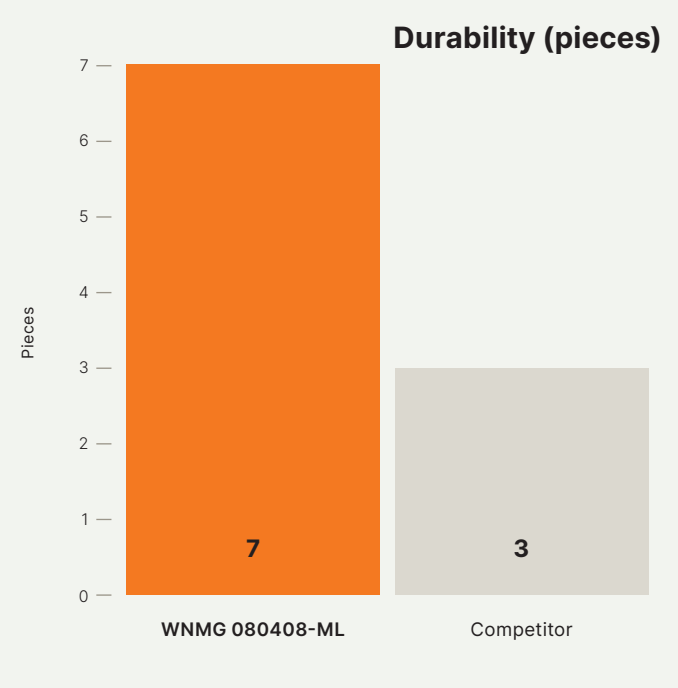
Enhance tool life by **133%** for hardened steel turning

Customer result: The ML chipbreaker achieved 7 pieces per edge compared to 3 with the competitor in rough turning of hardened railway flanges. The ML geometry provided lower cutting forces and superior tool life, delivering a 133% improvement while maintaining full productivity.

Segment	Railway
Application	Rough turning
Component	Flange
Material	42CrMo4 (HRC40)
Coolant	Yes
Dormer Pramet solution	WNMG 080408-ML

Machining data		
v_c	f_n	a_p
297	0.3	2.0

P3.3



v_c = cutting speed (m/min), f_n = feed per revolution (mm/rev), a_p = axial depth of cut (mm)

Success stories

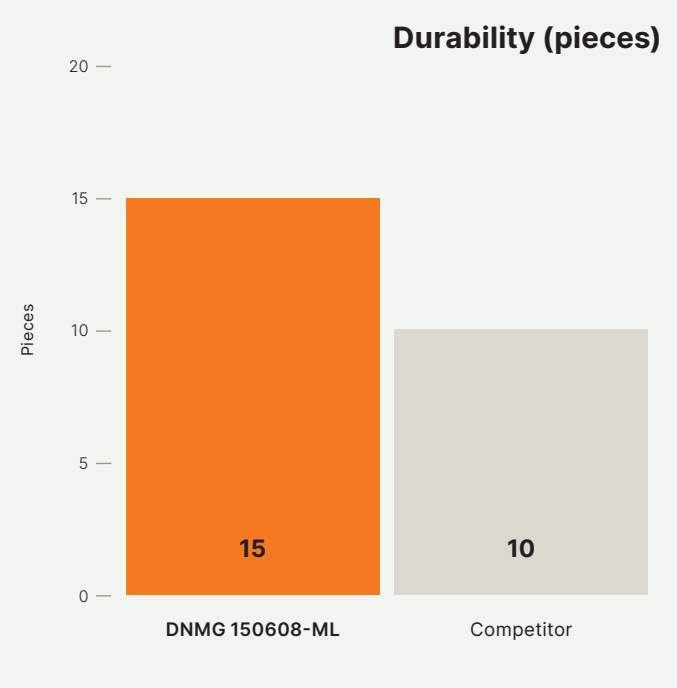
Increase tool life by **50%** in worm shaft turning

Customer result: In rough turning of worm shafts, the ML chipbreaker achieved 15 pieces per edge compared to 10 with the competitor, resulting in a 50% longer tool life. This improvement enabled reduced tool change frequency and lower overall machining costs, with consistent productivity maintained.

Segment	General engineering
Application	Rough turning
Component	Worm shaft
Material	40Cr (HB220–270)
Coolant	Yes
Dormer Pramet solution	DNMG 150608-ML

Machining data		
v_c	f_n	a_p
146	0.3	2.0

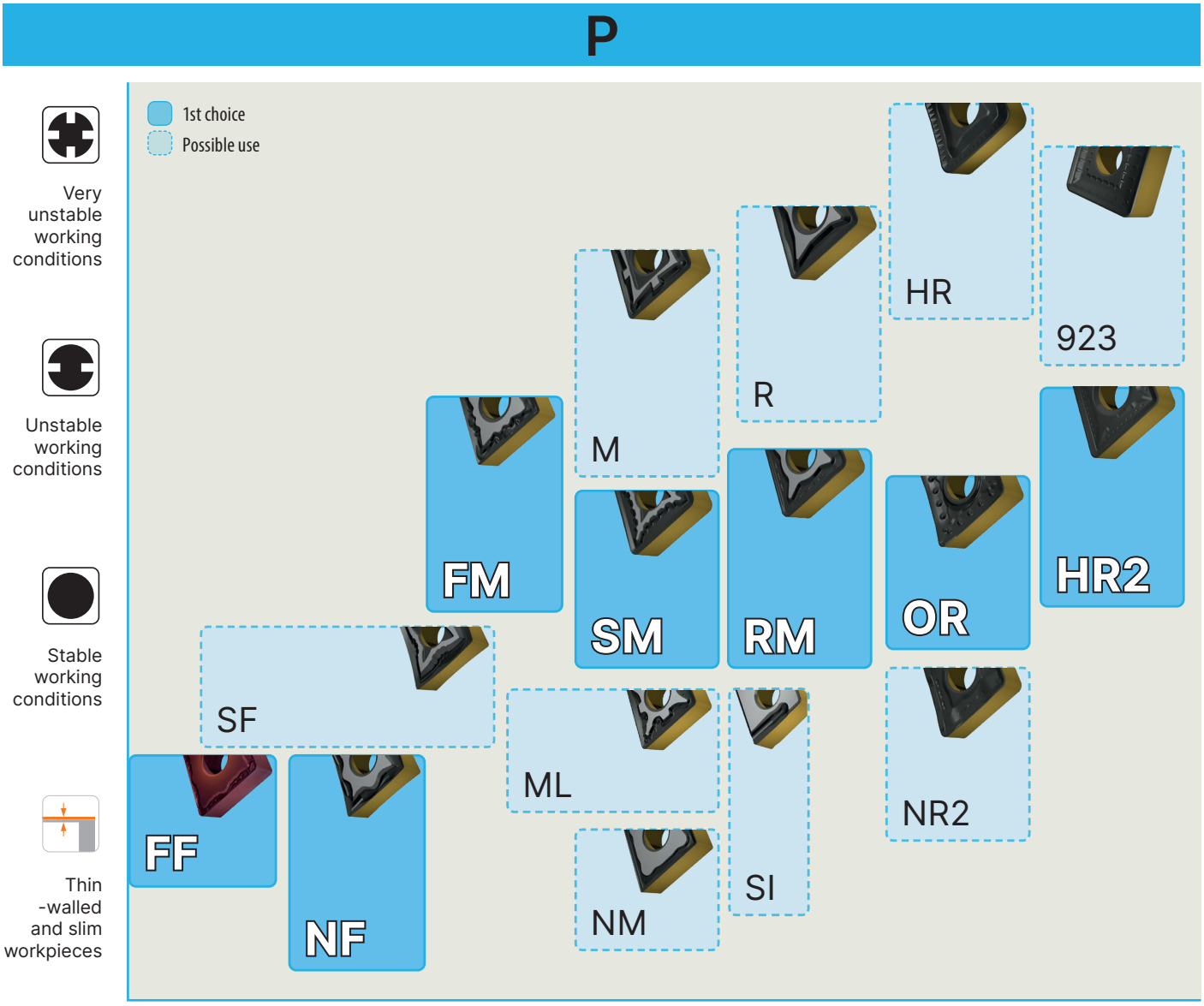
P3.2



v_c = cutting speed (m/min), f_n = feed per revolution (mm/rev), a_p = axial depth of cut (mm)

Technical information

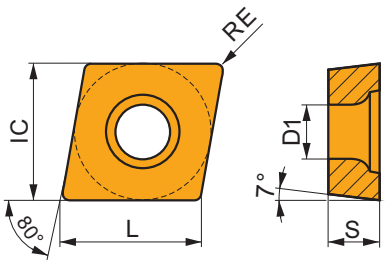
ISO inserts negative – chipbreaker navigator



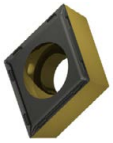
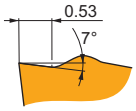
	FF	F	M	R	HR
f	0.05 – 0.2 mm/rev		0.2 – 0.4 mm/rev	0.4 – 1.0 mm/rev	> 1.0 mm/rev
a_p	0.05 – 2 mm		2 – 4 mm	4 – 10 mm	> 10 mm

CCGT

	IC (mm)	D1 (mm)	L (mm)	S (mm)
09T3	9.525	4.40	9.70	3.97



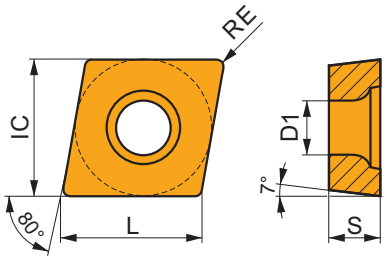
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
CCGT 09T302E-FF2:T9425	●	0.2	■ 455	0.05	1.0	–	–	–	■ 430	0.05	1.0	–	–	–	–	–	–	–	–	–

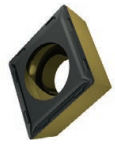
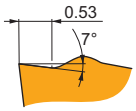
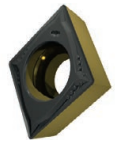
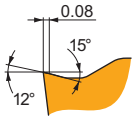
FF2 chip breaker is sharp and the first choice for fine-finishing of Steels. It features slightly positive rake angle without T-land. It's also suitable for Cast irons.

CCMT

	IC (mm)	D1 (mm)	L (mm)	S (mm)
0602	6.350	2.80	6.40	2.38
0803	7.940	3.40	8.10	3.18
09T3	9.525	4.40	9.70	3.97
1204	12.700	5.50	12.90	4.76



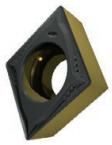
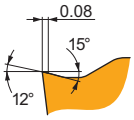
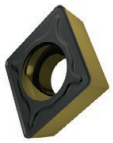
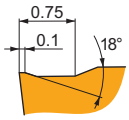
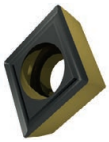
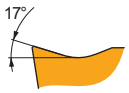
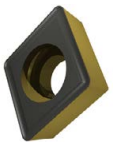
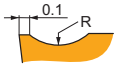
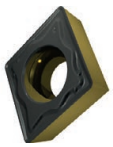
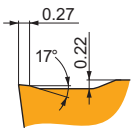
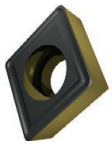
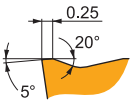
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
CCMT 060202E-FF2:T9425	●	0.2	■ 465	0.05	0.8	–	–	–	■ 440	0.05	0.8	–	–	–	–	–	–	–	–	–
CCMT 060204E-FF2:T9425	●	0.4	■ 365	0.12	1.0	–	–	–	■ 345	0.12	1.0	–	–	–	–	–	–	–	–	–
CCMT 080302E-FF2:T9425	●	0.2	■ 465	0.05	0.8	–	–	–	■ 440	0.05	0.8	–	–	–	–	–	–	–	–	–
CCMT 080304E-FF2:T9425	●	0.4	■ 365	0.12	1.0	–	–	–	■ 345	0.12	1.0	–	–	–	–	–	–	–	–	–
CCMT 080308E-FF2:T9425	●	0.8	■ 385	0.17	1.0	–	–	–	■ 365	0.17	1.0	–	–	–	–	–	–	–	–	–
CCMT 09T304E-FF2:T9425	●	0.4	■ 360	0.12	1.2	–	–	–	■ 340	0.12	1.2	–	–	–	–	–	–	–	–	–
CCMT 09T308E-FF2:T9425	●	0.8	■ 380	0.17	1.2	–	–	–	■ 360	0.17	1.2	–	–	–	–	–	–	–	–	–
 																				
CCMT 060202E-FM:T9425	●	0.2	■ 400	0.10	1.0	■ 240	0.09	1.0	◪ 380	0.10	1.0	–	–	–	–	–	–	–	–	–
CCMT 060204E-FM:T9425	●	0.4	■ 375	0.15	1.0	■ 225	0.15	1.0	◪ 355	0.15	1.0	–	–	–	–	–	–	–	–	–
CCMT 060208E-FM:T9425	●	0.8	■ 400	0.20	1.0	■ 240	0.18	1.0	◪ 380	0.20	1.0	–	–	–	–	–	–	–	–	–

FM chip breaker is versatile and the first choice for finishing of Steels. It features positive rake angle and positive, narrow T-land. It's also suitable for Stainless steels, and conditionally for Cast irons and Non-ferrous alloys.

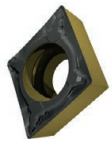
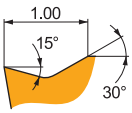
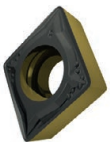
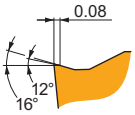
● Stable working conditions ⬌ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product		RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
FM chip breaker is versatile and the first choice for finishing of Steels. It features positive rake angle and positive, narrow T-land. It's also suitable for Stainless steels, and conditionally for Cast irons and Non-ferrous alloys.																				
CCMT 09T302E-FM:T9425	●	0.2	■ 390	0.10	1.2	■ 230	0.09	1.2	◪ 370	0.10	1.2	–	–	–	–	–	–	–	–	–
CCMT 09T304E-FM:T9425	●	0.4	■ 365	0.15	1.2	■ 215	0.15	1.2	◪ 345	0.15	1.2	–	–	–	–	–	–	–	–	–
CCMT 09T308E-FM:T9425	●	0.8	■ 395	0.20	1.2	■ 235	0.18	1.2	◪ 375	0.20	1.2	–	–	–	–	–	–	–	–	–
CCMT 120404E-FM:T9425	●	0.4	■ 355	0.15	1.7	■ 210	0.15	1.7	◪ 335	0.15	1.7	–	–	–	–	–	–	–	–	–
CCMT 120408E-FM:T9425	●	0.8	■ 385	0.20	1.7	■ 230	0.18	1.7	◪ 365	0.20	1.7	–	–	–	–	–	–	–	–	–
CCMT 120412E-FM:T9425	⚖	1.2	■ 365	0.27	1.7	■ 215	0.24	1.7	◪ 345	0.27	1.7	–	–	–	–	–	–	–	–	–
 																				
FM2 chip breaker is robust and the first choice for medium machining of Steels. It features positive rake angle and stable, moderate T-land. It's also suitable for Cast irons, and conditionally for Stainless steels.																				
CCMT 080304E-FM2:T9425	●	0.4	■ 365	0.12	1.0	◪ 215	0.11	1.0	■ 345	0.12	1.0	–	–	–	–	–	–	–	–	–
CCMT 080308E-FM2:T9425	⚖	0.8	■ 385	0.17	1.0	◪ 230	0.15	1.0	■ 365	0.17	1.0	–	–	–	–	–	–	–	–	–
CCMT 09T304E-FM2:T9425	●	0.4	■ 365	0.12	1.0	◪ 215	0.11	1.0	■ 345	0.12	1.0	–	–	–	–	–	–	–	–	–
CCMT 09T308E-FM2:T9425	⚖	0.8	■ 385	0.17	1.0	◪ 230	0.15	1.0	■ 365	0.17	1.0	–	–	–	–	–	–	–	–	–
CCMT 120408E-FM2:T9425	⚖	0.8	■ 350	0.20	1.5	◪ 210	0.18	1.5	■ 330	0.20	1.5	–	–	–	–	–	–	–	–	–
 																				
NF2 chip breaker is sharp and the first choice for finishing of Stainless steels. It features positive rake angle without T-land. It's also suitable for Super-alloys, and conditionally for Steels, Cast irons and Non-ferrous alloys.																				
CCMT 060202E-NF2:T9425	●	0.2	◪ 370	0.10	0.8	■ 220	0.09	0.8	◪ 350	0.10	0.8	–	–	–	◪ 80	0.08	0.6	–	–	–
CCMT 060204E-NF2:T9425	●	0.4	◪ 370	0.12	0.8	■ 220	0.11	0.8	◪ 350	0.12	0.8	–	–	–	◪ 80	0.11	0.6	–	–	–
CCMT 080304E-NF2:T9425	●	0.4	◪ 365	0.12	1.0	■ 215	0.11	1.0	◪ 345	0.12	1.0	–	–	–	◪ 80	0.11	0.8	–	–	–
CCMT 080308E-NF2:T9425	⚖	0.8	◪ 385	0.17	1.0	■ 230	0.15	1.0	◪ 365	0.17	1.0	–	–	–	◪ 85	0.14	0.8	–	–	–
CCMT 09T304E-NF2:T9425	●	0.4	◪ 360	0.12	1.2	■ 215	0.11	1.2	◪ 340	0.12	1.2	–	–	–	◪ 80	0.11	1.0	–	–	–
CCMT 09T308E-NF2:T9425	⚖	0.8	◪ 405	0.14	1.2	■ 240	0.13	1.2	◪ 380	0.14	1.2	–	–	–	◪ 90	0.13	1.0	–	–	–
 																				
I.C. / R: 6.35 / 1.0; 9.525 / 1.5; 12.7 / 2.5																				
RF chip breaker is robust and the first choice for medium machining of Cast irons. It features slightly positive rake angle and stable, moderate T-land. It's also suitable for Steels, and conditionally for Stainless steels and Hard materials.																				
CCMT 060204E-RF:T9425	●	0.4	■ 305	0.15	1.0	◪ 180	0.15	1.0	■ 285	0.15	1.0	–	–	–	–	–	–	–	–	–
CCMT 09T304E-RF:T9425	●	0.4	■ 265	0.20	1.5	◪ 155	0.18	1.5	■ 250	0.20	1.5	–	–	–	–	–	–	–	–	–
CCMT 09T308E-RF:T9425	●	0.8	■ 315	0.20	1.5	◪ 185	0.18	1.5	■ 295	0.20	1.5	–	–	–	–	–	–	–	–	–
CCMT 120408E-RF:T9425	●	0.8	■ 295	0.22	2.2	◪ 175	0.22	2.2	■ 280	0.22	2.2	–	–	–	–	–	–	–	–	–
 																				
RM chip breaker is robust and the first choice for roughing of Steels and Cast irons. It features positive rake angle and stable, wide T-land. It's also suitable for Stainless steels, and conditionally for Super-alloys and Hard materials.																				
CCMT 09T304E-RM:T9425	●	0.4	■ 305	0.25	2.2	■ 180	0.23	2.2	■ 285	0.25	2.2	–	–	–	◪ 65	0.18	1.8	–	–	–
CCMT 09T308E-RM:T9425	⚖	0.8	■ 340	0.30	2.2	■ 200	0.27	2.2	■ 320	0.30	2.2	–	–	–	◪ 75	0.24	1.8	–	–	–
CCMT 09T312E-RM:T9425	⚖	1.2	■ 350	0.33	2.2	■ 210	0.30	2.2	■ 330	0.33	2.2	–	–	–	◪ 75	0.23	1.8	–	–	–
CCMT 120408E-RM:T9425	⚖	0.8	■ 330	0.30	2.7	■ 195	0.27	2.7	■ 310	0.30	2.7	–	–	–	◪ 70	0.24	2.2	–	–	–
CCMT 120412E-RM:T9425	⚖	1.2	■ 340	0.33	2.7	■ 200	0.30	2.7	■ 320	0.33	2.7	–	–	–	◪ 75	0.23	2.2	–	–	–
 																				
RM3 chip breaker is robust and designed for roughing of Steels and Cast irons. It features positive rake angle and negative, wide T-land. It's also conditionally suitable for Stainless steels and Hard materials.																				
CCMT 120404E-RM3:T9425	●	0.4	■ 260	0.25	2.5	◪ 155	0.25	2.5	■ 245	0.25	2.5	–	–	–	–	–	–	–	–	–
CCMT 120408E-RM3:T9425	⚖	0.8	■ 300	0.27	2.5	◪ 180	0.27	2.5	■ 285	0.27	2.5	–	–	–	–	–	–	–	–	–

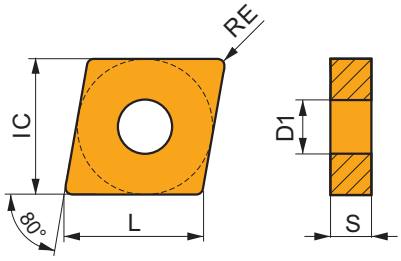
● Stable working conditions ⚖ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

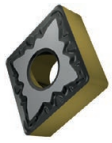
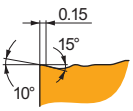
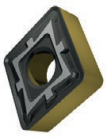
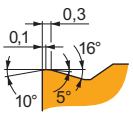
Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 	**UR** chip breaker is versatile and the first choice for finishing of Cast irons. It features positive rake angle without T-land. It's also suitable for Steels, and conditionally for Stainless steels.																			
CCMT 060202E-UR:T9425	●	0.2	■ 350	0.10	0.8	◩ 210	0.09	0.8	■ 330	0.10	0.8	–	–	–	–	–	–	–	–	–
CCMT 060204E-UR:T9425	●	0.4	■ 320	0.15	1.0	◩ 190	0.15	1.0	■ 300	0.15	1.0	–	–	–	–	–	–	–	–	–
CCMT 060208E-UR:T9425	●	0.8	■ 345	0.20	1.0	◩ 205	0.18	1.0	■ 325	0.20	1.0	–	–	–	–	–	–	–	–	–
CCMT 09T304E-UR:T9425	●	0.4	■ 315	0.15	1.2	◩ 185	0.15	1.2	■ 295	0.15	1.2	–	–	–	–	–	–	–	–	–
CCMT 09T308E-UR:T9425	●	0.8	■ 345	0.20	1.2	◩ 205	0.18	1.2	■ 325	0.20	1.2	–	–	–	–	–	–	–	–	–
CCMT 120404E-UR:T9425	●	0.4	■ 305	0.15	1.7	◩ 180	0.15	1.7	■ 285	0.15	1.7	–	–	–	–	–	–	–	–	–
CCMT 120408E-UR:T9425	●	0.8	■ 330	0.20	1.7	◩ 195	0.18	1.7	■ 310	0.20	1.7	–	–	–	–	–	–	–	–	–
CCMT 120412E-UR:T9425	⇕	1.2	■ 315	0.27	1.7	◩ 185	0.24	1.7	■ 295	0.27	1.7	–	–	–	–	–	–	–	–	–
 	**W-FM** chip breaker has wiper edge and is designed for finishing of Steels, Stainless steels and Cast irons. It features positive rake angle and positive, narrow T-land.																			
CCMT 060204W-FM:T9425	●	0.4	■ 300	0.30	0.8	■ 180	0.27	0.8	■ 285	0.30	0.8	–	–	–	–	–	–	–	–	–
CCMT 09T304W-FM:T9425	●	0.4	■ 300	0.30	0.8	■ 180	0.27	0.8	■ 285	0.30	0.8	–	–	–	–	–	–	–	–	–
CCMT 09T308W-FM:T9425	●	0.8	■ 320	0.40	1.0	■ 190	0.36	1.0	■ 300	0.40	1.0	–	–	–	–	–	–	–	–	–

CNMG

	IC (mm)	D1 (mm)	L (mm)	S (mm)
0903	9.525	3.81	9.70	3.18
1204	12.700	5.16	12.90	4.76
1606	15.875	6.35	16.10	6.35
1906	19.050	7.94	19.30	6.35
2509	25.400	9.12	25.80	9.53

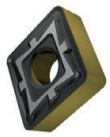
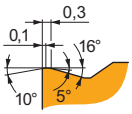
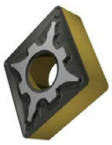
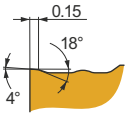
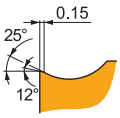
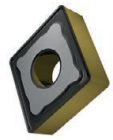
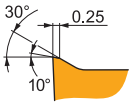
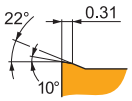


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 	**FM** chip breaker is versatile and the first choice for finishing of Steels and Cast irons. It features slightly positive rake angle and positive, narrow T-land. It's also conditionally suitable for Stainless steels and Super-alloys.																			
CNMG 090304E-FM:T9425	●	0.4	■ 365	0.20	1.4	◩ 215	0.18	1.4	■ 345	0.20	1.4	–	–	–	◩ 80	0.16	1.1	–	–	–
CNMG 090308E-FM:T9425	●	0.8	■ 430	0.20	1.4	◩ 255	0.18	1.4	■ 405	0.20	1.4	–	–	–	◩ 95	0.16	1.1	–	–	–
CNMG 120404E-FM:T9425	●	0.4	■ 350	0.20	2.1	◩ 210	0.18	2.1	■ 330	0.20	2.1	–	–	–	◩ 75	0.16	1.7	–	–	–
CNMG 120408E-FM:T9425	●	0.8	■ 415	0.20	2.1	◩ 245	0.18	2.1	■ 390	0.20	2.1	–	–	–	◩ 90	0.16	1.7	–	–	–
CNMG 120412E-FM:T9425	⇕	1.2	■ 400	0.27	2.1	◩ 240	0.24	2.1	■ 380	0.27	2.1	–	–	–	◩ 90	0.19	1.7	–	–	–
 	**M** chip breaker is versatile and the first choice for medium machining of Cast irons. It features positive rake angle and negative/stable, moderate T-land. It's also suitable for Steels, and conditionally for Hard materials.																			
CNMG 090308E-M:T9425	⇕	0.8	■ 330	0.32	1.8	–	–	–	■ 310	0.32	1.8	–	–	–	–	–	–	–	–	–
CNMG 120404E-M:T9425	●	0.4	■ 320	0.20	2.1	–	–	–	■ 300	0.20	2.1	–	–	–	–	–	–	–	–	–
CNMG 120408E-M:T9425	⇕	0.8	■ 325	0.32	2.1	–	–	–	■ 305	0.32	2.1	–	–	–	–	–	–	–	–	–
CNMG 120412E-M:T9425	⇕	1.2	■ 320	0.40	2.1	–	–	–	■ 300	0.40	2.1	–	–	–	–	–	–	–	–	–
CNMG 120416E-M:T9425	⇕	1.6	■ 335	0.40	2.1	–	–	–	■ 315	0.40	2.1	–	–	–	–	–	–	–	–	–

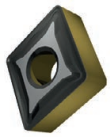
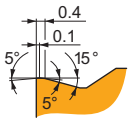
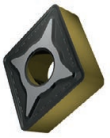
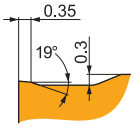
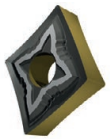
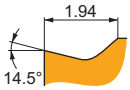
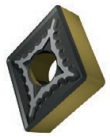
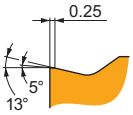
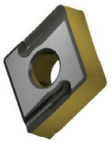
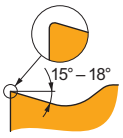
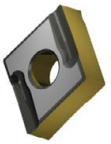
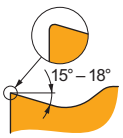
● Stable working conditions ⇕ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◩ Possible use

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 	**M** chip breaker is versatile and the first choice for medium machining of Cast irons. It features positive rake angle and negative/stable, moderate T-land. It's also suitable for Steels, and conditionally for Hard materials.																					
CNMG 160608E-M:T9425	⇕	0.8	■	305	0.32	3.6	–	–	–	■	285	0.32	3.6	–	–	–	–	–	–	–	–	–	–
CNMG 160612E-M:T9425	⇕	1.2	■	305	0.40	3.6	–	–	–	■	285	0.40	3.6	–	–	–	–	–	–	–	–	–	–
CNMG 160616E-M:T9425	⇕	1.6	■	320	0.40	3.6	–	–	–	■	300	0.40	3.6	–	–	–	–	–	–	–	–	–	–
CNMG 190608E-M:T9425	⇕	0.8	■	300	0.32	4.2	–	–	–	■	285	0.32	4.2	–	–	–	–	–	–	–	–	–	–
CNMG 190612E-M:T9425	⇕	1.2	■	300	0.40	4.2	–	–	–	■	285	0.40	4.2	–	–	–	–	–	–	–	–	–	–
CNMG 190616E-M:T9425	⇕	1.6	■	315	0.40	4.2	–	–	–	■	295	0.40	4.2	–	–	–	–	–	–	–	–	–	–
 	**ML** chip breaker is versatile and designed for low depth of cut and medium machining of steels. It features positive rake angle and stable, narrow T-land. It's also suitable for cast irons.																					
CNMG 120404-ML:T9415	●	0.4	■	365	0.20	1.0	–	–	–	◪	345	0.20	1.0	–	–	–	–	–	–	–	–	–	–
CNMG 120404-ML:T9425	●	0.4	■	340	0.20	1.0	–	–	–	■	320	0.20	1.0	–	–	–	–	–	–	–	–	–	–
CNMG 120408-ML:T9415	⇕	0.8	■	380	0.25	1.5	–	–	–	◪	360	0.25	1.5	–	–	–	–	–	–	–	–	–	–
CNMG 120408-ML:T9425	⇕	0.8	■	365	0.25	1.5	–	–	–	■	345	0.25	1.5	–	–	–	–	–	–	–	–	–	–
CNMG 120412-ML:T9415	⇕	1.2	■	360	0.30	2.0	–	–	–	◪	340	0.30	2.0	–	–	–	–	–	–	–	–	–	–
CNMG 120412-ML:T9425	⇕	1.2	■	355	0.30	2.0	–	–	–	■	335	0.30	2.0	–	–	–	–	–	–	–	–	–	–
	**NF** chip breaker is sharp and the first choice for fine-finishing of Steels, Stainless steels. It features highly positive rake angle and highly positive, narrow T-land. It's also conditionally suitable for Cast irons and Non-ferrous alloys and Super-alloys.																					
CNMG 090304E-NF:T9425	●	0.4	■	400	0.18	0.8	■	240	0.16	0.8	◪	380	0.18	0.8	–	–	–	◪	90	0.16	0.6	–	–	–
CNMG 090308E-NF:T9425	●	0.8	■	455	0.19	1.0	■	270	0.17	1.0	◪	430	0.19	1.0	–	–	–	◪	100	0.15	0.8	–	–	–
CNMG 120404E-NF:T9425	●	0.4	■	370	0.18	1.7	■	220	0.16	1.7	◪	350	0.18	1.7	–	–	–	◪	80	0.16	1.4	–	–	–
CNMG 120408E-NF:T9425	⇕	0.8	■	430	0.19	1.7	■	255	0.17	1.7	◪	405	0.19	1.7	–	–	–	◪	95	0.15	1.4	–	–	–
CNMG 120412E-NF:T9425	⇕	1.2	■	385	0.30	2.1	■	230	0.27	2.1	◪	365	0.30	2.1	–	–	–	◪	85	0.21	1.7	–	–	–
 	**NM** chip breaker is sharp and designed for medium machining of Steels, Stainless steels and Super-alloys. It features highly positive rake angle and positive, moderate T-land. It's also conditionally suitable for Non-ferrous alloys.																					
CNMG 120404E-NM:T9425	●	0.4	■	365	0.20	2.1	■	215	0.18	2.1	–	–	–	–	–	–	◪	80	0.16	1.7	–	–	–
CNMG 120408E-NM:T9425	⇕	0.8	■	400	0.25	2.1	■	240	0.23	2.1	–	–	–	–	–	–	◪	90	0.20	1.7	–	–	–
CNMG 120412E-NM:T9425	⇕	1.2	■	400	0.30	2.1	■	240	0.27	2.1	–	–	–	–	–	–	◪	90	0.24	1.7	–	–	–
CNMG 160608E-NM:T9425	⇕	0.8	■	360	0.30	3.6	■	215	0.27	3.6	–	–	–	–	–	–	◪	80	0.27	2.9	–	–	–
CNMG 160612E-NM:T9425	⇕	1.2	■	375	0.30	3.6	■	225	0.27	3.6	–	–	–	–	–	–	◪	80	0.27	2.9	–	–	–
CNMG 190612E-NM:T9425	⇕	1.2	■	355	0.35	4.2	■	210	0.32	4.2	–	–	–	–	–	–	◪	75	0.32	3.4	–	–	–
	**NMR** chip breaker is versatile and the first choice for medium machining of Stainless steels. It features positive rake angle and positive, wide T-land. It's also suitable for Steels and Super-alloys.																					
CNMG 120404E-NMR:T9425	●	0.4	■	300	0.25	2.0	■	180	0.23	2.0	–	–	–	–	–	–	◪	65	0.20	1.6	–	–	–
CNMG 120408E-NMR:T9425	⇕	0.8	■	305	0.35	2.7	■	180	0.32	2.7	–	–	–	–	–	–	◪	65	0.25	2.2	–	–	–
CNMG 120412E-NMR:T9425	⇕	1.2	■	310	0.40	2.7	■	185	0.36	2.7	–	–	–	–	–	–	◪	65	0.28	2.2	–	–	–
CNMG 160608E-NMR:T9425	⇕	0.8	■	295	0.35	4.0	■	175	0.32	4.0	–	–	–	–	–	–	◪	65	0.25	3.2	–	–	–
CNMG 160612E-NMR:T9425	⇕	1.2	■	300	0.40	4.0	■	180	0.36	4.0	–	–	–	–	–	–	◪	65	0.28	3.2	–	–	–
CNMG 160616E-NMR:T9425	⇕	1.6	■	300	0.45	4.0	■	180	0.41	4.0	–	–	–	–	–	–	◪	65	0.32	3.2	–	–	–
CNMG 190608E-NMR:T9425	⇕	0.8	■	285	0.35	5.2	■	170	0.32	5.2	–	–	–	–	–	–	◪	60	0.25	4.2	–	–	–
CNMG 190612E-NMR:T9425	⇕	1.2	■	290	0.40	5.2	■	170	0.36	5.2	–	–	–	–	–	–	◪	65	0.28	4.2	–	–	–
CNMG 190616E-NMR:T9425	⇕	1.6	■	290	0.45	5.2	■	170	0.41	5.2	–	–	–	–	–	–	◪	65	0.32	4.2	–	–	–

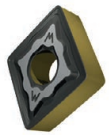
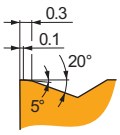
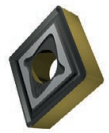
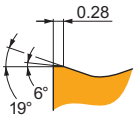
● Stable working conditions ⇕ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product		RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 	**R** chip breaker is robust and designed for roughing of Steels and Cast irons. It features slightly positive rake angle and negative/stable, extra-wide double T-land. It's also conditionally suitable for Hard materials.																			
CNMG 120408E-R:T9425	⬌	0.8	■ 285	0.40	4.0	–	–	–	■ 270	0.40	4.0	–	–	–	–	–	–	–	–	–
CNMG 120412E-R:T9425	⬌	1.2	■ 290	0.45	4.0	–	–	–	■ 275	0.45	4.0	–	–	–	–	–	–	–	–	–
CNMG 120416E-R:T9425	⬌	1.6	■ 290	0.50	4.0	–	–	–	■ 275	0.50	4.0	–	–	–	–	–	–	–	–	–
CNMG 160612E-R:T9425	⬌	1.2	■ 280	0.45	5.5	–	–	–	■ 265	0.45	5.5	–	–	–	–	–	–	–	–	–
CNMG 160616E-R:T9425	✱	1.6	■ 280	0.50	5.5	–	–	–	■ 265	0.50	5.5	–	–	–	–	–	–	–	–	–
CNMG 190612E-R:T9425	⬌	1.2	■ 275	0.45	7.0	–	–	–	■ 260	0.45	7.0	–	–	–	–	–	–	–	–	–
CNMG 190616E-R:T9425	✱	1.6	■ 275	0.50	7.0	–	–	–	■ 260	0.50	7.0	–	–	–	–	–	–	–	–	–
 	**RM** chip breaker is robust and the first choice for roughing of Steels. It features positive rake angle and stable, wide T-land. It's also suitable for Stainless steels, Cast irons, and conditionally for Super-alloys.																			
CNMG 120408E-RM:T9425	⬌	0.8	■ 325	0.40	4.0	■ 195	0.36	4.0	■ 305	0.40	4.0	–	–	–	◪ 70	0.28	3.2	–	–	–
CNMG 120412E-RM:T9425	⬌	1.2	■ 330	0.45	4.0	■ 195	0.41	4.0	■ 310	0.45	4.0	–	–	–	◪ 70	0.32	3.2	–	–	–
CNMG 120416E-RM:T9425	⬌	1.6	■ 335	0.50	4.0	■ 200	0.45	4.0	■ 315	0.50	4.0	–	–	–	◪ 75	0.35	3.2	–	–	–
CNMG 160608E-RM:T9425	⬌	0.8	■ 315	0.40	6.0	■ 185	0.36	6.0	■ 295	0.40	6.0	–	–	–	◪ 70	0.28	4.8	–	–	–
CNMG 160612E-RM:T9425	⬌	1.2	■ 315	0.45	6.0	■ 185	0.41	6.0	■ 295	0.45	6.0	–	–	–	◪ 70	0.32	4.8	–	–	–
CNMG 160616E-RM:T9425	⬌	1.6	■ 325	0.50	6.0	■ 195	0.45	6.0	■ 305	0.50	6.0	–	–	–	◪ 70	0.35	4.8	–	–	–
CNMG 190608E-RM:T9425	⬌	0.8	■ 305	0.40	7.5	■ 180	0.36	7.5	■ 285	0.40	7.5	–	–	–	◪ 65	0.28	6.0	–	–	–
CNMG 190612E-RM:T9425	⬌	1.2	■ 310	0.45	7.5	■ 185	0.41	7.5	■ 290	0.45	7.5	–	–	–	◪ 65	0.32	6.0	–	–	–
CNMG 190616E-RM:T9425	⬌	1.6	■ 310	0.50	7.5	■ 185	0.45	7.5	■ 290	0.50	7.5	–	–	–	◪ 65	0.35	6.0	–	–	–
CNMG 190624E-RM:T9425	⬌	2.4	■ 325	0.50	7.5	■ 195	0.45	7.5	■ 305	0.50	7.5	–	–	–	◪ 70	0.35	6.0	–	–	–
CNMG 250924E-RM:T9425	⬌	2.4	■ 150	0.80	12.0	■ 90	0.72	12.0	■ 140	0.80	12.0	–	–	–	◪ 30	0.56	9.6	–	–	–
 	**SF** chip breaker is sharp and the first choice for finishing of Stainless steels and Super-alloys. It features slightly positive rake angle without T-land. It's also suitable for Steels, Cast irons and Hard materials, and conditionally for Non-ferrous alloys.																			
CNMG 120404E-SF:T9425	●	0.4	■ 380	0.17	1.0	■ 225	0.15	1.0	■ 360	0.17	1.0	–	–	–	◪ 85	0.15	0.8	–	–	–
CNMG 120408E-SF:T9425	⬌	0.8	■ 425	0.20	1.0	■ 255	0.18	1.0	■ 400	0.20	1.0	–	–	–	◪ 95	0.16	0.8	–	–	–
 	**SM** chip breaker is versatile and the first choice for medium machining of Steels and Super-alloys. It features slightly positive rake angle and stable, moderate T-land. It's also suitable for Stainless steels, Cast irons, and conditionally for Non-ferrous alloys and Hard materials.																			
CNMG 120404E-SM:T9425	●	0.4	■ 335	0.20	2.0	■ 200	0.18	2.0	■ 315	0.20	2.0	–	–	–	◪ 75	0.18	1.6	–	–	–
CNMG 120408E-SM:T9425	⬌	0.8	■ 370	0.25	2.0	■ 220	0.23	2.0	■ 350	0.25	2.0	–	–	–	◪ 80	0.20	1.6	–	–	–
CNMG 120412E-SM:T9425	⬌	1.2	■ 370	0.30	2.0	■ 220	0.27	2.0	■ 350	0.30	2.0	–	–	–	◪ 80	0.24	1.6	–	–	–
CNMG 160608E-SM:T9425	⬌	0.8	■ 350	0.26	3.0	■ 210	0.23	3.0	■ 330	0.26	3.0	–	–	–	◪ 75	0.23	2.4	–	–	–
CNMG 160612E-SM:T9425	⬌	1.2	■ 355	0.30	3.0	■ 210	0.27	3.0	■ 335	0.30	3.0	–	–	–	◪ 75	0.27	2.4	–	–	–
CNMG 190612E-SM:T9425	⬌	1.2	■ 345	0.30	4.0	■ 205	0.27	4.0	■ 325	0.30	4.0	–	–	–	◪ 75	0.27	3.2	–	–	–
 	**SI** chip breaker is sharp and designed for medium machining of Steels, Stainless steels. It features positive rake angle without T-land. It's also conditionally suitable for Non-ferrous alloys and Super-alloys.																			
CNMG 120404ER-SI:T9425	●	0.4	■ 410	0.20	1.7	■ 245	0.18	1.7	–	–	–	–	–	–	◪ 90	0.18	1.4	–	–	–
CNMG 120408ER-SI:T9425	●	0.8	■ 400	0.35	1.7	■ 240	0.32	1.7	–	–	–	–	–	–	◪ 90	0.25	1.4	–	–	–
 	**SI** chip breaker is sharp and designed for medium machining of Steels, Stainless steels. It features positive rake angle without T-land. It's also conditionally suitable for Non-ferrous alloys and Super-alloys.																			
CNMG 120404EL-SI:T9425	●	0.4	■ 410	0.20	1.7	■ 245	0.18	1.7	–	–	–	–	–	–	◪ 90	0.18	1.4	–	–	–
CNMG 120408EL-SI:T9425	●	0.8	■ 400	0.35	1.7	■ 240	0.32	1.7	–	–	–	–	–	–	◪ 90	0.25	1.4	–	–	–

● Stable working conditions ⬌ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

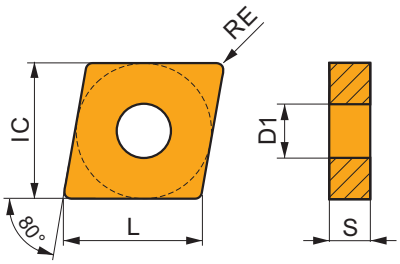
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
W-M chip breaker has wiper edge and is designed for finishing of Steels. It features positive rake angle and positive, moderate T-land. It's also conditionally suitable for Cast irons.																				
CNMG 120408W-M:T9425	⇕	0.8	■ 300	0.45	1.5	–	–	–	◪ 285	0.45	1.5	–	–	–	–	–	–	–	–	–
 																				
W-MR chip breaker has wiper edge and is designed for finishing of Steels. It features positive rake angle and stable, wide T-land. It's also conditionally suitable for Stainless steels and Cast irons.																				
CNMG 120404W-MR:T9425	●	0.4	■ 290	0.30	1.5	◪ 170	0.27	1.5	◪ 275	0.30	1.5	–	–	–	–	–	–	–	–	–
CNMG 120408W-MR:T9425	⇕	0.8	■ 300	0.45	1.5	◪ 180	0.41	1.5	◪ 285	0.45	1.5	–	–	–	–	–	–	–	–	–
CNMG 120412W-MR:T9425	⇕	1.2	■ 300	0.55	1.5	◪ 180	0.50	1.5	◪ 285	0.55	1.5	–	–	–	–	–	–	–	–	–

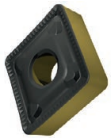
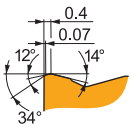
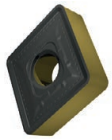
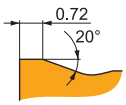
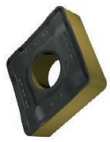
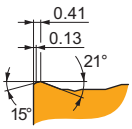
CNMM

DORMER PRAMET

	IC (mm)	D1 (mm)	L (mm)	S (mm)
1204	12.700	5.16	12.90	4.76
1606	15.875	6.35	16.10	6.35
1906	19.050	7.94	19.30	6.35
2509	25.400	9.12	25.80	9.53

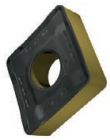


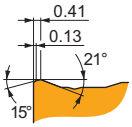
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
HR chip breaker is robust and designed for heavy roughing of Steels and Cast irons. It features slightly positive rake angle and negative/negative, extra-wide double T-land. It's also conditionally suitable for Stainless steels.																				
CNMM 190616E-HR:T9425	⇕	1.6	■ 135	0.60	10.0	◪ 80	0.54	10.0	■ 125	0.60	10.0	–	–	–	–	–	–	–	–	–
CNMM 190624E-HR:T9425	⇕	2.4	■ 140	0.65	10.0	◪ 80	0.59	10.0	■ 130	0.65	10.0	–	–	–	–	–	–	–	–	–
CNMM 250924E-HR:T9425	✱	2.4	■ 135	0.65	14.0	◪ 80	0.59	14.0	■ 125	0.65	14.0	–	–	–	–	–	–	–	–	–
 																				
HR2 chip breaker is robust and designed for heavy roughing of Steels and Cast irons. It features positive rake angle and stable, extra-wide double T-land. It's also conditionally suitable for Stainless steels.																				
CNMM 190616-HR2:T9425	⇕	1.6	■ 135	0.65	10.0	◪ 80	0.59	10.0	■ 125	0.65	10.0	–	–	–	–	–	–	–	–	–
CNMM 190624-HR2:T9425	⇕	2.4	■ 125	0.85	10.0	◪ 75	0.77	10.0	■ 115	0.85	10.0	–	–	–	–	–	–	–	–	–
CNMM 250924-HR2:T9425	⇕	2.4	■ 125	0.85	12.0	◪ 75	0.77	12.0	■ 115	0.85	12.0	–	–	–	–	–	–	–	–	–
 																				
NR2 chip breaker is robust and the first choice for heavy roughing of Stainless steels. It features positive rake angle and negative/negative, extra-wide double T-land. It's also suitable for Steels, and conditionally for Cast irons and Super-alloys.																				
CNMM 120408E-NR2:T9425	⇕	0.8	■ 305	0.40	5.0	■ 180	0.36	5.0	◪ 285	0.40	5.0	–	–	–	◪ 65	0.28	4.0	–	–	–
CNMM 120412E-NR2:T9425	⇕	1.2	■ 305	0.45	5.0	■ 180	0.41	5.0	◪ 285	0.45	5.0	–	–	–	◪ 65	0.32	4.0	–	–	–
CNMM 160608E-NR2:T9425	⇕	0.8	■ 300	0.40	6.0	■ 180	0.36	6.0	◪ 285	0.40	6.0	–	–	–	◪ 65	0.32	4.8	–	–	–
CNMM 160612E-NR2:T9425	⇕	1.2	■ 300	0.45	6.0	■ 180	0.41	6.0	◪ 285	0.45	6.0	–	–	–	◪ 65	0.36	4.8	–	–	–
CNMM 160616E-NR2:T9425	✱	1.6	■ 310	0.50	6.0	■ 185	0.45	6.0	◪ 290	0.50	6.0	–	–	–	◪ 65	0.40	4.8	–	–	–
CNMM 190612E-NR2:T9425	⇕	1.2	■ 290	0.45	9.0	■ 170	0.41	9.0	◪ 275	0.45	9.0	–	–	–	◪ 65	0.36	7.2	–	–	–

● Stable working conditions ⇕ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

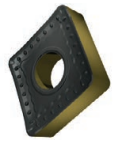
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

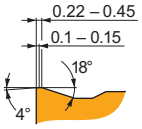




NR2 chip breaker is robust and the first choice for heavy roughing of Stainless steels. It features positive rake angle and negative/negative, extra-wide double T-land. It's also suitable for Steels, and conditionally for Cast irons and Super-alloys.

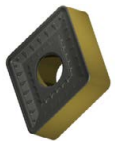
Product		RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
CNMM 190616E-NR2:T9425	✱	1.6	290	0.50	9.0	170	0.45	9.0	275	0.50	9.0	–	–	–	65	0.40	7.2	–	–	–
CNMM 190624E-NR2:T9425	✱	2.4	265	0.80	9.0	155	0.72	9.0	250	0.80	9.0	–	–	–	55	0.56	7.2	–	–	–
CNMM 250924E-NR2:T9425	✱	2.4	145	0.80	12.0	85	0.72	12.0	135	0.80	12.0	–	–	–	30	0.56	9.6	–	–	–

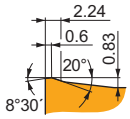




OR chip breaker is robust and the first choice for heavy roughing of Steels. It features positive rake angle and negative/stable, extra-wide double T-land. It's also suitable for Cast irons, and conditionally for Stainless steels and Super-alloys.

Product		RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
CNMM 120408E-OR:T9425	●	0.8	305	0.40	5.0	180	0.36	5.0	285	0.40	5.0	–	–	–	65	0.28	4.0	–	–	–
CNMM 120412E-OR:T9425	✱	1.2	305	0.45	5.0	180	0.41	5.0	285	0.45	5.0	–	–	–	65	0.36	4.0	–	–	–
CNMM 120416E-OR:T9425	✱	1.6	315	0.50	5.0	185	0.45	5.0	295	0.50	5.0	–	–	–	70	0.40	4.0	–	–	–
CNMM 160608E-OR:T9425	●	0.8	300	0.40	6.0	180	0.36	6.0	285	0.40	6.0	–	–	–	65	0.32	4.8	–	–	–
CNMM 160612E-OR:T9425	✱	1.2	300	0.45	6.0	180	0.41	6.0	285	0.45	6.0	–	–	–	65	0.36	4.8	–	–	–
CNMM 160616E-OR:T9425	✱	1.6	310	0.50	6.0	185	0.45	6.0	290	0.50	6.0	–	–	–	65	0.40	4.8	–	–	–
CNMM 190612E-OR:T9425	✱	1.2	290	0.45	9.0	170	0.41	9.0	275	0.45	9.0	–	–	–	65	0.36	7.2	–	–	–
CNMM 190616E-OR:T9425	✱	1.6	290	0.50	9.0	170	0.45	9.0	275	0.50	9.0	–	–	–	65	0.40	7.2	–	–	–
CNMM 190624E-OR:T9425	✱	2.4	265	0.80	9.0	155	0.72	9.0	250	0.80	9.0	–	–	–	55	0.56	7.2	–	–	–
CNMM 250924E-OR:T9425	✱	2.4	130	1.00	12.0	75	0.90	12.0	120	1.00	12.0	–	–	–	25	0.70	9.6	–	–	–



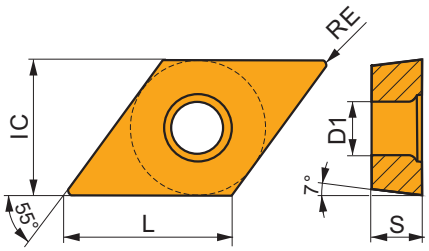


923 chip breaker is robust and designed for heavy roughing of Stainless steels. It features positive rake angle and negative/stable, extra-wide double T-land. It's also conditionally suitable for Steels and Cast irons.

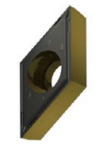
Product		RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
CNMM 250924S-923:T9425	✱	2.4	125	0.85	12.0	75	0.77	12.0	115	0.85	12.0	–	–	–	25	0.60	9.6	–	–	–

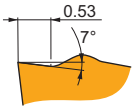
DCGT

	IC (mm)	D1 (mm)	L (mm)	S (mm)
11T3	9.525	4.40	11.60	3.97



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.



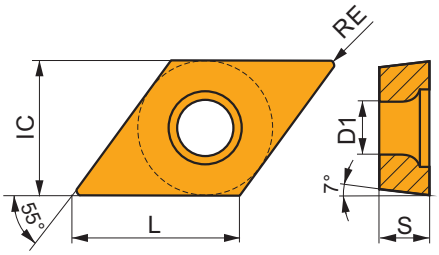


FF2 chip breaker is sharp and the first choice for fine-finishing of Steels. It features slightly positive rake angle without T-land. It's also suitable for Cast irons.

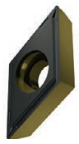
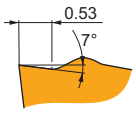
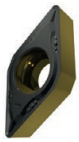
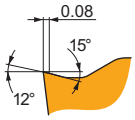
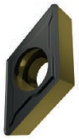
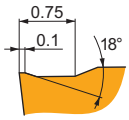
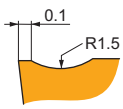
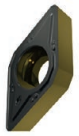
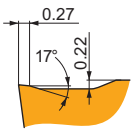
Product		RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
DCGT 11T302E-FF2:T9425	●	0.2	370	0.05	0.8	–	–	–	350	0.05	0.8	–	–	–	–	–	–	–	–	–

DCMT

	IC (mm)	D1 (mm)	L (mm)	S (mm)
0702	6.350	2.80	7.80	2.38
11T3	9.525	4.40	11.60	3.97
1504	12.700	5.50	15.50	4.76

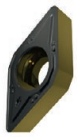
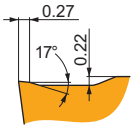
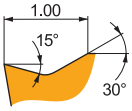
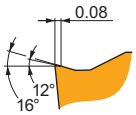


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
FF2 chip breaker is sharp and the first choice for fine-finishing of Steels. It features slightly positive rake angle without T-land. It's also suitable for Cast irons.																				
DCMT 070202E-FF2:T9425	●	0.2	■ 370	0.05	0.8	–	–	–	■ 350	0.05	0.8	–	–	–	–	–	–	–	–	–
DCMT 070204E-FF2:T9425	●	0.4	■ 295	0.12	0.8	–	–	–	■ 280	0.12	0.8	–	–	–	–	–	–	–	–	–
DCMT 070208E-FF2:T9425	●	0.8	■ 315	0.17	0.8	–	–	–	■ 295	0.17	0.8	–	–	–	–	–	–	–	–	–
DCMT 11T304E-FF2:T9425	●	0.4	■ 295	0.12	0.8	–	–	–	■ 280	0.12	0.8	–	–	–	–	–	–	–	–	–
DCMT 11T308E-FF2:T9425	●	0.8	■ 315	0.17	0.8	–	–	–	■ 295	0.17	0.8	–	–	–	–	–	–	–	–	–
 																				
FM chip breaker is versatile and the first choice for finishing of Steels. It features positive rake angle and positive, narrow T-land. It's also suitable for Stainless steels, and conditionally for Cast irons and Non-ferrous alloys.																				
DCMT 070202E-FM:T9425	●	0.2	■ 325	0.10	0.8	■ 195	0.09	0.8	◪ 305	0.10	0.8	–	–	–	–	–	–	–	–	–
DCMT 070204E-FM:T9425	●	0.4	■ 285	0.18	0.8	■ 170	0.16	0.8	◪ 270	0.18	0.8	–	–	–	–	–	–	–	–	–
DCMT 11T302E-FM:T9425	●	0.2	■ 325	0.10	0.8	■ 195	0.09	0.8	◪ 305	0.10	0.8	–	–	–	–	–	–	–	–	–
DCMT 11T304E-FM:T9425	●	0.4	■ 285	0.18	0.8	■ 170	0.16	0.8	◪ 270	0.18	0.8	–	–	–	–	–	–	–	–	–
DCMT 11T308E-FM:T9425	●	0.8	■ 345	0.17	0.8	■ 205	0.15	0.8	◪ 325	0.17	0.8	–	–	–	–	–	–	–	–	–
DCMT 11T312E-FM:T9425	●	1.2	■ 320	0.22	1.2	■ 190	0.22	1.2	◪ 300	0.22	1.2	–	–	–	–	–	–	–	–	–
 																				
FM2 chip breaker is robust and the first choice for medium machining of Steels. It features positive rake angle and stable, moderate T-land. It's also suitable for Cast irons, and conditionally for Stainless steels.																				
DCMT 070204E-FM2:T9425	●	0.4	■ 295	0.12	0.8	◪ 175	0.11	0.8	■ 280	0.12	0.8	–	–	–	–	–	–	–	–	–
DCMT 11T304E-FM2:T9425	●	0.4	■ 295	0.12	0.8	◪ 175	0.11	0.8	■ 280	0.12	0.8	–	–	–	–	–	–	–	–	–
DCMT 11T308E-FM2:T9425	●	0.8	■ 315	0.17	0.8	◪ 185	0.15	0.8	■ 295	0.17	0.8	–	–	–	–	–	–	–	–	–
DCMT 11T312E-FM2:T9425	●	1.2	■ 295	0.22	1.2	◪ 175	0.20	1.2	■ 280	0.22	1.2	–	–	–	–	–	–	–	–	–
DCMT 150408E-FM2:T9425	●	0.8	■ 280	0.20	1.5	◪ 165	0.18	1.5	■ 265	0.20	1.5	–	–	–	–	–	–	–	–	–
																				
RF chip breaker is robust and the first choice for medium machining of Cast irons. It features slightly positive rake angle and stable, moderate T-land. It's also suitable for Steels, and conditionally for Stainless steels and Hard materials.																				
DCMT 11T304E-RF:T9425	●	0.4	■ 225	0.20	0.8	◪ 135	0.18	0.8	■ 210	0.20	0.8	–	–	–	–	–	–	–	–	–
DCMT 11T308E-RF:T9425	●	0.8	■ 270	0.20	0.8	◪ 160	0.18	0.8	■ 255	0.20	0.8	–	–	–	–	–	–	–	–	–
 																				
RM chip breaker is robust and the first choice for roughing of Steels and Cast irons. It features positive rake angle and stable, wide T-land. It's also suitable for Stainless steels, and conditionally for Super-alloys and Hard materials.																				
DCMT 11T304E-RM:T9425	●	0.4	■ 280	0.20	1.0	■ 165	0.18	1.0	■ 265	0.20	1.0	–	–	–	◪ 60	0.14	0.8	–	–	–
DCMT 11T308E-RM:T9425	●	0.8	■ 310	0.27	0.8	■ 185	0.24	0.8	■ 290	0.27	0.8	–	–	–	◪ 65	0.19	0.6	–	–	–
DCMT 11T312E-RM:T9425	⬌	1.2	■ 315	0.27	1.2	■ 185	0.24	1.2	■ 295	0.27	1.2	–	–	–	◪ 70	0.19	1.2	–	–	–

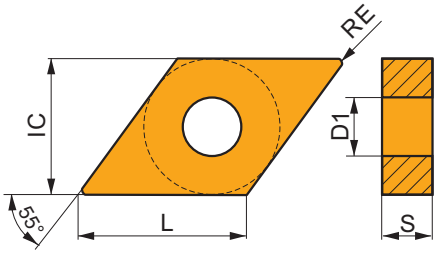
● Stable working conditions ⬌ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

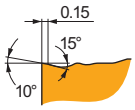
Product	●	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 	**RM** chip breaker is robust and the first choice for roughing of Steels and Cast irons. It features positive rake angle and stable, wide T-land. It's also suitable for Stainless steels, and conditionally for Super-alloys and Hard materials.																			
DCMT 150408E-RM:T9425	●	0.8	■ 285	0.27	1.9	■ 170	0.24	1.9	■ 270	0.27	1.9	–	–	–	◪ 60	0.22	1.5	–	–	–
	**UR** chip breaker is versatile and the first choice for finishing of Cast irons. It features positive rake angle without T-land. It's also suitable for Steels, and conditionally for Stainless steels.																			
DCMT 070202E-UR:T9425	●	0.2	■ 280	0.10	0.8	◪ 165	0.09	0.8	■ 265	0.10	0.8	–	–	–	–	–	–	–	–	–
DCMT 070204E-UR:T9425	●	0.4	■ 245	0.18	0.8	◪ 145	0.16	0.8	■ 230	0.18	0.8	–	–	–	–	–	–	–	–	–
DCMT 11T302E-UR:T9425	●	0.2	■ 280	0.10	0.8	◪ 165	0.09	0.8	■ 265	0.10	0.8	–	–	–	–	–	–	–	–	–
DCMT 11T304E-UR:T9425	●	0.4	■ 245	0.18	0.8	◪ 145	0.16	0.8	■ 230	0.18	0.8	–	–	–	–	–	–	–	–	–
DCMT 11T308E-UR:T9425	●	0.8	■ 300	0.17	0.8	◪ 180	0.15	0.8	■ 285	0.17	0.8	–	–	–	–	–	–	–	–	–
DCMT 11T312E-UR:T9425	●	1.2	■ 280	0.22	1.2	◪ 165	0.20	1.2	■ 265	0.22	1.2	–	–	–	–	–	–	–	–	–
	**W-FM** chip breaker has wiper edge and is designed for finishing of Steels, Stainless steels and Cast irons. It features positive rake angle and positive, narrow T-land.																			
DCMX 11T304W-FM:T9425	●	0.4	■ 240	0.30	0.8	■ 140	0.27	0.8	■ 225	0.30	0.8	–	–	–	–	–	–	–	–	–
DCMX 11T308W-FM:T9425	●	0.8	■ 255	0.40	1.0	■ 150	0.36	1.0	■ 240	0.40	1.0	–	–	–	–	–	–	–	–	–

DNMG

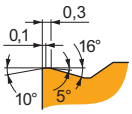
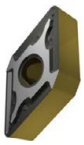
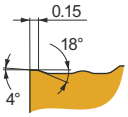
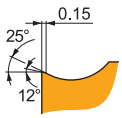
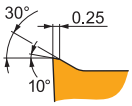
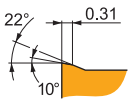
	IC (mm)	D1 (mm)	L (mm)	S (mm)
1104	9.525	3.81	11.60	4.76
1504	12.700	5.16	15.50	4.76
1506	12.700	5.16	15.50	6.35



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

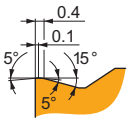
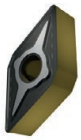
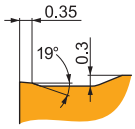
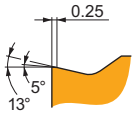
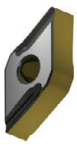
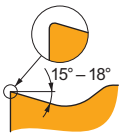
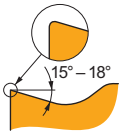
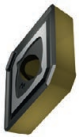
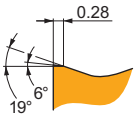
Product	●	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
	**FM** chip breaker is versatile and the first choice for finishing of Steels and Cast irons. It features slightly positive rake angle and positive, narrow T-land. It's also conditionally suitable for Stainless steels and Super-alloys.																			
DNMG 110404E-FM:T9425	●	0.4	■ 305	0.20	0.8	◪ 180	0.18	0.8	■ 285	0.20	0.8	–	–	–	◪ 65	0.20	0.6	–	–	–
DNMG 110408E-FM:T9425	●	0.8	■ 365	0.20	0.8	◪ 215	0.18	0.8	■ 345	0.20	0.8	–	–	–	◪ 80	0.16	0.6	–	–	–
DNMG 150404E-FM:T9425	●	0.4	■ 285	0.20	1.7	◪ 170	0.18	1.7	■ 270	0.20	1.7	–	–	–	◪ 60	0.20	1.4	–	–	–
DNMG 150408E-FM:T9425	●	0.8	■ 340	0.20	1.7	◪ 200	0.18	1.7	■ 320	0.20	1.7	–	–	–	◪ 75	0.16	1.4	–	–	–
DNMG 150604E-FM:T9425	●	0.4	■ 285	0.20	1.7	◪ 170	0.18	1.7	■ 270	0.20	1.7	–	–	–	◪ 60	0.20	1.4	–	–	–
DNMG 150608E-FM:T9425	●	0.8	■ 340	0.20	1.7	◪ 200	0.18	1.7	■ 320	0.20	1.7	–	–	–	◪ 75	0.16	1.4	–	–	–
DNMG 150612E-FM:T9425	●	1.2	■ 330	0.25	1.7	◪ 195	0.23	1.7	■ 310	0.25	1.7	–	–	–	◪ 70	0.18	1.4	–	–	–
DNMG 150616E-FM:T9425	●	1.6	■ 330	0.30	1.7	◪ 195	0.27	1.7	■ 310	0.30	1.7	–	–	–	◪ 70	0.21	1.4	–	–	–

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
																				
M chip breaker is versatile and the first choice for medium machining of Cast irons. It features positive rake angle and negative/stable, moderate T-land. It's also suitable for Steels, and conditionally for Hard materials.																				
DNMG 110404E-M:T9425	●	0.4	■ 270	0.20	1.2	–	–	–	■ 255	0.20	1.2	–	–	–	–	–	–	–	–	–
DNMG 110408E-M:T9425	●	0.8	■ 280	0.30	1.2	–	–	–	■ 265	0.30	1.2	–	–	–	–	–	–	–	–	–
DNMG 110412E-M:T9425	⇕	1.2	■ 270	0.40	1.2	–	–	–	■ 255	0.40	1.2	–	–	–	–	–	–	–	–	–
DNMG 150404E-M:T9425	●	0.4	■ 255	0.20	1.9	–	–	–	■ 240	0.20	1.9	–	–	–	–	–	–	–	–	–
DNMG 150408E-M:T9425	●	0.8	■ 265	0.30	1.9	–	–	–	■ 250	0.30	1.9	–	–	–	–	–	–	–	–	–
DNMG 150412E-M:T9425	⇕	1.2	■ 260	0.40	1.9	–	–	–	■ 245	0.40	1.9	–	–	–	–	–	–	–	–	–
DNMG 150604E-M:T9425	●	0.4	■ 255	0.20	1.9	–	–	–	■ 240	0.20	1.9	–	–	–	–	–	–	–	–	–
DNMG 150608E-M:T9425	●	0.8	■ 265	0.30	1.9	–	–	–	■ 250	0.30	1.9	–	–	–	–	–	–	–	–	–
DNMG 150612E-M:T9425	⇕	1.2	■ 260	0.40	1.9	–	–	–	■ 245	0.40	1.9	–	–	–	–	–	–	–	–	–
 																				
ML chip breaker is versatile and designed for low depth of cut and medium machining of steels. It features positive rake angle and stable, narrow T-land. It's also suitable for cast irons.																				
DNMG 110408-ML:T9415	●	0.8	■ 300	0.25	1.5	–	–	–	◪ 285	0.25	1.5	–	–	–	–	–	–	–	–	–
DNMG 110408-ML:T9425	●	0.8	■ 290	0.25	1.5	–	–	–	■ 275	0.25	1.5	–	–	–	–	–	–	–	–	–
DNMG 150408-ML:T9415	●	0.8	■ 300	0.25	1.5	–	–	–	◪ 285	0.25	1.5	–	–	–	–	–	–	–	–	–
DNMG 150408-ML:T9425	●	0.8	■ 290	0.25	1.5	–	–	–	■ 275	0.25	1.5	–	–	–	–	–	–	–	–	–
DNMG 150608-ML:T9415	●	0.8	■ 300	0.25	1.5	–	–	–	◪ 285	0.25	1.5	–	–	–	–	–	–	–	–	–
DNMG 150608-ML:T9425	⇕	0.8	■ 290	0.25	1.5	–	–	–	■ 275	0.25	1.5	–	–	–	–	–	–	–	–	–
DNMG 150612-ML:T9415	⇕	1.2	■ 285	0.30	2.0	–	–	–	◪ 270	0.30	2.0	–	–	–	–	–	–	–	–	–
DNMG 150612-ML:T9425	⇕	1.2	■ 280	0.30	2.0	–	–	–	■ 265	0.30	2.0	–	–	–	–	–	–	–	–	–
DNMG 150616-ML:T9415	⇕	1.6	■ 280	0.35	2.0	–	–	–	◪ 265	0.35	2.0	–	–	–	–	–	–	–	–	–
DNMG 150616-ML:T9425	⇕	1.6	■ 280	0.35	2.0	–	–	–	■ 265	0.35	2.0	–	–	–	–	–	–	–	–	–
																				
NF chip breaker is sharp and the first choice for fine-finishing of Steels, Stainless steels. It features highly positive rake angle and highly positive, narrow T-land. It's also conditionally suitable for Cast irons and Non-ferrous alloys and Super-alloys.																				
DNMG 110404E-NF:T9425	●	0.4	■ 320	0.18	0.8	■ 190	0.16	0.8	◪ 300	0.18	0.8	–	–	–	◪ 70	0.16	0.6	–	–	–
DNMG 110408E-NF:T9425	●	0.8	■ 370	0.18	1.0	■ 220	0.16	1.0	◪ 350	0.18	1.0	–	–	–	◪ 80	0.16	0.8	–	–	–
DNMG 150404E-NF:T9425	●	0.4	■ 295	0.18	1.7	■ 175	0.16	1.7	◪ 280	0.18	1.7	–	–	–	◪ 65	0.16	1.4	–	–	–
DNMG 150408E-NF:T9425	●	0.8	■ 355	0.18	1.7	■ 210	0.16	1.7	◪ 335	0.18	1.7	–	–	–	◪ 75	0.16	1.4	–	–	–
DNMG 150604E-NF:T9425	●	0.4	■ 295	0.18	1.9	■ 175	0.16	1.9	◪ 280	0.18	1.9	–	–	–	◪ 65	0.16	1.5	–	–	–
DNMG 150608E-NF:T9425	●	0.8	■ 350	0.18	1.9	■ 210	0.16	1.9	◪ 330	0.18	1.9	–	–	–	◪ 75	0.16	1.5	–	–	–
																				
NM chip breaker is sharp and designed for medium machining of Steels, Stainless steels and Super-alloys. It features highly positive rake angle and positive, moderate T-land. It's also conditionally suitable for Non-ferrous alloys.																				
DNMG 110408E-NM:T9425	●	0.8	■ 355	0.25	0.8	■ 210	0.23	0.8	–	–	–	–	–	–	◪ 75	0.20	0.6	–	–	–
DNMG 150604E-NM:T9425	●	0.4	■ 295	0.20	1.9	■ 175	0.18	1.9	–	–	–	–	–	–	◪ 65	0.20	1.5	–	–	–
DNMG 150608E-NM:T9425	●	0.8	■ 325	0.25	1.9	■ 195	0.23	1.9	–	–	–	–	–	–	◪ 70	0.20	1.5	–	–	–
																				
NMR chip breaker is versatile and the first choice for medium machining of Stainless steels. It features positive rake angle and positive, wide T-land. It's also suitable for Steels and Super-alloys.																				
DNMG 110404E-NMR:T9425	●	0.4	■ 280	0.20	0.8	■ 165	0.18	0.8	–	–	–	–	–	–	◪ 60	0.18	0.6	–	–	–
DNMG 150404E-NMR:T9425	●	0.4	■ 255	0.20	1.9	■ 150	0.18	1.9	–	–	–	–	–	–	◪ 55	0.18	1.5	–	–	–
DNMG 150408E-NMR:T9425	⇕	0.8	■ 265	0.30	1.9	■ 155	0.27	1.9	–	–	–	–	–	–	◪ 55	0.24	1.5	–	–	–
DNMG 150604E-NMR:T9425	●	0.4	■ 255	0.20	1.9	■ 150	0.18	1.9	–	–	–	–	–	–	◪ 55	0.18	1.5	–	–	–
DNMG 150608E-NMR:T9425	⇕	0.8	■ 265	0.30	1.9	■ 155	0.27	1.9	–	–	–	–	–	–	◪ 55	0.24	1.5	–	–	–
DNMG 150612E-NMR:T9425	⇕	1.2	■ 280	0.30	1.9	■ 165	0.27	1.9	–	–	–	–	–	–	◪ 60	0.24	1.5	–	–	–

● Stable working conditions ⇕ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

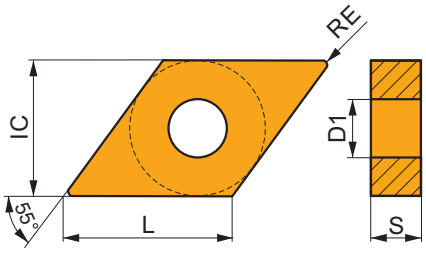
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product		RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
	**R** chip breaker is robust and designed for roughing of Steels and Cast irons. It features slightly positive rake angle and negative/stable, extra-wide double T-land. It's also conditionally suitable for Hard materials.																			
DNMG 150608E-R:T9425	⬌	0.8	■ 235	0.40	3.0	–	–	–	■ 220	0.40	3.0	–	–	–	–	–	–	–	–	–
DNMG 150612E-R:T9425	⬌	1.2	■ 245	0.40	3.0	–	–	–	■ 230	0.40	3.0	–	–	–	–	–	–	–	–	–
DNMG 150616E-R:T9425	⬌	1.6	■ 260	0.40	3.0	–	–	–	■ 245	0.40	3.0	–	–	–	–	–	–	–	–	–
 	**RM** chip breaker is robust and the first choice for roughing of Steels. It features positive rake angle and stable, wide T-land. It's also suitable for Stainless steels, Cast irons, and conditionally for Super-alloys.																			
DNMG 110408E-RM:T9425	●	0.8	■ 275	0.40	2.0	■ 165	0.36	2.0	■ 260	0.40	2.0	–	–	–	◪ 60	0.28	1.6	–	–	–
DNMG 110412E-RM:T9425	⬌	1.2	■ 290	0.40	2.0	■ 170	0.36	2.0	■ 275	0.40	2.0	–	–	–	◪ 65	0.28	1.6	–	–	–
DNMG 150408E-RM:T9425	●	0.8	■ 270	0.40	3.0	■ 160	0.36	3.0	■ 255	0.40	3.0	–	–	–	◪ 60	0.28	2.4	–	–	–
DNMG 150412E-RM:T9425	⬌	1.2	■ 285	0.40	3.0	■ 170	0.36	3.0	■ 270	0.40	3.0	–	–	–	◪ 60	0.28	2.4	–	–	–
DNMG 150608E-RM:T9425	⬌	0.8	■ 270	0.40	3.0	■ 160	0.36	3.0	■ 255	0.40	3.0	–	–	–	◪ 60	0.28	2.4	–	–	–
DNMG 150612E-RM:T9425	⬌	1.2	■ 285	0.40	3.0	■ 170	0.36	3.0	■ 270	0.40	3.0	–	–	–	◪ 60	0.28	2.4	–	–	–
DNMG 150616E-RM:T9425	⬌	1.6	■ 295	0.40	3.0	■ 175	0.36	3.0	■ 280	0.40	3.0	–	–	–	◪ 65	0.33	2.4	–	–	–
	**SM** chip breaker is versatile and the first choice for medium machining of Steels and Super-alloys. It features slightly positive rake angle and stable, moderate T-land. It's also suitable for Stainless steels, Cast irons, and conditionally for Non-ferrous alloys and Hard materials.																			
DNMG 110404E-SM:T9425	●	0.4	■ 295	0.20	0.8	■ 175	0.18	0.8	■ 280	0.20	0.8	–	–	–	◪ 65	0.18	0.6	–	–	–
DNMG 110408E-SM:T9425	●	0.8	■ 315	0.25	1.2	■ 185	0.23	1.2	■ 295	0.25	1.2	–	–	–	◪ 70	0.20	1.0	–	–	–
DNMG 150604E-SM:T9425	●	0.4	■ 275	0.20	1.7	■ 165	0.18	1.7	■ 260	0.20	1.7	–	–	–	◪ 60	0.18	1.4	–	–	–
DNMG 150608E-SM:T9425	●	0.8	■ 300	0.25	1.7	■ 180	0.23	1.7	■ 285	0.25	1.7	–	–	–	◪ 65	0.20	1.4	–	–	–
DNMG 150612E-SM:T9425	⬌	1.2	■ 300	0.30	1.7	■ 180	0.27	1.7	■ 285	0.30	1.7	–	–	–	◪ 65	0.24	1.4	–	–	–
 	**SI** chip breaker is sharp and designed for medium machining of Steels, Stainless steels. It features positive rake angle without T-land. It's also conditionally suitable for Non-ferrous alloys and Super-alloys.																			
DNMG 110404ER-SI:T9425	●	0.4	■ 340	0.20	1.0	■ 200	0.18	1.0	–	–	–	–	–	–	◪ 75	0.18	0.8	–	–	–
DNMG 110408ER-SI:T9425	●	0.8	■ 340	0.35	1.0	■ 200	0.32	1.0	–	–	–	–	–	–	◪ 75	0.25	0.8	–	–	–
DNMG 150404ER-SI:T9425	●	0.4	■ 330	0.20	1.5	■ 195	0.18	1.5	–	–	–	–	–	–	◪ 70	0.18	1.2	–	–	–
DNMG 150408ER-SI:T9425	●	0.8	■ 325	0.35	1.5	■ 195	0.32	1.5	–	–	–	–	–	–	◪ 70	0.25	1.2	–	–	–
DNMG 150604ER-SI:T9425	●	0.4	■ 330	0.20	1.5	■ 195	0.18	1.5	–	–	–	–	–	–	◪ 70	0.18	1.2	–	–	–
DNMG 150608ER-SI:T9425	●	0.8	■ 325	0.35	1.5	■ 195	0.32	1.5	–	–	–	–	–	–	◪ 70	0.25	1.2	–	–	–
	**SI** chip breaker is sharp and designed for medium machining of Steels, Stainless steels. It features positive rake angle without T-land. It's also conditionally suitable for Non-ferrous alloys and Super-alloys.																			
DNMG 110404EL-SI:T9425	●	0.4	■ 340	0.20	1.0	■ 200	0.18	1.0	–	–	–	–	–	–	◪ 75	0.18	0.8	–	–	–
DNMG 110408EL-SI:T9425	●	0.8	■ 340	0.35	1.0	■ 200	0.32	1.0	–	–	–	–	–	–	◪ 75	0.25	0.8	–	–	–
DNMG 150404EL-SI:T9425	●	0.4	■ 330	0.20	1.5	■ 195	0.18	1.5	–	–	–	–	–	–	◪ 70	0.18	1.2	–	–	–
DNMG 150408EL-SI:T9425	●	0.8	■ 325	0.35	1.5	■ 195	0.32	1.5	–	–	–	–	–	–	◪ 70	0.25	1.2	–	–	–
DNMG 150604EL-SI:T9425	●	0.4	■ 330	0.20	1.5	■ 195	0.18	1.5	–	–	–	–	–	–	◪ 70	0.18	1.2	–	–	–
DNMG 150608EL-SI:T9425	●	0.8	■ 325	0.35	1.5	■ 195	0.32	1.5	–	–	–	–	–	–	◪ 70	0.25	1.2	–	–	–
 	**W-MR** chip breaker has wiper edge and is designed for finishing of Steels. It features positive rake angle and stable, wide T-land. It's also conditionally suitable for Stainless steels and Cast irons.																			
DNMG 150608W-MR:T9425	●	0.8	■ 250	0.40	1.5	◪ 150	0.36	1.5	◪ 235	0.40	1.5	–	–	–	–	–	–	–	–	–
DNMG 150612W-MR:T9425	⬌	1.2	■ 245	0.50	1.5	◪ 145	0.45	1.5	◪ 230	0.50	1.5	–	–	–	–	–	–	–	–	–

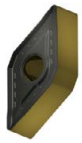
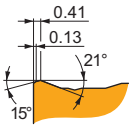
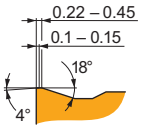
● Stable working conditions ⬌ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

DNMM

	IC (mm)	D1 (mm)	L (mm)	S (mm)
1506	12.700	5.16	15.50	6.35

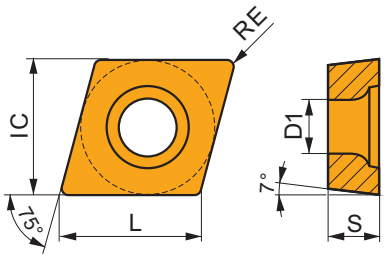


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

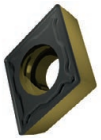
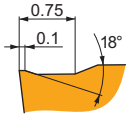
Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
NR2 chip breaker is robust and the first choice for heavy roughing of Stainless steels. It features positive rake angle and negative/negative, extra-wide double T-land. It's also suitable for Steels, and conditionally for Cast irons and Super-alloys.																				
DNMM 150608E-NR2:T9425	⇕	0.8	■ 255	0.40	3.0	■ 150	0.36	3.0	◪ 240	0.40	3.0	–	–	–	◪ 55	0.32	2.4	–	–	–
																				
OR chip breaker is robust and the first choice for heavy roughing of Steels. It features positive rake angle and negative/stable, extra-wide double T-land. It's also suitable for Cast irons, and conditionally for Stainless steels and Super-alloys.																				
DNMM 150608E-OR:T9425	⇕	0.8	■ 255	0.40	3.0	◪ 150	0.36	3.0	■ 240	0.40	3.0	–	–	–	◪ 55	0.28	2.4	–	–	–
DNMM 150612E-OR:T9425	⇕	1.2	■ 270	0.40	3.0	◪ 160	0.36	3.0	■ 255	0.40	3.0	–	–	–	◪ 60	0.32	2.4	–	–	–
DNMM 150616E-OR:T9425	⇕	1.6	■ 270	0.45	3.0	◪ 160	0.41	3.0	■ 255	0.45	3.0	–	–	–	◪ 60	0.41	2.4	–	–	–

ECMT

	IC (mm)	D1 (mm)	L (mm)	S (mm)
0602	6.350	2.80	6.50	2.38
0803	7.940	3.40	8.20	3.18



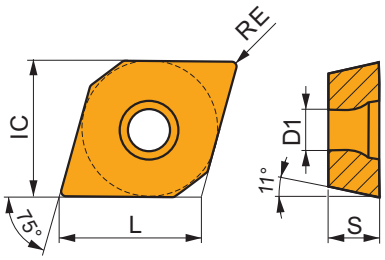
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
FM2 chip breaker is robust and the first choice for medium machining of Steels. It features positive rake angle and stable, moderate T-land. It's also suitable for Cast irons, and conditionally for Stainless steels.																				
ECMT 060204E-FM2:T9425	●	0.4	■ 370	0.12	0.8	◪ 220	0.11	0.8	■ 350	0.12	0.8	–	–	–	–	–	–	–	–	–
ECMT 080304E-FM2:T9425	●	0.4	■ 365	0.12	1.0	◪ 215	0.11	1.0	■ 345	0.12	1.0	–	–	–	–	–	–	–	–	–
ECMT 080308E-FM2:T9425	⇕	0.8	■ 385	0.17	1.0	◪ 230	0.15	1.0	■ 365	0.17	1.0	–	–	–	–	–	–	–	–	–

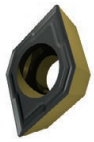
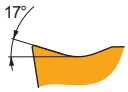
● Stable working conditions ⇕ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

EPMT

	IC (mm)	D1 (mm)	L (mm)	S (mm)
0502	5.560	2.50	5.70	2.38

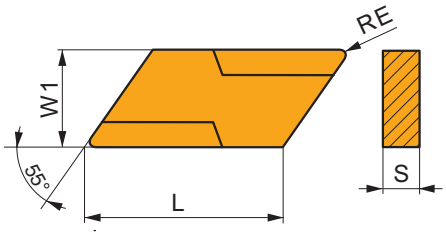


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

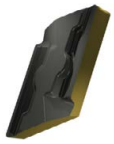
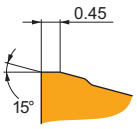
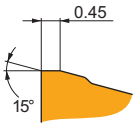
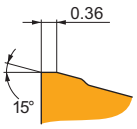
Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
NF2 chip breaker is sharp and the first choice for finishing of Stainless steels. It features positive rake angle without T-land. It's also suitable for Super-alloys, and conditionally for Steels, Cast irons and Non-ferrous alloys.																				
EPMT 050202E-NF2:T9425	●	0.2	◪ 415	0.07	0.8	■ 245	0.06	0.8	◪ 390	0.07	0.8	–	–	–	◪ 90	0.06	0.6	–	–	–

KNUX

	L (mm)	S (mm)
1604	19.50	4.76

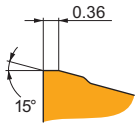
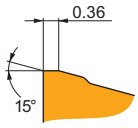
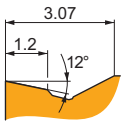
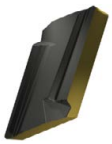
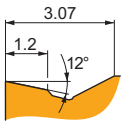


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
L-22 geometry with left-handed design for finish to semi-rough machining, and continuous cuts.																				
KNUX 160405L-22:T9425	●	0.5	■ 245	0.25	2.7	◪ 145	0.25	2.7	◪ 230	0.25	2.7	–	–	–	–	–	–	–	–	–
KNUX 160410L-22:T9425	⬌	1.0	■ 280	0.32	2.7	◪ 165	0.32	2.7	◪ 265	0.32	2.7	–	–	–	–	–	–	–	–	–
																				
R-22 geometry with right-handed design for finish to semi-rough machining, and continuous cuts.																				
KNUX 160405R-22:T9425	●	0.5	■ 245	0.25	2.7	◪ 145	0.25	2.7	◪ 230	0.25	2.7	–	–	–	–	–	–	–	–	–
KNUX 160410R-22:T9425	⬌	1.0	■ 280	0.32	2.7	◪ 165	0.32	2.7	◪ 265	0.32	2.7	–	–	–	–	–	–	–	–	–
																				
L-32 geometry with left-handed design for finish to semi-rough machining, and continuous cuts.																				
KNUX 160405L-32:T9425	●	0.5	■ 245	0.25	2.7	◪ 145	0.25	2.7	◪ 230	0.25	2.7	–	–	–	–	–	–	–	–	–

● Stable working conditions ⬌ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

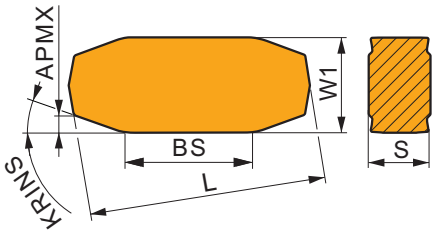
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

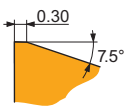
Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
																				
L-32 geometry with left-handed design for finish to semi-rough machining, and continuous cuts.																				
KNUX 160410L-32:T9425	●	1.0	■ 280	0.32	2.7	◩ 165	0.32	2.7	◩ 265	0.32	2.7	–	–	–	–	–	–	–	–	–
																				
R-32 geometry with right-handed design for finish to semi-rough machining, and continuous cuts.																				
KNUX 160405R-32:T9425	●	0.5	■ 245	0.25	2.7	◩ 145	0.25	2.7	◩ 230	0.25	2.7	–	–	–	–	–	–	–	–	–
KNUX 160410R-32:T9425	●	1.0	■ 280	0.32	2.7	◩ 165	0.32	2.7	◩ 265	0.32	2.7	–	–	–	–	–	–	–	–	–
																				
ER-72 geometry with right-handed design for fine to finish machining, and continuous cuts.																				
KNUX 160405ER-72:T9425	●	0.5	■ 325	0.20	2.0	◩ 195	0.18	2.0	■ 305	0.20	2.0	–	–	–	◩ 70	0.16	1.6	–	–	–
 																				
EL-72 geometry with left-handed design for fine to finish machining, and continuous cuts.																				
KNUX 160405EL-72:T9425	●	0.5	■ 325	0.20	2.0	◩ 195	0.18	2.0	■ 305	0.20	2.0	–	–	–	◩ 70	0.16	1.6	–	–	–

LNGF 30

DORMER PRAMET

	L (mm)	S (mm)
3007	30.12	7.54

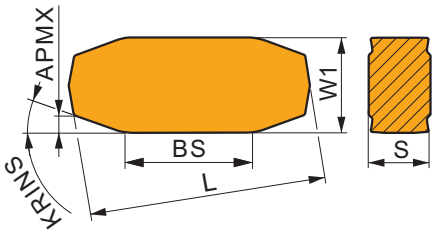


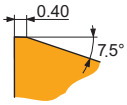
Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
																				
Peeling geometry PM with wiper secondary cutting edge for medium depth of cut, high linear speed for stable to unstable cutting conditions.																				
LNGF 300715-PM-S01:T9425	⇕	–	■ 205	1.70	0.7	◩ 120	1.53	0.7	–	–	–	–	–	–	–	–	–	–	–	–

● Stable working conditions ⇕ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◩ Possible use

LNGF 36

	L (mm)	S (mm)	APMX (mm)
3612	36.50	12.00	2.00

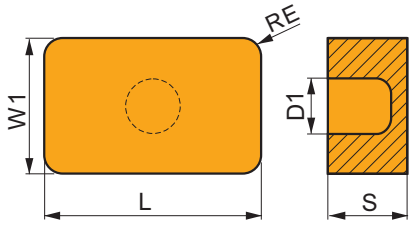


Product		RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
																				
LNGF 361220-PM-S01:T9425		–	180	2.50	0.8	105	2.25	0.8	–	–	–	–	–	–	–	–	–	–	–	–

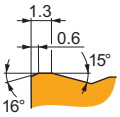
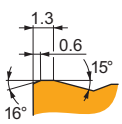
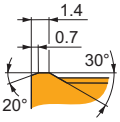
Peeling geometry **PM** with wiper secondary cutting edge for medium depth of cut, high linear speed for stable to unstable cutting conditions.

LNUX 40, LN.X 50

	D1 (mm)	L (mm)	S (mm)
40-1	9.30	40.00	14.00
50-1	9.30	50.80	14.00
5014	6.35	50.80	14.00



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product		RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
																				
LNUX 40-1129003:T9425		3.2	80	1.35	25.0	–	–	–	75	1.35	25.0	–	–	–	–	–	–	–	–	–
																				
LNUX 50-1275000:T9425		3.2	80	1.35	25.0	–	–	–	75	1.35	25.0	–	–	–	–	–	–	–	–	–
																				
LNMX 501432E:T9425		3.2	85	1.50	25.0	–	–	–	80	1.50	25.0	–	–	–	–	–	–	–	–	–

LN.X for heavy rough machining and continuous to interrupted cuts.

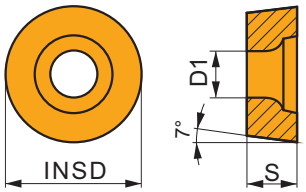
LN.X for heavy rough machining and continuous to interrupted cuts.

LN.X design for heavy rough machining and continuous to heavy interrupted cuts.

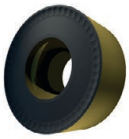
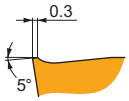
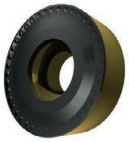
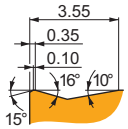
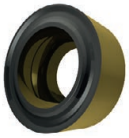
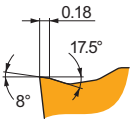
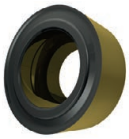
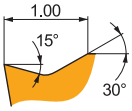
● Stable working conditions ⬍ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

RCMT

	D1 (mm)	S (mm)
0602	2.80	2.38
0803	3.40	3.18
10T3	4.40	3.97
1204	4.40	4.76
1606	5.50	6.35
2006	6.50	6.35



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
RCMT 1606MOS-37:T9425	✱	–	■ 245	0.60	3.0	–	–	–	■ 230	0.60	3.0	–	–	–	–	–	–	–	–	–
 																				
RCMT 2006MOS-371:T9425	✱	–	■ 225	0.80	3.0	–	–	–	■ 210	0.80	3.0	–	–	–	–	–	–	–	–	–
 																				
RCMT 0602MOE-FM:T9425	⬌	–	■ 385	0.45	1.2	■ 230	0.41	1.2	◪ 365	0.45	1.2	–	–	–	–	–	–	–	–	–
RCMT 0803MOE-FM:T9425	⬌	–	■ 345	0.60	1.6	■ 205	0.54	1.6	◪ 325	0.60	1.6	–	–	–	–	–	–	–	–	–
RCMT 10T3MOE-FM:T9425	⬌	–	■ 335	0.65	1.7	■ 200	0.59	1.7	◪ 315	0.65	1.7	–	–	–	–	–	–	–	–	–
RCMT 1204MOE-FM:T9425	⬌	–	■ 320	0.70	1.8	■ 190	0.63	1.8	◪ 300	0.70	1.8	–	–	–	–	–	–	–	–	–
 																				
RCMT 0602MOE-UR:T9425	⬌	–	■ 350	0.40	1.2	◪ 210	0.36	1.2	■ 330	0.40	1.2	–	–	–	–	–	–	–	–	–
RCMT 0803MOE-UR:T9425	⬌	–	■ 325	0.45	1.6	◪ 195	0.41	1.6	■ 305	0.45	1.6	–	–	–	–	–	–	–	–	–
RCMT 10T3MOE-UR:T9425	⬌	–	■ 320	0.50	1.4	◪ 190	0.45	1.4	■ 300	0.50	1.4	–	–	–	–	–	–	–	–	–
RCMT 1204MOE-UR:T9425	⬌	–	■ 305	0.55	1.8	◪ 180	0.50	1.8	■ 285	0.55	1.8	–	–	–	–	–	–	–	–	–

37 geometry for semi-rough to heavy-rough machining, and continuous to interrupted cuts.

371 geometry for semi-rough to heavy-rough machining, and continuous to interrupted cuts.

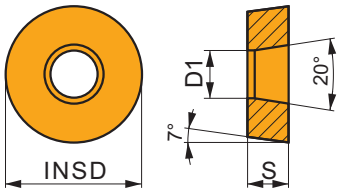
FM chip breaker is versatile and the first choice for finishing of Steels. It features positive rake angle and positive, narrow T-land. It's also suitable for Stainless steels, and conditionally for Cast irons and Non-ferrous alloys.

UR chip breaker is versatile and the first choice for finishing of Cast irons. It features positive rake angle without T-land. It's also suitable for Steels, and conditionally for Stainless steels.

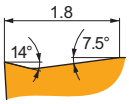
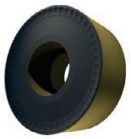
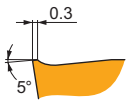
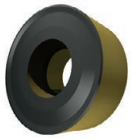
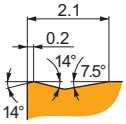
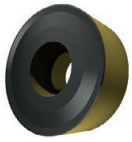
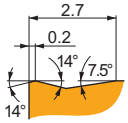
● Stable working conditions ⬌ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

RCMX

	D1 (mm)	S (mm)
1003	3.60	3.18
1204	4.20	4.76
1606	5.20	6.35



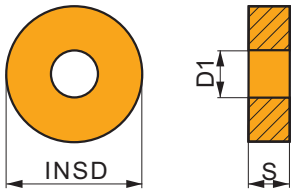
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
																				
RCMX 1003MOS-31:T9425	⬌	–	■ 275	0.50	2.0	◪ 165	0.45	2.0	■ 260	0.50	2.0	–	–	–	–	–	–	–	–	–
31 geometry for finish to semi-rough machining, and continuous to interrupted cuts.																				
 																				
RCMX 1606MOS-37:T9425	✱	–	■ 245	0.60	3.0	–	–	–	■ 230	0.60	3.0	–	–	–	–	–	–	–	–	–
37 geometry for semi-rough to heavy-rough machining, and continuous to interrupted cuts.																				
 																				
RCMX 1204MOS-321:T9425	✱	–	■ 210	1.00	3.0	–	–	–	■ 195	1.00	3.0	–	–	–	–	–	–	–	–	–
321 geometry for semi-rough to heavy-rough machining, and continuous to interrupted cuts.																				
 																				
RCMX 1606MOS-331:T9425	✱	–	■ 195	1.20	3.5	–	–	–	■ 185	1.20	3.5	–	–	–	–	–	–	–	–	–
331 geometry for semi-rough to heavy-rough machining, and continuous to interrupted cuts.																				

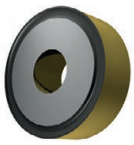
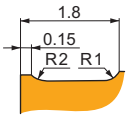
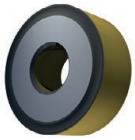
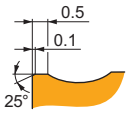
● Stable working conditions ⬌ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

RNMG

	D1 (mm)	S (mm)
1204	5.16	4.76
1506	6.35	6.35
1906	7.94	6.35
2509	9.12	9.53

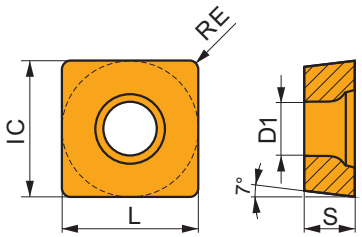


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

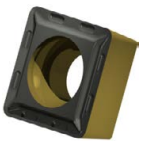
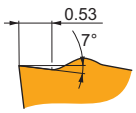
Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
08 geometry for semi-rough to heavy-rough machining, and continuous to interrupted cuts.																				
RNMG 120400E-08:T9425	●	–	◪	240	0.70	3.0	–	–	–	◪	225	0.70	3.0	–	–	–	–	–	–	–	–	–	–
RNMG 150600E-08:T9425	✱	–	◪	360	0.70	3.0	–	–	–	◪	340	0.70	3.0	–	–	–	–	–	–	–	–	–	–
RNMG 190600E-08:T9425	●	–	◪	240	0.70	3.0	–	–	–	◪	225	0.70	3.0	–	–	–	–	–	–	–	–	–	–
 																				
081 geometry for rough to heavy-rough machining, and continuous to interrupted cuts.																				
RNMG 250900E-081:T9425	✱	–	◪	180	0.90	5.0	–	–	–	◪	170	0.90	5.0	–	–	–	–	–	–	–	–	–	–

SCMT

	IC (mm)	D1 (mm)	L (mm)	S (mm)
09T3	9.525	4.40	9.53	3.97
1204	12.700	5.50	12.70	4.76
2509	25.400	8.70	25.40	9.53
3809	38.100	8.70	38.10	9.53

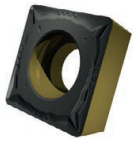
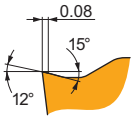
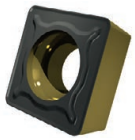
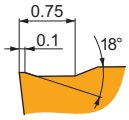
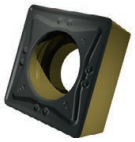
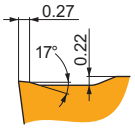
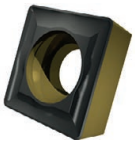
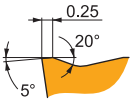
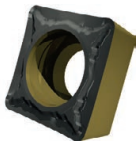
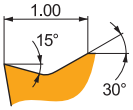
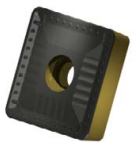
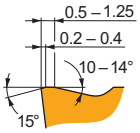
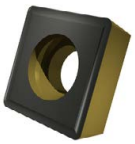
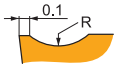
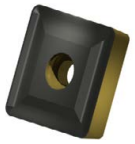
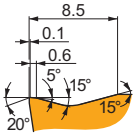


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
FF2 chip breaker is sharp and the first choice for fine-finishing of Steels. It features slightly positive rake angle without T-land. It's also suitable for Cast irons.																				
SCMT 09T304E-FF2:T9425	●	0.4	■	375	0.12	1.2	–	–	–	■	355	0.12	1.2	–	–	–	–	–	–	–	–	–	–
SCMT 09T308E-FF2:T9425	●	0.8	■	395	0.17	1.2	–	–	–	■	375	0.17	1.2	–	–	–	–	–	–	–	–	–	–

● Stable working conditions ⇕ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

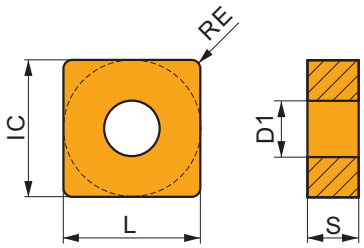
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇔ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
FM chip breaker is versatile and the first choice for finishing of Steels. It features positive rake angle and positive, narrow T-land. It's also suitable for Stainless steels, and conditionally for Cast irons and Non-ferrous alloys.																				
SCMT 09T304E-FM:T9425	●	0.4	■ 385	0.15	1.2	■ 230	0.15	1.2	◪ 365	0.15	1.2	–	–	–	–	–	–	–	–	–
SCMT 09T308E-FM:T9425	●	0.8	■ 415	0.20	1.2	■ 245	0.18	1.2	◪ 390	0.20	1.2	–	–	–	–	–	–	–	–	–
SCMT 120404E-FM:T9425	●	0.4	■ 370	0.15	1.6	■ 220	0.15	1.6	◪ 350	0.15	1.6	–	–	–	–	–	–	–	–	–
SCMT 120408E-FM:T9425	●	0.8	■ 400	0.20	1.6	■ 240	0.18	1.6	◪ 380	0.20	1.6	–	–	–	–	–	–	–	–	–
SCMT 120412E-FM:T9425	⇔	1.2	■ 385	0.27	1.6	■ 230	0.24	1.6	◪ 365	0.27	1.6	–	–	–	–	–	–	–	–	–
 																				
FM2 chip breaker is robust and the first choice for medium machining of Steels. It features positive rake angle and stable, moderate T-land. It's also suitable for Cast irons, and conditionally for Stainless steels.																				
SCMT 09T304E-FM2:T9425	●	0.4	■ 385	0.12	1.0	◪ 230	0.11	1.0	■ 365	0.12	1.0	–	–	–	–	–	–	–	–	–
SCMT 09T308E-FM2:T9425	⇔	0.8	■ 405	0.17	1.0	◪ 240	0.15	1.0	■ 380	0.17	1.0	–	–	–	–	–	–	–	–	–
 																				
RM chip breaker is robust and the first choice for roughing of Steels and Cast irons. It features positive rake angle and stable, wide T-land. It's also suitable for Stainless steels, and conditionally for Super-alloys and Hard materials.																				
SCMT 09T308E-RM:T9425	⇔	0.8	■ 365	0.30	2.0	■ 215	0.27	2.0	■ 345	0.30	2.0	–	–	–	◪ 80	0.24	1.6	–	–	–
SCMT 120408E-RM:T9425	⇔	0.8	■ 360	0.30	2.3	■ 215	0.27	2.3	■ 340	0.30	2.3	–	–	–	◪ 80	0.24	1.8	–	–	–
 																				
RM3 chip breaker is robust and designed for roughing of Steels and Cast irons. It features positive rake angle and negative, wide T-land. It's also conditionally suitable for Stainless steels and Hard materials.																				
SCMT 120408E-RM3:T9425	⇔	0.8	■ 320	0.27	2.3	◪ 190	0.27	2.3	■ 300	0.27	2.3	–	–	–	–	–	–	–	–	–
SCMT 120412E-RM3:T9425	⇔	1.2	■ 330	0.30	2.3	◪ 195	0.27	2.3	■ 310	0.30	2.3	–	–	–	–	–	–	–	–	–
 																				
UR chip breaker is versatile and the first choice for finishing of Cast irons. It features positive rake angle without T-land. It's also suitable for Steels, and conditionally for Stainless steels.																				
SCMT 09T304E-UR:T9425	●	0.4	■ 330	0.15	1.2	◪ 195	0.15	1.2	■ 310	0.15	1.2	–	–	–	–	–	–	–	–	–
SCMT 09T308E-UR:T9425	●	0.8	■ 360	0.20	1.2	◪ 215	0.18	1.2	■ 340	0.20	1.2	–	–	–	–	–	–	–	–	–
SCMT 120408E-UR:T9425	●	0.8	■ 345	0.20	1.6	◪ 205	0.18	1.6	■ 325	0.20	1.6	–	–	–	–	–	–	–	–	–
 																				
OR chip breaker is robust and the first choice for heavy roughing of Stainless steels. It features positive rake angle and negative/stable, extra-wide double T-land. It's also suitable for Steels, Cast irons, and conditionally for Super-alloys.																				
SCMT 250924E-OR:T9425	✱	2.4	■ 125	1.00	10.0	■ 75	0.90	10.0	■ 115	1.00	10.0	–	–	–	◪ 25	0.70	8.0	–	–	–
SCMT 380932E-OR:T9425	✱	3.2	■ 110	1.20	18.0	■ 65	1.08	18.0	■ 100	1.20	18.0	–	–	–	◪ 20	1.08	9.9	–	–	–
 																				
RF chip breaker is robust and the first choice for medium machining of Cast irons. It features slightly positive rake angle and stable, moderate T-land. It's also suitable for Steels, and conditionally for Stainless steels and Hard materials.																				
SCMT 09T308E-RF:T9425	●	0.8	■ 335	0.20	1.5	◪ 200	0.18	1.5	■ 315	0.20	1.5	–	–	–	–	–	–	–	–	–
SCMT 120408E-RF:T9425	●	0.8	■ 310	0.22	2.2	◪ 185	0.22	2.2	■ 290	0.22	2.2	–	–	–	–	–	–	–	–	–
 																				
DR4 chip breaker is robust and the first choice for heavy roughing of Steels. It features positive rake angle and negative/stable, extra-wide double T-land. It's also suitable for Cast irons, and conditionally for Stainless steels.																				
SCMT 380932E-DR4:T9425	⇔	3.2	■ 85	1.33	16.0	◪ 50	1.20	16.0	■ 80	1.33	16.0	–	–	–	–	–	–	–	–	–

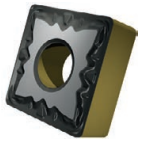
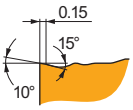
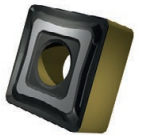
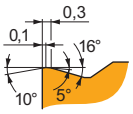
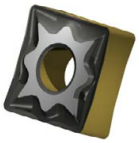
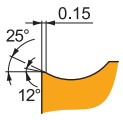
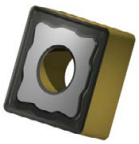
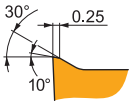
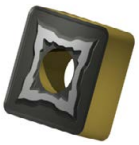
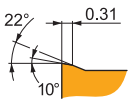
● Stable working conditions ⇔ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

SNMG

	IC (mm)	D1 (mm)	L (mm)	S (mm)
0903	–	–	–	–
1204	12.700	5.16	12.70	4.76
1506	15.875	6.35	15.88	6.35
1906	19.050	7.94	19.05	6.35
2509	25.400	9.12	25.40	9.53

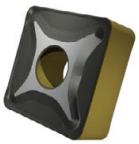
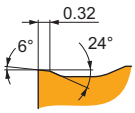
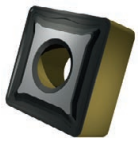
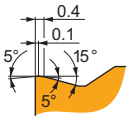
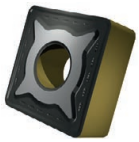
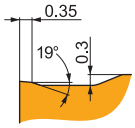
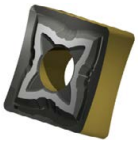
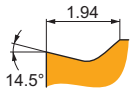
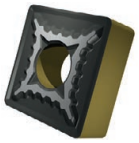
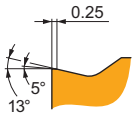


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
FM chip breaker is versatile and the first choice for finishing of Steels and Cast irons. It features slightly positive rake angle and positive, narrow T-land. It's also conditionally suitable for Stainless steels and Super-alloys.																				
SNMG 120404E-FM:T9425	●	0.4	■ 365	0.20	2.1	◪ 215	0.18	2.1	■ 345	0.20	2.1	–	–	–	◪ 80	0.16	1.7	–	–	–
SNMG 120408E-FM:T9425	⬌	0.8	■ 435	0.20	2.1	◪ 260	0.18	2.1	■ 410	0.20	2.1	–	–	–	◪ 95	0.16	1.7	–	–	–
SNMG 120412E-FM:T9425	⬌	1.2	■ 420	0.27	2.1	◪ 250	0.24	2.1	■ 395	0.27	2.1	–	–	–	◪ 90	0.19	1.7	–	–	–
 																				
M chip breaker is versatile and the first choice for medium machining of Cast irons. It features positive rake angle and negative/stable, moderate T-land. It's also suitable for Steels, and conditionally for Hard materials.																				
SNMG 090308E-M:T9425	⬌	–	■ 340	0.32	2.1	–	–	–	■ 320	0.32	2.1	–	–	–	–	–	–	–	–	–
SNMG 120408E-M:T9425	⬌	0.8	■ 340	0.32	2.1	–	–	–	■ 320	0.32	2.1	–	–	–	–	–	–	–	–	–
SNMG 120412E-M:T9425	⬌	1.2	■ 335	0.40	2.1	–	–	–	■ 315	0.40	2.1	–	–	–	–	–	–	–	–	–
SNMG 120416E-M:T9425	⬌	1.6	■ 350	0.40	2.1	–	–	–	■ 330	0.40	2.1	–	–	–	–	–	–	–	–	–
SNMG 150612E-M:T9425	⬌	1.2	■ 320	0.40	3.4	–	–	–	■ 300	0.40	3.4	–	–	–	–	–	–	–	–	–
SNMG 190612E-M:T9425	⬌	1.2	■ 315	0.40	4.0	–	–	–	■ 295	0.40	4.0	–	–	–	–	–	–	–	–	–
SNMG 190616E-M:T9425	⬌	1.6	■ 330	0.40	4.0	–	–	–	■ 310	0.40	4.0	–	–	–	–	–	–	–	–	–
 																				
NF chip breaker is sharp and the first choice for fine-finishing of Steels, Stainless steels. It features highly positive rake angle and highly positive, narrow T-land. It's also conditionally suitable for Cast irons and Non-ferrous alloys and Super-alloys.																				
SNMG 120404E-NF:T9425	●	0.4	■ 390	0.18	1.7	■ 230	0.16	1.7	◪ 370	0.18	1.7	–	–	–	◪ 85	0.16	1.4	–	–	–
SNMG 120408E-NF:T9425	⬌	0.8	■ 455	0.19	1.7	■ 270	0.17	1.7	◪ 430	0.19	1.7	–	–	–	◪ 100	0.15	1.4	–	–	–
 																				
NM chip breaker is sharp and designed for medium machining of Steels, Stainless steels and Super-alloys. It features highly positive rake angle and positive, moderate T-land. It's also conditionally suitable for Non-ferrous alloys.																				
SNMG 120408E-NM:T9425	⬌	0.8	■ 420	0.25	2.1	■ 250	0.23	2.1	–	–	–	–	–	–	◪ 90	0.20	1.7	–	–	–
 																				
NMR chip breaker is versatile and the first choice for medium machining of Stainless steels. It features positive rake angle and positive, wide T-land. It's also suitable for Steels and Super-alloys.																				
SNMG 120408E-NMR:T9425	⬌	0.8	■ 320	0.35	2.6	■ 190	0.32	2.6	–	–	–	–	–	–	◪ 70	0.25	2.1	–	–	–
SNMG 120412E-NMR:T9425	⬌	1.2	■ 330	0.40	2.6	■ 195	0.36	2.6	–	–	–	–	–	–	◪ 70	0.28	2.1	–	–	–
SNMG 150612E-NMR:T9425	⬌	1.2	■ 315	0.40	3.8	■ 185	0.36	3.8	–	–	–	–	–	–	◪ 70	0.28	3.0	–	–	–

● Stable working conditions ⬌ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

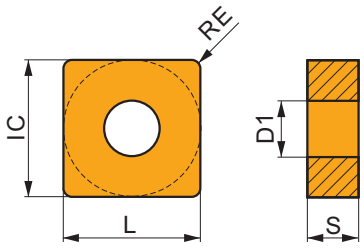
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 	**NRM** chip breaker is versatile and the first choice for roughing of Stainless steels. It features positive rake angle and stable, wide T-land. It's also suitable for Steels and Super-alloys.																			
SNMG 250924-NRM:T9425	⇕	2.4	■ 150	0.65	9.0	■ 90	0.59	9.0	■ 140	0.65	9.0	–	–	–	◪ 30	0.46	7.2	–	–	–
 	**R** chip breaker is robust and designed for roughing of Steels and Cast irons. It features slightly positive rake angle and negative/stable, extra-wide double T-land. It's also conditionally suitable for Hard materials.																			
SNMG 120408E-R:T9425	⇕	0.8	■ 295	0.40	3.8	–	–	–	■ 280	0.40	3.8	–	–	–	–	–	–	–	–	–
SNMG 120412E-R:T9425	⇕	1.2	■ 300	0.45	3.8	–	–	–	■ 285	0.45	3.8	–	–	–	–	–	–	–	–	–
SNMG 120416E-R:T9425	✱	1.6	■ 305	0.50	3.8	–	–	–	■ 285	0.50	3.8	–	–	–	–	–	–	–	–	–
SNMG 150612E-R:T9425	✱	1.2	■ 295	0.45	4.5	–	–	–	■ 280	0.45	4.5	–	–	–	–	–	–	–	–	–
SNMG 150616E-R:T9425	✱	1.6	■ 300	0.50	4.5	–	–	–	■ 285	0.50	4.5	–	–	–	–	–	–	–	–	–
SNMG 190612E-R:T9425	✱	1.2	■ 285	0.45	6.0	–	–	–	■ 270	0.45	6.0	–	–	–	–	–	–	–	–	–
SNMG 190616E-R:T9425	✱	1.6	■ 295	0.50	6.0	–	–	–	■ 280	0.50	6.0	–	–	–	–	–	–	–	–	–
 	**RM** chip breaker is robust and the first choice for roughing of Steels. It features positive rake angle and stable, wide T-land. It's also suitable for Stainless steels, Cast irons, and conditionally for Super-alloys.																			
SNMG 120408E-RM:T9425	⇕	0.8	■ 340	0.40	4.0	■ 200	0.36	4.0	■ 320	0.40	4.0	–	–	–	◪ 75	0.28	3.2	–	–	–
SNMG 120412E-RM:T9425	⇕	1.2	■ 350	0.45	4.0	■ 210	0.41	4.0	■ 330	0.45	4.0	–	–	–	◪ 75	0.32	3.2	–	–	–
SNMG 120416E-RM:T9425	⇕	1.6	■ 355	0.50	4.0	■ 210	0.45	4.0	■ 335	0.50	4.0	–	–	–	◪ 75	0.35	3.2	–	–	–
SNMG 150612E-RM:T9425	⇕	1.2	■ 335	0.45	5.0	■ 200	0.41	5.0	■ 315	0.45	5.0	–	–	–	◪ 75	0.32	4.0	–	–	–
SNMG 150616E-RM:T9425	⇕	1.6	■ 345	0.50	5.0	■ 205	0.45	5.0	■ 325	0.50	5.0	–	–	–	◪ 75	0.35	4.0	–	–	–
SNMG 190612E-RM:T9425	⇕	1.2	■ 330	0.45	7.0	■ 195	0.41	7.0	■ 310	0.45	7.0	–	–	–	◪ 70	0.32	5.6	–	–	–
SNMG 190616E-RM:T9425	⇕	1.6	■ 335	0.50	7.0	■ 200	0.45	7.0	■ 315	0.50	7.0	–	–	–	◪ 75	0.35	5.6	–	–	–
SNMG 250924E-RM:T9425	⇕	2.4	■ 155	0.80	12.0	■ 90	0.72	12.0	■ 145	0.80	12.0	–	–	–	◪ 30	0.56	9.6	–	–	–
 	**SF** chip breaker is sharp and the first choice for finishing of Stainless steels and Super-alloys. It features slightly positive rake angle without T-land. It's also suitable for Steels, Cast irons and Hard materials, and conditionally for Non-ferrous alloys.																			
SNMG 120408E-SF:T9425	⇕	0.8	■ 450	0.20	1.0	■ 270	0.18	1.0	■ 425	0.20	1.0	–	–	–	◪ 100	0.16	0.8	–	–	–
 	**SM** chip breaker is versatile and the first choice for medium machining of Steels and Super-alloys. It features slightly positive rake angle and stable, moderate T-land. It's also suitable for Stainless steels, Cast irons, and conditionally for Non-ferrous alloys and Hard materials.																			
SNMG 120408E-SM:T9425	⇕	0.8	■ 395	0.25	1.8	■ 235	0.23	1.8	■ 375	0.25	1.8	–	–	–	◪ 85	0.20	1.4	–	–	–
SNMG 190612E-SM:T9425	⇕	1.2	■ 360	0.30	4.0	■ 215	0.27	4.0	■ 340	0.30	4.0	–	–	–	◪ 80	0.27	3.2	–	–	–
SNMG 190616E-SM:T9425	⇕	1.6	■ 345	0.40	4.0	■ 205	0.36	4.0	■ 325	0.40	4.0	–	–	–	◪ 75	0.32	3.2	–	–	–

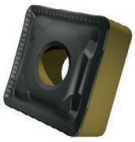
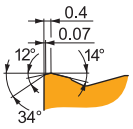
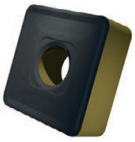
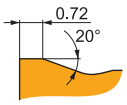
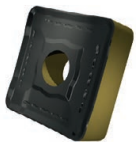
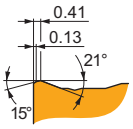
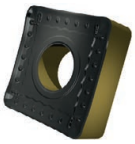
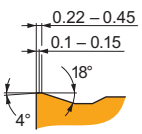
● Stable working conditions ⇕ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

SNMM

	IC (mm)	D1 (mm)	L (mm)	S (mm)
1204	12.700	5.16	12.70	4.76
1506	15.875	6.35	15.88	6.35
1906	19.050	7.94	19.05	6.35
2507	25.400	9.12	25.40	7.94
2509	25.400	9.12	25.40	9.53

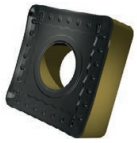
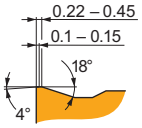
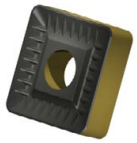
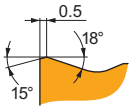
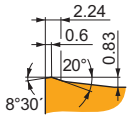


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
HR chip breaker is robust and designed for heavy roughing of Steels and Cast irons. It features slightly positive rake angle and negative/negative, extra-wide double T-land. It's also conditionally suitable for Stainless steels.																				
SNMM 190616E-HR:T9425	⇕	1.6	■ 145	0.60	9.0	◪ 85	0.54	9.0	■ 135	0.60	9.0	–	–	–	–	–	–	–	–	–
SNMM 190624E-HR:T9425	✱	2.4	■ 150	0.65	9.0	◪ 90	0.59	9.0	■ 140	0.65	9.0	–	–	–	–	–	–	–	–	–
SNMM 250716E-HR:T9425	✱	1.6	■ 140	0.60	13.0	◪ 80	0.54	13.0	■ 130	0.60	13.0	–	–	–	–	–	–	–	–	–
SNMM 250724E-HR:T9425	✱	2.4	■ 140	0.65	13.0	◪ 80	0.59	13.0	■ 130	0.65	13.0	–	–	–	–	–	–	–	–	–
SNMM 250732E-HR:T9425	✱	3.2	■ 130	0.80	13.0	◪ 75	0.72	13.0	■ 120	0.80	13.0	–	–	–	–	–	–	–	–	–
SNMM 250924E-HR:T9425	✱	2.4	■ 140	0.65	13.0	◪ 80	0.59	13.0	■ 130	0.65	13.0	–	–	–	–	–	–	–	–	–
SNMM 250932E-HR:T9425	✱	3.2	■ 130	0.80	13.0	◪ 75	0.72	13.0	■ 120	0.80	13.0	–	–	–	–	–	–	–	–	–
 																				
HR2 chip breaker is robust and designed for heavy roughing of Steels and Cast irons. It features positive rake angle and stable, extra-wide double T-land. It's also conditionally suitable for Stainless steels.																				
SNMM 190616-HR2:T9425	⇕	1.6	■ 140	0.65	8.9	◪ 80	0.59	8.9	■ 130	0.65	8.9	–	–	–	–	–	–	–	–	–
SNMM 190624-HR2:T9425	✱	2.4	■ 135	0.85	8.9	◪ 80	0.77	8.9	■ 125	0.85	8.9	–	–	–	–	–	–	–	–	–
SNMM 250724-HR2:T9425	✱	2.4	■ 130	0.85	11.0	◪ 75	0.77	11.0	■ 120	0.85	11.0	–	–	–	–	–	–	–	–	–
SNMM 250924-HR2:T9425	✱	2.4	■ 130	0.85	11.0	◪ 75	0.77	11.0	■ 120	0.85	11.0	–	–	–	–	–	–	–	–	–
SNMM 250932-HR2:T9425	✱	3.2	■ 125	1.00	11.0	◪ 75	0.90	11.0	■ 115	1.00	11.0	–	–	–	–	–	–	–	–	–
 																				
NR2 chip breaker is robust and the first choice for heavy roughing of Stainless steels. It features positive rake angle and negative/negative, extra-wide double T-land. It's also suitable for Steels, and conditionally for Cast irons and Super-alloys.																				
SNMM 120408E-NR2:T9425	⇕	0.8	■ 320	0.40	4.7	■ 190	0.36	4.7	◪ 300	0.40	4.7	–	–	–	◪ 70	0.32	3.8	–	–	–
SNMM 150612E-NR2:T9425	⇕	1.2	■ 315	0.45	6.0	■ 185	0.41	6.0	◪ 295	0.45	6.0	–	–	–	◪ 70	0.36	4.8	–	–	–
SNMM 150616E-NR2:T9425	✱	1.6	■ 325	0.50	6.0	■ 195	0.45	6.0	◪ 305	0.50	6.0	–	–	–	◪ 70	0.40	4.8	–	–	–
SNMM 190612E-NR2:T9425	✱	1.2	■ 310	0.45	8.0	■ 185	0.41	8.0	◪ 290	0.45	8.0	–	–	–	◪ 65	0.36	6.4	–	–	–
SNMM 190616E-NR2:T9425	✱	1.6	■ 315	0.50	8.0	■ 185	0.45	8.0	◪ 295	0.50	8.0	–	–	–	◪ 70	0.40	6.4	–	–	–
SNMM 190624E-NR2:T9425	✱	2.4	■ 285	0.80	8.0	■ 170	0.72	8.0	◪ 270	0.80	8.0	–	–	–	◪ 60	0.56	6.4	–	–	–
SNMM 250724E-NR2:T9425	✱	2.4	■ 150	0.80	12.0	■ 90	0.72	12.0	◪ 140	0.80	12.0	–	–	–	◪ 30	0.56	9.6	–	–	–
SNMM 250924E-NR2:T9425	✱	2.4	■ 150	0.80	12.0	■ 90	0.72	12.0	◪ 140	0.80	12.0	–	–	–	◪ 30	0.56	9.6	–	–	–
 																				
OR chip breaker is robust and the first choice for heavy roughing of Steels. It features positive rake angle and negative/stable, extra-wide double T-land. It's also suitable for Cast irons, and conditionally for Stainless steels and Super-alloys.																				
SNMM 120408E-OR:T9425	⇕	0.8	■ 320	0.40	4.7	◪ 190	0.36	4.7	■ 300	0.40	4.7	–	–	–	◪ 70	0.32	3.8	–	–	–
SNMM 120412E-OR:T9425	✱	1.2	■ 325	0.45	4.7	◪ 195	0.41	4.7	■ 305	0.45	4.7	–	–	–	◪ 70	0.36	3.8	–	–	–
SNMM 120416E-OR:T9425	✱	1.6	■ 330	0.50	4.7	◪ 195	0.45	4.7	■ 310	0.50	4.7	–	–	–	◪ 70	0.40	3.8	–	–	–
SNMM 150608E-OR:T9425	⇕	0.8	■ 315	0.40	6.0	◪ 185	0.36	6.0	■ 295	0.40	6.0	–	–	–	◪ 70	0.36	4.8	–	–	–
SNMM 150612E-OR:T9425	✱	1.2	■ 315	0.45	6.0	◪ 185	0.41	6.0	■ 295	0.45	6.0	–	–	–	◪ 70	0.36	4.8	–	–	–
SNMM 150616E-OR:T9425	✱	1.6	■ 325	0.50	6.0	◪ 195	0.45	6.0	■ 305	0.50	6.0	–	–	–	◪ 70	0.40	4.8	–	–	–
SNMM 190612E-OR:T9425	✱	1.2	■ 310	0.45	8.0	◪ 185	0.41	8.0	■ 290	0.45	8.0	–	–	–	◪ 65	0.36	6.4	–	–	–

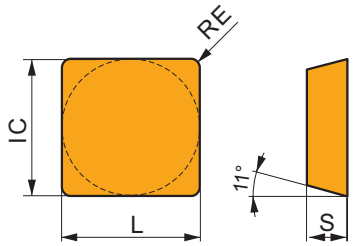
● Stable working conditions ⇕ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

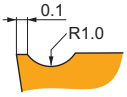
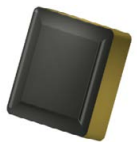
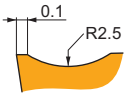
Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
OR chip breaker is robust and the first choice for heavy roughing of Steels. It features positive rake angle and negative/stable, extra-wide double T-land. It's also suitable for Cast irons, and conditionally for Stainless steels and Super-alloys.																				
SNMM 190616E-OR:T9425	✱	1.6	■ 315	0.50	8.0	◪ 185	0.45	8.0	■ 295	0.50	8.0	–	–	–	◪ 70	0.40	6.4	–	–	–
SNMM 190624E-OR:T9425	✱	2.4	■ 285	0.80	8.0	◪ 170	0.72	8.0	■ 270	0.80	8.0	–	–	–	◪ 60	0.56	6.4	–	–	–
SNMM 250716E-OR:T9425	✱	1.6	■ 160	0.55	12.0	◪ 95	0.50	12.0	■ 150	0.55	12.0	–	–	–	◪ 35	0.50	9.6	–	–	–
SNMM 250724E-OR:T9425	✱	2.4	■ 135	1.00	12.0	◪ 80	0.90	12.0	■ 125	1.00	12.0	–	–	–	◪ 30	0.70	9.6	–	–	–
SNMM 250924E-OR:T9425	✱	2.4	■ 135	1.00	12.0	◪ 80	0.90	12.0	■ 125	1.00	12.0	–	–	–	◪ 30	0.70	9.6	–	–	–
 																				
SR geometry for rough to heavy-rough machining, and continuous to interrupted cuts.																				
SNMM 250724S-SR:T9425	✱	2.4	■ 110	1.00	12.0	◪ 65	0.90	12.0	■ 100	1.00	12.0	–	–	–	–	–	–	–	–	–
SNMM 250924S-SR:T9425	✱	2.4	■ 110	1.00	14.0	◪ 65	0.90	14.0	■ 100	1.00	14.0	–	–	–	–	–	–	–	–	–
																				
923 chip breaker is robust and designed for heavy roughing of Stainless steels. It features positive rake angle and negative/stable, extra-wide double T-land. It's also conditionally suitable for Steels and Cast irons.																				
SNMM 190616S-923:T9425	✱	1.6	■ 255	0.65	8.9	■ 150	0.59	8.9	◪ 240	0.65	8.9	–	–	–	◪ 55	0.52	7.1	–	–	–
SNMM 250724S-923:T9425	✱	2.4	■ 130	0.85	11.0	■ 75	0.77	11.0	◪ 120	0.85	11.0	–	–	–	◪ 25	0.60	8.8	–	–	–
SNMM 250924S-923:T9425	✱	2.4	■ 130	0.85	11.0	■ 75	0.77	11.0	◪ 120	0.85	11.0	–	–	–	◪ 25	0.60	8.8	–	–	–

SPMR

	IC (mm)	L (mm)	S (mm)
0903	9.525	9.53	3.18
1203	12.700	12.70	3.18



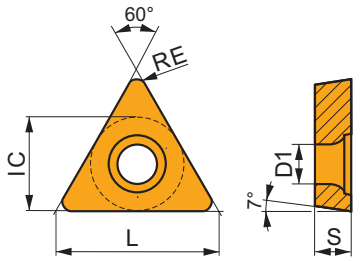
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
																				
46 geometry for fine to finish machining, and continuous to interrupted cuts.																				
SPMR 090308E-46:T9425	●	0.8	■ 380	0.15	1.0	◪ 225	0.15	1.0	■ 360	0.15	1.0	–	–	–	–	–	–	–	–	–
 																				
48 geometry for finish to semi-rough machining, and continuous to interrupted cuts.																				
SPMR 120304E-48:T9425	●	0.4	■ 260	0.22	2.2	◪ 155	0.22	2.2	■ 245	0.22	2.2	–	–	–	–	–	–	–	–	–
SPMR 120308E-48:T9425	⇕	0.8	■ 310	0.22	2.2	◪ 185	0.22	2.2	■ 290	0.22	2.2	–	–	–	–	–	–	–	–	–
SPMR 120312E-48:T9425	⇕	1.2	■ 325	0.22	2.2	◪ 195	0.22	2.2	■ 305	0.22	2.2	–	–	–	–	–	–	–	–	–

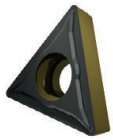
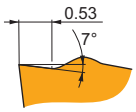
● Stable working conditions ⇕ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

TCMT

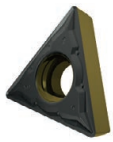
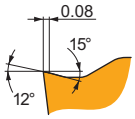
	IC (mm)	D1 (mm)	L (mm)	S (mm)
06T1	3.970	2.20	6.90	1.98
0902	5.560	2.50	9.60	2.38
1102	6.350	2.80	11.00	2.38
16T3	9.525	4.40	16.50	3.97



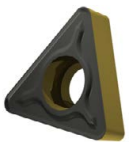
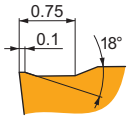
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
TCMT 06T104E-FF2:T9425	●	0.4	■ 315	0.12	0.8	–	–	–	■ 295	0.12	0.8	–	–	–	–	–	–	–	–	–
TCMT 090204E-FF2:T9425	●	0.4	■ 310	0.12	1.0	–	–	–	■ 290	0.12	1.0	–	–	–	–	–	–	–	–	–
TCMT 110204E-FF2:T9425	●	0.4	■ 315	0.12	0.8	–	–	–	■ 295	0.12	0.8	–	–	–	–	–	–	–	–	–
TCMT 110208E-FF2:T9425	●	0.8	■ 335	0.17	0.8	–	–	–	■ 315	0.17	0.8	–	–	–	–	–	–	–	–	–
TCMT 16T304E-FF2:T9425	●	0.4	■ 315	0.12	0.8	–	–	–	■ 295	0.12	0.8	–	–	–	–	–	–	–	–	–
TCMT 16T308E-FF2:T9425	●	0.8	■ 335	0.17	0.8	–	–	–	■ 315	0.17	0.8	–	–	–	–	–	–	–	–	–

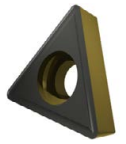
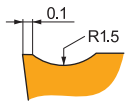
FF2 chip breaker is sharp and the first choice for fine-finishing of Steels. It features slightly positive rake angle without T-land. It's also suitable for Cast irons.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
TCMT 110202E-FM:T9425	●	0.2	■ 345	0.10	0.8	■ 205	0.09	0.8	◪ 325	0.10	0.8	–	–	–	–	–	–	–	–	–
TCMT 110204E-FM:T9425	●	0.4	■ 305	0.18	0.8	■ 180	0.16	0.8	◪ 285	0.18	0.8	–	–	–	–	–	–	–	–	–
TCMT 110208E-FM:T9425	●	0.8	■ 370	0.17	0.8	■ 220	0.15	0.8	◪ 350	0.17	0.8	–	–	–	–	–	–	–	–	–
TCMT 16T304E-FM:T9425	●	0.4	■ 285	0.18	1.7	■ 170	0.16	1.7	◪ 270	0.18	1.7	–	–	–	–	–	–	–	–	–
TCMT 16T308E-FM:T9425	●	0.8	■ 340	0.17	1.7	■ 200	0.15	1.7	◪ 320	0.17	1.7	–	–	–	–	–	–	–	–	–

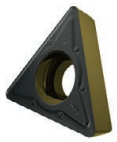
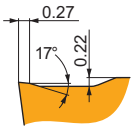
FM chip breaker is versatile and the first choice for finishing of Steels. It features positive rake angle and positive, narrow T-land. It's also suitable for Stainless steels, and conditionally for Cast irons and Non-ferrous alloys.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
TCMT 110204E-FM2:T9425	●	0.4	■ 315	0.12	0.8	◪ 185	0.11	0.8	■ 295	0.12	0.8	–	–	–	–	–	–	–	–	–
TCMT 110208E-FM2:T9425	●	0.8	■ 335	0.17	0.8	◪ 200	0.15	0.8	■ 315	0.17	0.8	–	–	–	–	–	–	–	–	–
TCMT 16T308E-FM2:T9425	●	0.8	■ 310	0.20	1.0	◪ 185	0.18	1.0	■ 290	0.20	1.0	–	–	–	–	–	–	–	–	–

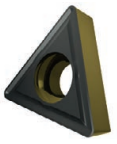
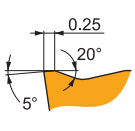
FM2 chip breaker is robust and the first choice for medium machining of Steels. It features positive rake angle and stable, moderate T-land. It's also suitable for Cast irons, and conditionally for Stainless steels.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
TCMT 16T308E-RF:T9425	●	0.8	■ 270	0.20	1.5	◪ 160	0.18	1.5	■ 255	0.20	1.5	–	–	–	–	–	–	–	–	–

RF chip breaker is robust and the first choice for medium machining of Cast irons. It features slightly positive rake angle and stable, moderate T-land. It's also suitable for Steels, and conditionally for Stainless steels and Hard materials.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
TCMT 16T308E-RM:T9425	●	0.8	■ 305	0.27	1.9	■ 180	0.24	1.9	■ 285	0.27	1.9	–	–	–	◪ 65	0.19	1.5	–	–	–
TCMT 16T312E-RM:T9425	⇕	1.2	■ 320	0.27	1.9	■ 190	0.24	1.9	■ 300	0.27	1.9	–	–	–	◪ 70	0.19	1.5	–	–	–

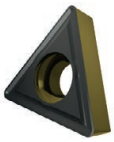
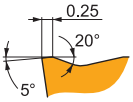
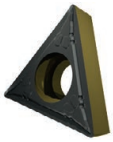
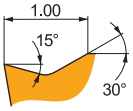
RM chip breaker is robust and the first choice for roughing of Steels and Cast irons. It features positive rake angle and stable, wide T-land. It's also suitable for Stainless steels, and conditionally for Super-alloys and Hard materials.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
TCMT 16T304E-RM3:T9425	●	0.4	■ 225	0.25	2.0	◪ 135	0.25	2.0	■ 210	0.25	2.0	–	–	–	–	–	–	–	–	–
TCMT 16T308E-RM3:T9425	●	0.8	■ 265	0.27	2.0	◪ 155	0.27	2.0	■ 250	0.27	2.0	–	–	–	–	–	–	–	–	–

RM3 chip breaker is robust and designed for roughing of Steels and Cast irons. It features positive rake angle and negative, wide T-land. It's also conditionally suitable for Stainless steels and Hard materials.

● Stable working conditions ⇕ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

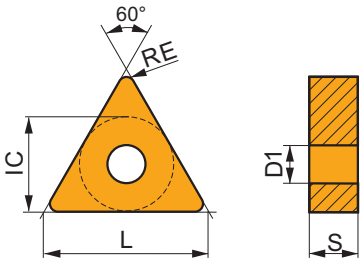
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
RM3 chip breaker is robust and designed for roughing of Steels and Cast irons. It features positive rake angle and negative, wide T-land. It's also conditionally suitable for Stainless steels and Hard materials.																				
 																				
UR chip breaker is versatile and the first choice for finishing of Cast irons. It features positive rake angle without T-land. It's also suitable for Steels, and conditionally for Stainless steels.																				
TCMT 110204E-UR:T9425	●	0.4	■ 260	0.18	0.8	◪ 155	0.16	0.8	■ 245	0.18	0.8	–	–	–	–	–	–	–	–	–
TCMT 16T304E-UR:T9425	●	0.4	■ 260	0.18	0.8	◪ 155	0.16	0.8	■ 245	0.18	0.8	–	–	–	–	–	–	–	–	–
TCMT 16T308E-UR:T9425	●	0.8	■ 320	0.17	0.8	◪ 190	0.15	0.8	■ 300	0.17	0.8	–	–	–	–	–	–	–	–	–

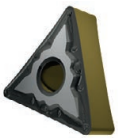
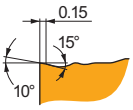
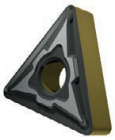
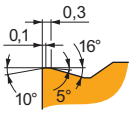
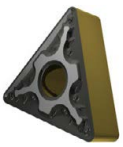
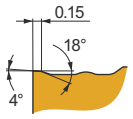
TNMG

DORMER PRAMET

	IC (mm)	D1 (mm)	L (mm)	S (mm)
1604	9.525	3.81	16.50	4.76
2204	12.700	5.16	22.00	4.76
2706	15.875	6.35	27.50	6.35
3309	19.050	7.94	33.00	9.53

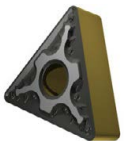
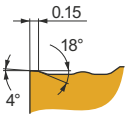
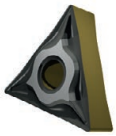
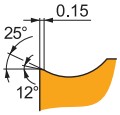
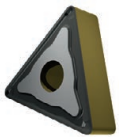
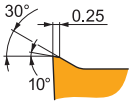
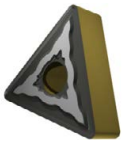
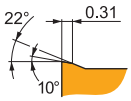
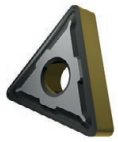
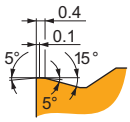
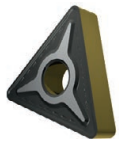
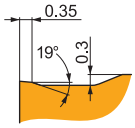


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
FM chip breaker is versatile and the first choice for finishing of Steels and Cast irons. It features slightly positive rake angle and positive, narrow T-land. It's also conditionally suitable for Stainless steels and Super-alloys.																				
TNMG 160404E-FM:T9425	●	0.4	■ 305	0.20	1.7	◪ 180	0.18	1.7	■ 285	0.20	1.7	–	–	–	◪ 65	0.20	1.4	–	–	–
TNMG 160408E-FM:T9425	●	0.8	■ 360	0.20	1.7	◪ 215	0.18	1.7	■ 340	0.20	1.7	–	–	–	◪ 80	0.16	1.4	–	–	–
TNMG 160412E-FM:T9425	●	1.2	■ 355	0.25	1.7	◪ 210	0.23	1.7	■ 335	0.25	1.7	–	–	–	◪ 75	0.18	1.4	–	–	–
TNMG 220404E-FM:T9425	●	0.4	■ 305	0.20	1.7	◪ 180	0.18	1.7	■ 285	0.20	1.7	–	–	–	◪ 65	0.18	1.4	–	–	–
TNMG 220408E-FM:T9425	●	0.8	■ 360	0.20	1.7	◪ 215	0.18	1.7	■ 340	0.20	1.7	–	–	–	◪ 80	0.16	1.4	–	–	–
 																				
M chip breaker is versatile and the first choice for medium machining of Cast irons. It features positive rake angle and negative/stable, moderate T-land. It's also suitable for Steels, and conditionally for Hard materials.																				
TNMG 160404E-M:T9425	●	0.4	■ 275	0.20	1.6	–	–	–	■ 260	0.20	1.6	–	–	–	–	–	–	–	–	–
TNMG 160408E-M:T9425	●	0.8	■ 290	0.30	1.6	–	–	–	■ 275	0.30	1.6	–	–	–	–	–	–	–	–	–
TNMG 160412E-M:T9425	⇕	1.2	■ 280	0.40	1.6	–	–	–	■ 265	0.40	1.6	–	–	–	–	–	–	–	–	–
TNMG 220408E-M:T9425	●	0.8	■ 280	0.30	2.1	–	–	–	■ 265	0.30	2.1	–	–	–	–	–	–	–	–	–
TNMG 220412E-M:T9425	⇕	1.2	■ 270	0.40	2.1	–	–	–	■ 255	0.40	2.1	–	–	–	–	–	–	–	–	–
 																				
ML chip breaker is versatile and designed for low depth of cut and medium machining of steels. It features positive rake angle and stable, narrow T-land. It's also suitable for cast irons.																				
TNMG 160404-ML:T9415	●	0.4	■ 310	0.20	1.0	–	–	–	◪ 290	0.20	1.0	–	–	–	–	–	–	–	–	–
TNMG 160404-ML:T9425	●	0.4	■ 290	0.20	1.0	–	–	–	■ 275	0.20	1.0	–	–	–	–	–	–	–	–	–
TNMG 160408-ML:T9415	●	0.8	■ 320	0.25	1.5	–	–	–	◪ 300	0.25	1.5	–	–	–	–	–	–	–	–	–

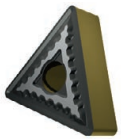
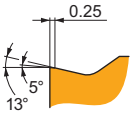
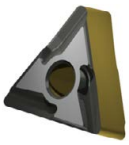
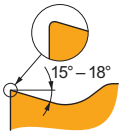
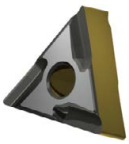
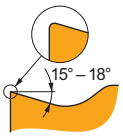
● Stable working conditions ⇕ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
ML chip breaker is versatile and designed for low depth of cut and medium machining of steels. It features positive rake angle and stable, narrow T-land. It's also suitable for cast irons.																				
TNMG 160408-ML:T9425	⇕	0.8	■ 310	0.25	1.5	–	–	–	■ 290	0.25	1.5	–	–	–	–	–	–	–	–	–
TNMG 160412-ML:T9415	⇕	1.2	■ 305	0.30	2.0	–	–	–	◪ 285	0.30	2.0	–	–	–	–	–	–	–	–	–
TNMG 160412-ML:T9425	⇕	1.2	■ 300	0.30	2.0	–	–	–	■ 285	0.30	2.0	–	–	–	–	–	–	–	–	–
 																				
NF chip breaker is sharp and the first choice for fine-finishing of Steels, Stainless steels. It features highly positive rake angle and highly positive, narrow T-land. It's also conditionally suitable for Cast irons and Non-ferrous alloys and Super-alloys.																				
TNMG 160404E-NF:T9425	●	0.4	■ 320	0.18	1.4	■ 190	0.16	1.4	◪ 300	0.18	1.4	–	–	–	◪ 70	0.16	1.1	–	–	–
TNMG 160408E-NF:T9425	●	0.8	■ 380	0.18	1.4	■ 225	0.16	1.4	◪ 360	0.18	1.4	–	–	–	◪ 85	0.16	1.1	–	–	–
 																				
NM chip breaker is sharp and designed for medium machining of Steels, Stainless steels and Super-alloys. It features highly positive rake angle and positive, moderate T-land. It's also conditionally suitable for Non-ferrous alloys.																				
TNMG 160404E-NM:T9425	●	0.4	■ 315	0.20	1.9	■ 185	0.18	1.9	–	–	–	–	–	–	◪ 70	0.20	1.5	–	–	–
TNMG 160408E-NM:T9425	●	0.8	■ 345	0.25	1.9	■ 205	0.23	1.9	–	–	–	–	–	–	◪ 75	0.20	1.5	–	–	–
TNMG 220408E-NM:T9425	●	0.8	■ 350	0.25	1.7	■ 210	0.23	1.7	–	–	–	–	–	–	◪ 75	0.20	1.4	–	–	–
TNMG 220412E-NM:T9425	⇕	1.2	■ 340	0.30	2.1	■ 200	0.27	2.1	–	–	–	–	–	–	◪ 75	0.24	1.7	–	–	–
 																				
NMR chip breaker is versatile and the first choice for medium machining of Stainless steels. It features positive rake angle and positive, wide T-land. It's also suitable for Steels and Super-alloys.																				
TNMG 160404E-NMR:T9425	●	0.4	■ 275	0.20	1.7	■ 165	0.18	1.7	–	–	–	–	–	–	◪ 60	0.18	1.4	–	–	–
TNMG 160408E-NMR:T9425	⇕	0.8	■ 290	0.30	1.7	■ 170	0.27	1.7	–	–	–	–	–	–	◪ 65	0.24	1.4	–	–	–
TNMG 220408E-NMR:T9425	⇕	0.8	■ 280	0.30	2.1	■ 165	0.27	2.1	–	–	–	–	–	–	◪ 60	0.24	1.7	–	–	–
TNMG 220412E-NMR:T9425	⇕	1.2	■ 295	0.30	2.1	■ 175	0.27	2.1	–	–	–	–	–	–	◪ 65	0.24	1.7	–	–	–
 																				
R chip breaker is robust and designed for roughing of Steels and Cast irons. It features slightly positive rake angle and negative/stable, extra-wide double T-land. It's also conditionally suitable for Hard materials.																				
TNMG 160408E-R:T9425	⇕	0.8	■ 250	0.40	3.0	–	–	–	■ 235	0.40	3.0	–	–	–	–	–	–	–	–	–
TNMG 160412E-R:T9425	⇕	1.2	■ 260	0.40	3.0	–	–	–	■ 245	0.40	3.0	–	–	–	–	–	–	–	–	–
TNMG 220408E-R:T9425	⇕	0.8	■ 240	0.40	4.0	–	–	–	■ 225	0.40	4.0	–	–	–	–	–	–	–	–	–
TNMG 220412E-R:T9425	⇕	1.2	■ 255	0.40	4.0	–	–	–	■ 240	0.40	4.0	–	–	–	–	–	–	–	–	–
TNMG 220416E-R:T9425	⇕	1.6	■ 265	0.40	4.0	–	–	–	■ 250	0.40	4.0	–	–	–	–	–	–	–	–	–
 																				
RM chip breaker is robust and the first choice for roughing of Steels. It features positive rake angle and stable, wide T-land. It's also suitable for Stainless steels, Cast irons, and conditionally for Super-alloys.																				
TNMG 160408E-RM:T9425	⇕	0.8	■ 285	0.40	3.0	■ 170	0.36	3.0	■ 270	0.40	3.0	–	–	–	◪ 60	0.30	2.4	–	–	–
TNMG 160412E-RM:T9425	⇕	1.2	■ 300	0.40	3.0	■ 180	0.36	3.0	■ 285	0.40	3.0	–	–	–	◪ 65	0.30	2.4	–	–	–
TNMG 220408E-RM:T9425	⇕	0.8	■ 275	0.40	4.0	■ 165	0.36	4.0	■ 260	0.40	4.0	–	–	–	◪ 60	0.30	3.2	–	–	–
TNMG 220412E-RM:T9425	⇕	1.2	■ 290	0.40	4.0	■ 170	0.36	4.0	■ 275	0.40	4.0	–	–	–	◪ 65	0.30	3.2	–	–	–
TNMG 220416E-RM:T9425	⇕	1.6	■ 305	0.40	4.0	■ 180	0.36	4.0	■ 285	0.40	4.0	–	–	–	◪ 65	0.30	3.2	–	–	–
TNMG 270612E-RM:T9425	⇕	1.2	■ 155	0.40	6.0	■ 90	0.36	6.0	■ 145	0.40	6.0	–	–	–	◪ 30	0.30	4.8	–	–	–
TNMG 270616E-RM:T9425	⇕	1.6	■ 160	0.40	6.0	■ 95	0.36	6.0	■ 150	0.40	6.0	–	–	–	◪ 35	0.30	4.8	–	–	–
TNMG 270624E-RM:T9425	⇕	2.4	■ 155	0.50	6.0	■ 90	0.45	6.0	■ 145	0.50	6.0	–	–	–	◪ 30	0.38	4.8	–	–	–
TNMG 270632E-RM:T9425	⇕	3.2	■ 150	0.60	6.0	■ 90	0.54	6.0	■ 140	0.60	6.0	–	–	–	◪ 30	0.45	4.8	–	–	–
TNMG 330924E-RM:T9425	⇕	2.4	■ 150	0.50	10.0	■ 90	0.45	10.0	■ 140	0.50	10.0	–	–	–	◪ 30	0.38	8.0	–	–	–

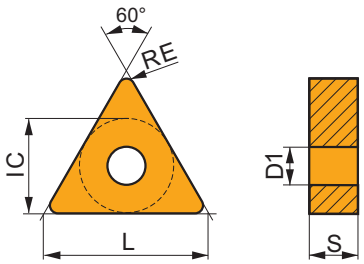
● Stable working conditions ⇕ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

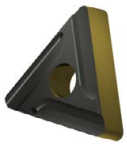
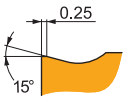
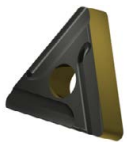
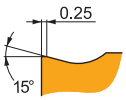
Product	● ⚙ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 	**SM** chip breaker is versatile and the first choice for medium machining of Steels and Super-alloys. It features slightly positive rake angle and stable, moderate T-land. It's also suitable for Stainless steels, Cast irons, and conditionally for Non-ferrous alloys and Hard materials.																				
TNMG 160404E-SM:T9425	●	0.4	■ 290	0.20	1.7	■ 170	0.18	1.7	■ 275	0.20	1.7	–	–	–	◪ 65	0.18	1.4	–	–	–
TNMG 160408E-SM:T9425	●	0.8	■ 320	0.25	1.7	■ 190	0.23	1.7	■ 300	0.25	1.7	–	–	–	◪ 70	0.20	1.4	–	–	–
TNMG 160412E-SM:T9425	⚙	1.2	■ 320	0.30	1.7	■ 190	0.27	1.7	■ 300	0.30	1.7	–	–	–	◪ 70	0.24	1.4	–	–	–
TNMG 220404E-SM:T9425	●	0.4	■ 290	0.20	1.7	■ 170	0.18	1.7	■ 275	0.20	1.7	–	–	–	◪ 65	0.18	1.4	–	–	–
TNMG 220408E-SM:T9425	●	0.8	■ 320	0.25	1.7	■ 190	0.23	1.7	■ 300	0.25	1.7	–	–	–	◪ 70	0.20	1.4	–	–	–
TNMG 220412E-SM:T9425	⚙	1.2	■ 320	0.30	1.7	■ 190	0.27	1.7	■ 300	0.30	1.7	–	–	–	◪ 70	0.24	1.4	–	–	–
 	**SI** chip breaker is sharp and designed for medium machining of Steels, Stainless steels. It features positive rake angle without T-land. It's also conditionally suitable for Non-ferrous alloys and Super-alloys.																				
TNMG 160404ER-SI:T9425	●	0.4	■ 350	0.20	1.5	■ 210	0.18	1.5	–	–	–	–	–	–	◪ 75	0.18	1.2	–	–	–
TNMG 160408ER-SI:T9425	●	0.8	■ 345	0.35	1.5	■ 205	0.32	1.5	–	–	–	–	–	–	◪ 75	0.25	1.2	–	–	–
 	**SI** chip breaker is sharp and designed for medium machining of Steels, Stainless steels. It features positive rake angle without T-land. It's also conditionally suitable for Non-ferrous alloys and Super-alloys.																				
TNMG 160404EL-SI:T9425	●	0.4	■ 350	0.20	1.5	■ 210	0.18	1.5	–	–	–	–	–	–	◪ 75	0.18	1.2	–	–	–
TNMG 160408EL-SI:T9425	●	0.8	■ 345	0.35	1.5	■ 205	0.32	1.5	–	–	–	–	–	–	◪ 75	0.25	1.2	–	–	–

TNMM

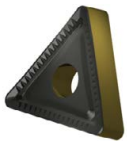
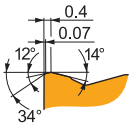
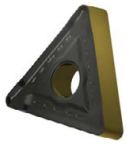
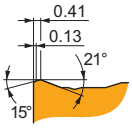
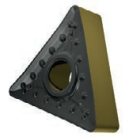
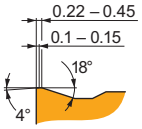
	IC (mm)	D1 (mm)	L (mm)	S (mm)
1604	9.525	3.81	16.50	4.76
2204	12.700	5.16	22.00	4.76
2706	15.875	6.35	27.50	6.35



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⚙ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 	**EL** geometry with left handed design for medium to semi-rough machining, and continuous cuts.																			
TNMM 220412EL:T9425	●	1.2	■ 355	0.35	2.1	■ 210	0.32	2.1	–	–	–	–	–	–	◪ 75	0.25	1.7	–	–	–
 	**ER** geometry with right-handed design for medium to semi-rough machining, and continuous cuts.																			
TNMM 220412ER:T9425	●	1.2	■ 355	0.35	2.1	■ 210	0.32	2.1	–	–	–	–	–	–	◪ 75	0.25	1.7	–	–	–

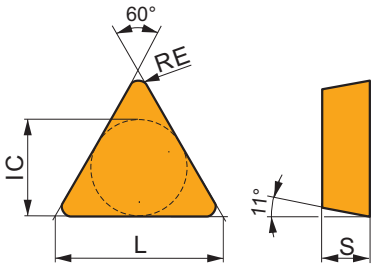
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
HR chip breaker is robust and designed for heavy roughing of Steels and Cast irons. It features slightly positive rake angle and negative/negative, extra-wide double T-land. It's also conditionally suitable for Stainless steels.																				
TNMM 270616E-HR:T9425	⇕	1.6	■ 120	0.60	7.0	◪ 70	0.54	7.0	■ 110	0.60	7.0	–	–	–	–	–	–	–	–	–
 																				
NR2 chip breaker is robust and the first choice for heavy roughing of Stainless steels. It features positive rake angle and negative/negative, extra-wide double T-land. It's also suitable for Steels, and conditionally for Cast irons and Super-alloys.																				
TNMM 160408E-NR2:T9425	⇕	0.8	■ 275	0.40	3.0	■ 165	0.36	3.0	◪ 260	0.40	3.0	–	–	–	◪ 60	0.28	2.4	–	–	–
TNMM 220408E-NR2:T9425	⇕	0.8	■ 265	0.40	4.0	■ 155	0.36	4.0	◪ 250	0.40	4.0	–	–	–	◪ 55	0.28	3.2	–	–	–
TNMM 220412E-NR2:T9425	⇕	1.2	■ 280	0.40	4.0	■ 165	0.36	4.0	◪ 265	0.40	4.0	–	–	–	◪ 60	0.32	3.2	–	–	–
 																				
OR chip breaker is robust and the first choice for heavy roughing of Steels. It features positive rake angle and negative/stable, extra-wide double T-land. It's also suitable for Cast irons, and conditionally for Stainless steels and Super-alloys.																				
TNMM 160408E-OR:T9425	⇕	0.8	■ 275	0.40	3.0	◪ 165	0.36	3.0	■ 260	0.40	3.0	–	–	–	◪ 60	0.28	2.4	–	–	–
TNMM 220408E-OR:T9425	⇕	0.8	■ 265	0.40	4.0	◪ 155	0.36	4.0	■ 250	0.40	4.0	–	–	–	◪ 55	0.32	3.2	–	–	–
TNMM 220412E-OR:T9425	⇕	1.2	■ 285	0.40	3.0	◪ 170	0.36	3.0	■ 270	0.40	3.0	–	–	–	◪ 60	0.32	2.4	–	–	–

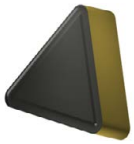
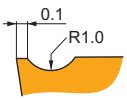
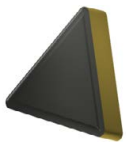
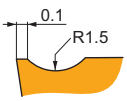
TPMR

DORMER PRAMET

	IC (mm)	L (mm)	S (mm)
1103	6.350	11.00	3.18
1603	9.525	16.50	3.18

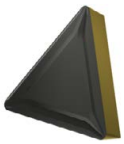
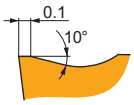


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
46 geometry for fine to finish machining, and continuous to interrupted cuts.																				
TPMR 110304E-46:T9425	●	0.4	■ 260	0.15	1.0	◪ 155	0.15	1.0	■ 245	0.15	1.0	–	–	–	–	–	–	–	–	–
TPMR 110308E-46:T9425	●	0.8	■ 310	0.15	1.0	◪ 185	0.15	1.0	■ 290	0.15	1.0	–	–	–	–	–	–	–	–	–
 																				
47 geometry for finish to semi-rough machining, and continuous to interrupted cuts.																				
TPMR 160304E-47:T9425	●	0.4	■ 225	0.20	1.5	◪ 135	0.18	1.5	■ 210	0.20	1.5	–	–	–	–	–	–	–	–	–
TPMR 160308E-47:T9425	●	0.8	■ 270	0.20	1.5	◪ 160	0.18	1.5	■ 255	0.20	1.5	–	–	–	–	–	–	–	–	–
TPMR 160312E-47:T9425	●	1.2	■ 285	0.20	1.5	◪ 170	0.18	1.5	■ 270	0.20	1.5	–	–	–	–	–	–	–	–	–

● Stable working conditions ⇕ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

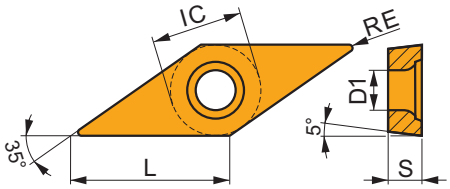
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⚙ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
61 geometry for finish machining with moderate feeds and depths of cut, and continuous to interrupted cuts.																				
TPMR 160308E-61:T9425	●	0.8	■ 220	0.35	1.8	◪ 130	0.32	1.8	■ 205	0.35	1.8	–	–	–	–	–	–	–	–	–

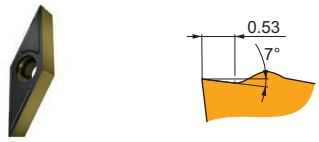
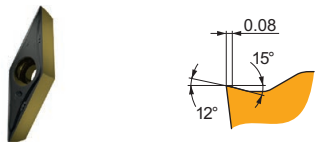
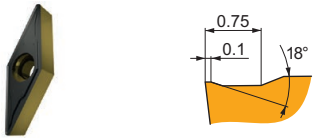
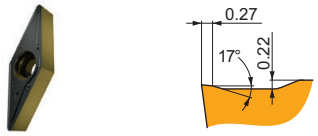
VBMT

DORMER PRAMET

	IC (mm)	D1 (mm)	L (mm)	S (mm)
1102	6.350	2.80	11.10	2.38
1103	6.350	2.80	11.10	3.18
1604	9.525	4.40	16.60	4.76

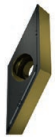
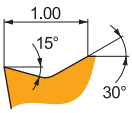


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⚙ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
																				
FF2 chip breaker is sharp and the first choice for fine-finishing of Steels. It features slightly positive rake angle without T-land. It's also suitable for Cast irons.																				
VBMT 160404E-FF2:T9425	●	0.4	■ 275	0.12	0.8	–	–	–	■ 260	0.12	0.8	–	–	–	–	–	–	–	–	–
																				
FM chip breaker is versatile and the first choice for finishing of Steels. It features positive rake angle and positive, narrow T-land. It's also suitable for Stainless steels, and conditionally for Cast irons and Non-ferrous alloys.																				
VBMT 110302E-FM:T9425	●	0.2	■ 300	0.10	0.8	■ 180	0.09	0.8	◪ 285	0.10	0.8	–	–	–	–	–	–	–	–	–
VBMT 110304E-FM:T9425	●	0.4	■ 260	0.19	0.8	■ 155	0.17	0.8	◪ 245	0.19	0.8	–	–	–	–	–	–	–	–	–
VBMT 110308E-FM:T9425	●	0.8	■ 320	0.17	0.8	■ 190	0.15	0.8	◪ 300	0.17	0.8	–	–	–	–	–	–	–	–	–
VBMT 160402E-FM:T9425	●	0.2	■ 290	0.10	1.2	■ 170	0.09	1.2	◪ 275	0.10	1.2	–	–	–	–	–	–	–	–	–
VBMT 160404E-FM:T9425	●	0.4	■ 250	0.19	1.2	■ 150	0.17	1.2	◪ 235	0.19	1.2	–	–	–	–	–	–	–	–	–
VBMT 160408E-FM:T9425	●	0.8	■ 305	0.17	1.2	■ 180	0.15	1.2	◪ 285	0.17	1.2	–	–	–	–	–	–	–	–	–
VBMT 160412E-FM:T9425	●	1.2	■ 295	0.22	1.2	■ 175	0.22	1.2	◪ 280	0.22	1.2	–	–	–	–	–	–	–	–	–
																				
FM2 chip breaker is robust and the first choice for medium machining of Steels. It features positive rake angle and stable, moderate T-land. It's also suitable for Cast irons, and conditionally for Stainless steels.																				
VBMT 160404E-FM2:T9425	●	0.4	■ 265	0.12	1.2	◪ 155	0.11	1.2	■ 250	0.12	1.2	–	–	–	–	–	–	–	–	–
VBMT 160408E-FM2:T9425	●	0.8	■ 265	0.20	1.2	◪ 155	0.18	1.2	■ 250	0.20	1.2	–	–	–	–	–	–	–	–	–
VBMT 160412E-FM2:T9425	●	1.2	■ 270	0.22	1.2	◪ 160	0.20	1.2	■ 255	0.22	1.2	–	–	–	–	–	–	–	–	–
																				
RM chip breaker is robust and the first choice for roughing of Steels and Cast irons. It features positive rake angle and stable, wide T-land. It's also suitable for Stainless steels, and conditionally for Super-alloys and Hard materials.																				
VBMT 160404E-RM:T9425	●	0.4	■ 260	0.20	1.2	■ 155	0.18	1.2	■ 245	0.20	1.2	–	–	–	◪ 55	0.18	1.0	–	–	–
VBMT 160408E-RM:T9425	●	0.8	■ 305	0.20	1.2	■ 180	0.18	1.2	■ 285	0.20	1.2	–	–	–	◪ 65	0.18	1.0	–	–	–
VBMT 160412E-RM:T9425	●	1.2	■ 290	0.27	1.2	■ 170	0.24	1.2	■ 275	0.27	1.2	–	–	–	◪ 65	0.19	1.0	–	–	–

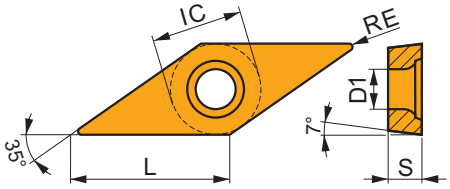
● Stable working conditions ⚙ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

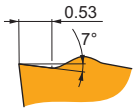
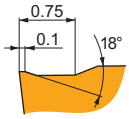
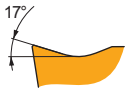
Product	●	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
UR chip breaker is versatile and the first choice for finishing of Cast irons. It features positive rake angle without T-land. It's also suitable for Steels, and conditionally for Stainless steels.																				
VBMT 110204E-UR:T9425	●	0.4	■ 225	0.19	0.8	◪ 135	0.17	0.8	■ 210	0.19	0.8	–	–	–	–	–	–	–	–	–
VBMT 160404E-UR:T9425	●	0.4	■ 220	0.18	1.2	◪ 130	0.16	1.2	■ 205	0.18	1.2	–	–	–	–	–	–	–	–	–
VBMT 160408E-UR:T9425	●	0.8	■ 265	0.17	1.2	◪ 155	0.15	1.2	■ 250	0.17	1.2	–	–	–	–	–	–	–	–	–
VBMT 160412E-UR:T9425	●	1.2	■ 255	0.22	1.2	◪ 150	0.20	1.2	■ 240	0.22	1.2	–	–	–	–	–	–	–	–	–

VCGT

	IC (mm)	D1 (mm)	L (mm)	S (mm)
1303	7.940	3.40	13.80	3.18



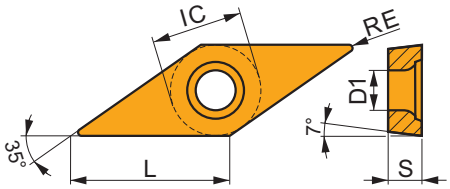
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	●	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
																				
FF2 chip breaker is sharp and the first choice for fine-finishing of Steels. It features slightly positive rake angle without T-land. It's also suitable for Cast irons.																				
VCGT 130302E-FF2:T9425	●	0.2	■ 315	0.05	1.0	–	–	–	■ 295	0.05	1.0	–	–	–	–	–	–	–	–	–
VCGT 130304E-FF2:T9425	●	0.4	■ 255	0.12	1.0	–	–	–	■ 240	0.12	1.0	–	–	–	–	–	–	–	–	–
VCGT 130308E-FF2:T9425	●	0.8	■ 270	0.17	1.0	–	–	–	■ 255	0.17	1.0	–	–	–	–	–	–	–	–	–
																				
FM2 chip breaker is robust and the first choice for medium machining of Steels. It features positive rake angle and stable, moderate T-land. It's also suitable for Cast irons, and conditionally for Stainless steels.																				
VCGT 130308E-FM2:T9425	●	0.8	■ 270	0.17	1.0	◪ 160	0.15	1.0	■ 255	0.17	1.0	–	–	–	–	–	–	–	–	–
																				
NF2 chip breaker is sharp and the first choice for finishing of Stainless steels. It features positive rake angle without T-land. It's also suitable for Super-alloys, and conditionally for Steels, Cast irons and Non-ferrous alloys.																				
VCGT 130302E-NF2:T9425	●	0.2	◪ 285	0.07	1.0	■ 170	0.06	1.0	◪ 270	0.07	1.0	–	–	–	◪ 60	0.06	0.8	–	–	–
VCGT 130304E-NF2:T9425	●	0.4	◪ 255	0.12	1.0	■ 150	0.11	1.0	◪ 240	0.12	1.0	–	–	–	◪ 55	0.08	0.8	–	–	–
VCGT 130308E-NF2:T9425	●	0.8	◪ 270	0.17	1.0	■ 160	0.15	1.0	◪ 255	0.17	1.0	–	–	–	◪ 60	0.12	0.8	–	–	–

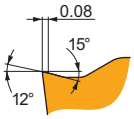
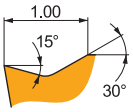
● Stable working conditions ● Unstable working conditions ● Heavy working conditions ■ Primary use ◪ Possible use

VCMT

	IC (mm)	D1 (mm)	L (mm)	S (mm)
1103	6.350	2.80	11.10	3.18
1604	9.525	4.40	16.60	4.76

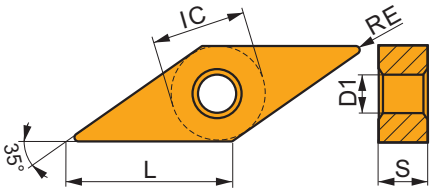


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

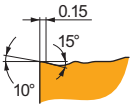
Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
																				
FM chip breaker is versatile and the first choice for finishing of Steels. It features positive rake angle and positive, narrow T-land. It's also suitable for Stainless steels, and conditionally for Cast irons and Non-ferrous alloys.																				
VCMT 160404E-FM:T9425	●	0.4	■	235	0.19	1.2	■	140	0.17	1.2	◪	220	0.19	1.2	–	–	–	–	–	–	–	–	–
VCMT 160408E-FM:T9425	●	0.8	■	290	0.17	1.2	■	170	0.15	1.2	◪	275	0.17	1.2	–	–	–	–	–	–	–	–	–
																				
UR chip breaker is versatile and the first choice for finishing of Cast irons. It features positive rake angle without T-land. It's also suitable for Steels, and conditionally for Stainless steels.																				
VCMT 110304E-UR:T9425	●	0.4	■	215	0.19	0.8	◪	125	0.17	0.8	■	200	0.19	0.8	–	–	–	–	–	–	–	–	–
VCMT 110308E-UR:T9425	●	0.8	■	260	0.17	0.8	◪	155	0.15	0.8	■	245	0.17	0.8	–	–	–	–	–	–	–	–	–
VCMT 160404E-UR:T9425	●	0.4	■	205	0.19	1.2	◪	120	0.17	1.2	■	190	0.19	1.2	–	–	–	–	–	–	–	–	–
VCMT 160408E-UR:T9425	●	0.8	■	250	0.17	1.2	◪	150	0.15	1.2	■	235	0.17	1.2	–	–	–	–	–	–	–	–	–

VNMG

	IC (mm)	D1 (mm)	L (mm)	S (mm)
1604	9.525	3.81	16.60	4.76

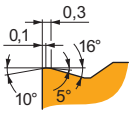
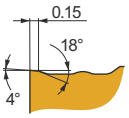
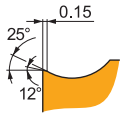
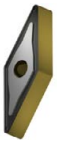
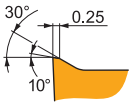
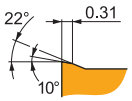
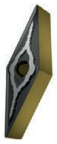
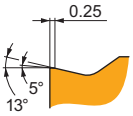


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
																				
FM chip breaker is versatile and the first choice for finishing of Steels and Cast irons. It features slightly positive rake angle and positive, narrow T-land. It's also conditionally suitable for Stainless steels and Super-alloys.																				
VNMG 160404E-FM:T9425	●	0.4	■	260	0.20	1.2	◪	155	0.18	1.2	■	245	0.20	1.2	–	–	–	◪	55	0.20	1.0	–	–	–
VNMG 160408E-FM:T9425	●	0.8	■	300	0.20	1.4	◪	180	0.18	1.4	■	285	0.20	1.4	–	–	–	◪	65	0.16	1.1	–	–	–
VNMG 160412E-FM:T9425	●	1.2	■	310	0.22	1.4	◪	185	0.20	1.4	■	290	0.22	1.4	–	–	–	◪	65	0.18	1.1	–	–	–

● Stable working conditions ⬌ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

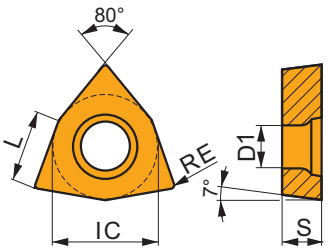
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⇕ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
																				
M chip breaker is versatile and the first choice for medium machining of Cast irons. It features positive rake angle and negative/stable, moderate T-land. It's also suitable for Steels, and conditionally for Hard materials.																				
VNMG 160404E-M:T9425	●	0.4	■ 235	0.20	1.2	–	–	–	■ 220	0.20	1.2	–	–	–	–	–	–	–	–	–
VNMG 160408E-M:T9425	●	0.8	■ 240	0.30	1.4	–	–	–	■ 225	0.30	1.4	–	–	–	–	–	–	–	–	–
VNMG 160412E-M:T9425	●	1.2	■ 230	0.40	1.4	–	–	–	■ 215	0.40	1.4	–	–	–	–	–	–	–	–	–
																				
ML chip breaker is versatile and designed for low depth of cut and medium machining of steels. It features positive rake angle and stable, narrow T-land. It's also suitable for cast irons.																				
VNMG 160404-ML:T9415	●	0.4	■ 255	0.20	1.0	–	–	–	◪ 240	0.20	1.0	–	–	–	–	–	–	–	–	–
VNMG 160404-ML:T9425	●	0.4	■ 240	0.20	1.0	–	–	–	■ 225	0.20	1.0	–	–	–	–	–	–	–	–	–
VNMG 160408-ML:T9415	●	0.8	■ 265	0.25	1.5	–	–	–	◪ 250	0.25	1.5	–	–	–	–	–	–	–	–	–
VNMG 160408-ML:T9425	●	0.8	■ 255	0.25	1.5	–	–	–	■ 240	0.25	1.5	–	–	–	–	–	–	–	–	–
																				
NF chip breaker is sharp and the first choice for fine-finishing of Steels, Stainless steels. It features highly positive rake angle and highly positive, narrow T-land. It's also conditionally suitable for Cast irons and Non-ferrous alloys and Super-alloys.																				
VNMG 160404E-NF:T9425	●	0.4	■ 270	0.18	1.2	■ 160	0.16	1.2	◪ 255	0.18	1.2	–	–	–	◪ 60	0.16	1.0	–	–	–
VNMG 160408E-NF:T9425	●	0.8	■ 310	0.18	1.4	■ 185	0.16	1.4	◪ 290	0.18	1.4	–	–	–	◪ 65	0.16	1.1	–	–	–
 																				
NM chip breaker is sharp and designed for medium machining of Steels, Stainless steels and Super-alloys. It features highly positive rake angle and positive, moderate T-land. It's also conditionally suitable for Non-ferrous alloys.																				
VNMG 160408E-NM:T9425	●	0.8	■ 265	0.30	2.1	■ 155	0.27	2.1	–	–	–	–	–	–	◪ 55	0.24	1.7	–	–	–
																				
NMR chip breaker is versatile and the first choice for medium machining of Stainless steels. It features positive rake angle and positive, wide T-land. It's also suitable for Steels and Super-alloys.																				
VNMG 160404E-NMR:T9425	●	0.4	■ 235	0.20	1.2	■ 140	0.18	1.2	–	–	–	–	–	–	◪ 50	0.18	1.0	–	–	–
VNMG 160408E-NMR:T9425	●	0.8	■ 240	0.30	1.4	■ 140	0.27	1.4	–	–	–	–	–	–	◪ 50	0.24	1.1	–	–	–
 																				
SM chip breaker is versatile and the first choice for medium machining of Steels and Super-alloys. It features slightly positive rake angle and stable, moderate T-land. It's also suitable for Stainless steels, Cast irons, and conditionally for Non-ferrous alloys and Hard materials.																				
VNMG 160404E-SM:T9425	●	0.4	■ 255	0.18	1.2	■ 150	0.16	1.2	■ 240	0.18	1.2	–	–	–	◪ 55	0.16	1.0	–	–	–
VNMG 160408E-SM:T9425	●	0.8	■ 270	0.25	1.4	■ 160	0.23	1.4	■ 255	0.25	1.4	–	–	–	◪ 60	0.20	1.1	–	–	–

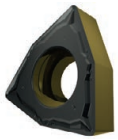
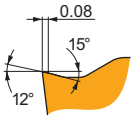
● Stable working conditions ⇕ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

WCMT

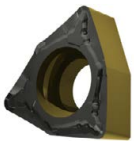
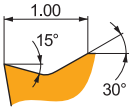
	IC (mm)	D1 (mm)	L (mm)	S (mm)
06T3	9.525	4.40	6.50	3.97
0804	12.700	5.50	8.70	4.76



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
WCMT 06T304E-FM:T9425	●	0.4	■ 365	0.15	1.2	■ 215	0.15	1.2	◪ 345	0.15	1.2	–	–	–	–	–	–	–	–	–
WCMT 06T308E-FM:T9425	●	0.8	■ 395	0.20	1.2	■ 235	0.18	1.2	◪ 375	0.20	1.2	–	–	–	–	–	–	–	–	–
WCMT 080404E-FM:T9425	●	0.4	■ 355	0.15	1.7	■ 210	0.15	1.7	◪ 335	0.15	1.7	–	–	–	–	–	–	–	–	–
WCMT 080408E-FM:T9425	●	0.8	■ 385	0.20	1.7	■ 230	0.18	1.7	◪ 365	0.20	1.7	–	–	–	–	–	–	–	–	–
WCMT 080412E-FM:T9425	⬌	1.2	■ 365	0.27	1.7	■ 215	0.24	1.7	◪ 345	0.27	1.7	–	–	–	–	–	–	–	–	–

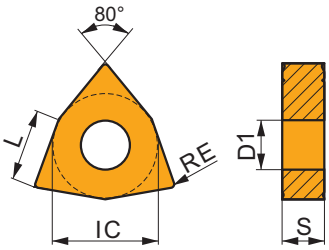
FM chip breaker is versatile and the first choice for finishing of Steels. It features positive rake angle and positive, narrow T-land. It's also suitable for Stainless steels, and conditionally for Cast irons and Non-ferrous alloys.

Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
WCMT 06T308E-UR:T9425	●	0.8	■ 345	0.20	1.2	◪ 205	0.18	1.2	■ 325	0.20	1.2	–	–	–	–	–	–	–	–	–

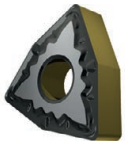
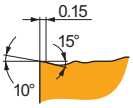
UR chip breaker is versatile and the first choice for finishing of Cast irons. It features positive rake angle without T-land. It's also suitable for Steels, and conditionally for Stainless steels.

WNMG

	IC (mm)	D1 (mm)	L (mm)	S (mm)
0604	9.525	3.81	6.50	4.76
06T3	9.525	3.81	6.50	4.76
0804	12.700	5.16	8.70	4.76



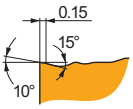
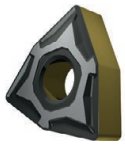
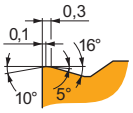
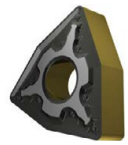
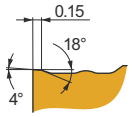
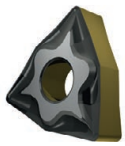
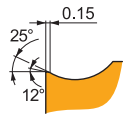
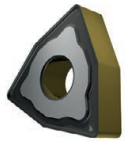
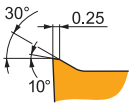
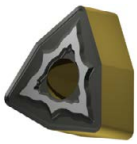
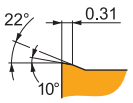
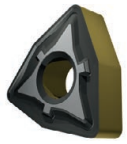
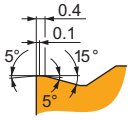
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
WNMG 060404E-FM:T9425	●	0.4	■ 365	0.20	1.4	◪ 215	0.18	1.4	■ 345	0.20	1.4	–	–	–	◪ 80	0.16	1.1	–	–	–
WNMG 060408E-FM:T9425	●	0.8	■ 430	0.20	1.4	◪ 255	0.18	1.4	■ 405	0.20	1.4	–	–	–	◪ 95	0.16	1.1	–	–	–
WNMG 06T304E-FM:T9425	●	0.4	■ 365	0.20	1.4	◪ 215	0.18	1.4	■ 345	0.20	1.4	–	–	–	◪ 80	0.16	1.1	–	–	–
WNMG 06T308E-FM:T9425	●	0.8	■ 430	0.20	1.4	◪ 255	0.18	1.4	■ 405	0.20	1.4	–	–	–	◪ 95	0.16	1.1	–	–	–
WNMG 080404E-FM:T9425	●	0.4	■ 370	0.20	1.2	◪ 220	0.18	1.2	■ 350	0.20	1.2	–	–	–	◪ 80	0.16	1.0	–	–	–

FM chip breaker is versatile and the first choice for finishing of Steels and Cast irons. It features slightly positive rake angle and positive, narrow T-land. It's also conditionally suitable for Stainless steels and Super-alloys.

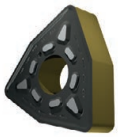
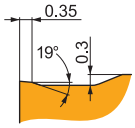
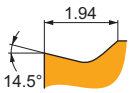
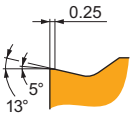
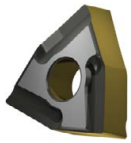
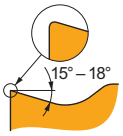
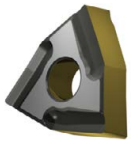
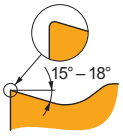
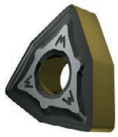
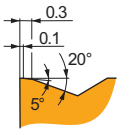
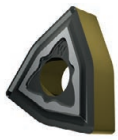
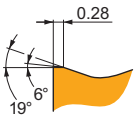
● Stable working conditions ⬌ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
	**FM** chip breaker is versatile and the first choice for finishing of Steels and Cast irons. It features slightly positive rake angle and positive, narrow T-land. It's also conditionally suitable for Stainless steels and Super-alloys.																				
WNMG 080408E-FM:T9425	●	0.8	■ 420	0.20	1.9	◪ 250	0.18	1.9	■ 395	0.20	1.9	–	–	–	◪ 90	0.16	1.5	–	–	–
WNMG 080412E-FM:T9425	⬌	1.2	■ 400	0.27	1.9	◪ 240	0.24	1.9	■ 380	0.27	1.9	–	–	–	◪ 90	0.19	1.5	–	–	–
 	**M** chip breaker is versatile and the first choice for medium machining of Cast irons. It features positive rake angle and negative/stable, moderate T-land. It's also suitable for Steels, and conditionally for Hard materials.																				
WNMG 060404E-M:T9425	●	0.4	■ 320	0.20	1.8	–	–	–	■ 300	0.20	1.8	–	–	–	–	–	–	–	–	–
WNMG 060408E-M:T9425	⬌	0.8	■ 330	0.32	1.8	–	–	–	■ 310	0.32	1.8	–	–	–	–	–	–	–	–	–
WNMG 080404E-M:T9425	●	0.4	■ 320	0.20	2.1	–	–	–	■ 300	0.20	2.1	–	–	–	–	–	–	–	–	–
WNMG 080408E-M:T9425	⬌	0.8	■ 325	0.32	2.1	–	–	–	■ 305	0.32	2.1	–	–	–	–	–	–	–	–	–
WNMG 080412E-M:T9425	⬌	1.2	■ 320	0.40	2.1	–	–	–	■ 300	0.40	2.1	–	–	–	–	–	–	–	–	–
 	**ML** chip breaker is versatile and designed for low depth of cut and medium machining of steels. It features positive rake angle and stable, narrow T-land. It's also suitable for cast irons.																				
WNMG 080404-ML:T9415	●	0.4	■ 365	0.20	1.0	–	–	–	◪ 345	0.20	1.0	–	–	–	–	–	–	–	–	–
WNMG 080404-ML:T9425	●	0.4	■ 340	0.20	1.0	–	–	–	■ 320	0.20	1.0	–	–	–	–	–	–	–	–	–
WNMG 080408-ML:T9415	⬌	0.8	■ 380	0.25	1.5	–	–	–	◪ 360	0.25	1.5	–	–	–	–	–	–	–	–	–
WNMG 080408-ML:T9425	⬌	0.8	■ 365	0.25	1.5	–	–	–	■ 345	0.25	1.5	–	–	–	–	–	–	–	–	–
WNMG 080412-ML:T9415	⬌	1.2	■ 360	0.30	2.0	–	–	–	◪ 340	0.30	2.0	–	–	–	–	–	–	–	–	–
WNMG 080412-ML:T9425	⬌	1.2	■ 355	0.30	2.0	–	–	–	■ 335	0.30	2.0	–	–	–	–	–	–	–	–	–
 	**NF** chip breaker is sharp and the first choice for fine-finishing of Steels, Stainless steels. It features highly positive rake angle and highly positive, narrow T-land. It's also conditionally suitable for Cast irons and Non-ferrous alloys and Super-alloys.																				
WNMG 060404E-NF:T9425	●	0.4	■ 400	0.18	0.8	■ 240	0.16	0.8	◪ 380	0.18	0.8	–	–	–	◪ 90	0.16	0.6	–	–	–
WNMG 060408E-NF:T9425	⬌	0.8	■ 455	0.19	1.0	■ 270	0.17	1.0	◪ 430	0.19	1.0	–	–	–	◪ 100	0.15	0.8	–	–	–
WNMG 080404E-NF:T9425	●	0.4	■ 370	0.18	1.7	■ 220	0.16	1.7	◪ 350	0.18	1.7	–	–	–	◪ 80	0.16	1.4	–	–	–
WNMG 080408E-NF:T9425	⬌	0.8	■ 430	0.19	1.7	■ 255	0.17	1.7	◪ 405	0.19	1.7	–	–	–	◪ 95	0.15	1.4	–	–	–
 	**NM** chip breaker is sharp and designed for medium machining of Steels, Stainless steels and Super-alloys. It features highly positive rake angle and positive, moderate T-land. It's also conditionally suitable for Non-ferrous alloys.																				
WNMG 060408E-NM:T9425	⬌	0.8	■ 415	0.25	1.8	■ 245	0.23	1.8	–	–	–	–	–	–	◪ 90	0.20	1.4	–	–	–
WNMG 060412E-NM:T9425	⬌	1.2	■ 405	0.30	1.8	■ 240	0.27	1.8	–	–	–	–	–	–	◪ 90	0.24	1.4	–	–	–
WNMG 080404E-NM:T9425	●	0.4	■ 365	0.20	2.1	■ 215	0.18	2.1	–	–	–	–	–	–	◪ 80	0.16	1.7	–	–	–
WNMG 080408E-NM:T9425	⬌	0.8	■ 400	0.25	2.1	■ 240	0.23	2.1	–	–	–	–	–	–	◪ 90	0.20	1.7	–	–	–
WNMG 080412E-NM:T9425	⬌	1.2	■ 400	0.30	2.1	■ 240	0.27	2.1	–	–	–	–	–	–	◪ 90	0.24	1.7	–	–	–
 	**NMR** chip breaker is versatile and the first choice for medium machining of Stainless steels. It features positive rake angle and positive, wide T-land. It's also suitable for Steels and Super-alloys.																				
WNMG 060408E-NMR:T9425	⬌	0.8	■ 325	0.35	1.6	■ 195	0.32	1.6	–	–	–	–	–	–	◪ 70	0.25	1.3	–	–	–
WNMG 080408E-NMR:T9425	⬌	0.8	■ 305	0.35	2.7	■ 180	0.32	2.7	–	–	–	–	–	–	◪ 65	0.25	2.2	–	–	–
WNMG 080412E-NMR:T9425	⬌	1.2	■ 310	0.40	2.7	■ 185	0.36	2.7	–	–	–	–	–	–	◪ 65	0.28	2.2	–	–	–
 	**R** chip breaker is robust and designed for roughing of Steels and Cast irons. It features slightly positive rake angle and negative/stable, extra-wide double T-land. It's also conditionally suitable for Hard materials.																				
WNMG 080408E-R:T9425	⬌	0.8	■ 285	0.40	3.5	–	–	–	■ 270	0.40	3.5	–	–	–	–	–	–	–	–	–
WNMG 080412E-R:T9425	⬌	1.2	■ 295	0.45	3.5	–	–	–	■ 280	0.45	3.5	–	–	–	–	–	–	–	–	–

● Stable working conditions ⬌ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

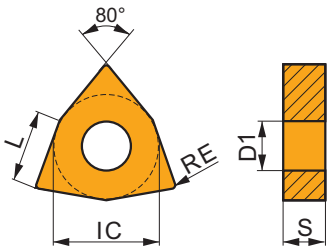
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product		RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
RM chip breaker is robust and the first choice for roughing of Steels. It features positive rake angle and stable, wide T-land. It's also suitable for Stainless steels, Cast irons, and conditionally for Super-alloys.																				
WNMG 060412E-RM:T9425	◐	1.2	■ 370	0.45	1.2	■ 220	0.41	1.2	■ 350	0.45	1.2	–	–	–	◪ 80	0.32	1.0	–	–	–
WNMG 080408E-RM:T9425	◐	0.8	■ 325	0.40	4.0	■ 195	0.36	4.0	■ 305	0.40	4.0	–	–	–	◪ 70	0.28	3.2	–	–	–
WNMG 080412E-RM:T9425	◐	1.2	■ 330	0.45	4.0	■ 195	0.41	4.0	■ 310	0.45	4.0	–	–	–	◪ 70	0.32	3.2	–	–	–
WNMG 080416E-RM:T9425	◐	1.6	■ 335	0.50	4.0	■ 200	0.45	4.0	■ 315	0.50	4.0	–	–	–	◪ 75	0.35	3.2	–	–	–
																				
SF chip breaker is sharp and the first choice for finishing of Stainless steels and Super-alloys. It features slightly positive rake angle without T-land. It's also suitable for Steels, Cast irons and Hard materials, and conditionally for Non-ferrous alloys.																				
WNMG 080408E-SF:T9425	◐	0.8	■ 425	0.20	1.0	■ 255	0.18	1.0	■ 400	0.20	1.0	–	–	–	◪ 95	0.16	0.8	–	–	–
																				
SM chip breaker is versatile and the first choice for medium machining of Steels and Super-alloys. It features slightly positive rake angle and stable, moderate T-land. It's also suitable for Stainless steels, Cast irons, and conditionally for Non-ferrous alloys and Hard materials.																				
WNMG 060404E-SM:T9425	●	0.4	■ 340	0.20	1.7	■ 200	0.18	1.7	■ 320	0.20	1.7	–	–	–	◪ 75	0.18	1.4	–	–	–
WNMG 060408E-SM:T9425	◐	0.8	■ 375	0.25	1.7	■ 225	0.23	1.7	■ 355	0.25	1.7	–	–	–	◪ 80	0.20	1.4	–	–	–
WNMG 060412E-SM:T9425	◐	1.2	■ 375	0.30	1.7	■ 225	0.27	1.7	■ 355	0.30	1.7	–	–	–	◪ 80	0.24	1.4	–	–	–
WNMG 080404E-SM:T9425	●	0.4	■ 335	0.20	2.0	■ 200	0.18	2.0	■ 315	0.20	2.0	–	–	–	◪ 75	0.18	1.6	–	–	–
WNMG 080408E-SM:T9425	◐	0.8	■ 370	0.25	2.0	■ 220	0.23	2.0	■ 350	0.25	2.0	–	–	–	◪ 80	0.20	1.6	–	–	–
WNMG 080412E-SM:T9425	◐	1.2	■ 370	0.30	2.0	■ 220	0.27	2.0	■ 350	0.30	2.0	–	–	–	◪ 80	0.24	1.6	–	–	–
 																				
SI chip breaker is sharp and designed for medium machining of Steels, Stainless steels. It features positive rake angle without T-land. It's also conditionally suitable for Non-ferrous alloys and Super-alloys.																				
WNMG 060404ER-SI:T9425	●	0.4	■ 410	0.20	1.7	■ 245	0.18	1.7	–	–	–	–	–	–	◪ 90	0.18	1.4	–	–	–
WNMG 080404ER-SI:T9425	●	0.4	■ 410	0.20	1.7	■ 245	0.18	1.7	–	–	–	–	–	–	◪ 90	0.18	1.4	–	–	–
WNMG 080408ER-SI:T9425	●	0.8	■ 400	0.35	1.7	■ 240	0.32	1.7	–	–	–	–	–	–	◪ 90	0.25	1.4	–	–	–
 																				
SI chip breaker is sharp and designed for medium machining of Steels, Stainless steels. It features positive rake angle without T-land. It's also conditionally suitable for Non-ferrous alloys and Super-alloys.																				
WNMG 060404EL-SI:T9425	●	0.4	■ 410	0.20	1.7	■ 245	0.18	1.7	–	–	–	–	–	–	◪ 90	0.18	1.4	–	–	–
WNMG 080404EL-SI:T9425	●	0.4	■ 410	0.20	1.7	■ 245	0.18	1.7	–	–	–	–	–	–	◪ 90	0.18	1.4	–	–	–
WNMG 080408EL-SI:T9425	●	0.8	■ 400	0.35	1.7	■ 240	0.32	1.7	–	–	–	–	–	–	◪ 90	0.25	1.4	–	–	–
 																				
W-M chip breaker has wiper edge and is designed for finishing of Steels. It features positive rake angle and positive, moderate T-land. It's also conditionally suitable for Cast irons.																				
WNMG 060408W-M:T9425	◐	0.8	■ 305	0.45	1.2	–	–	–	◪ 285	0.45	1.2	–	–	–	–	–	–	–	–	–
WNMG 080408W-M:T9425	◐	0.8	■ 300	0.45	1.5	–	–	–	◪ 285	0.45	1.5	–	–	–	–	–	–	–	–	–
WNMG 080412W-M:T9425	◐	1.2	■ 300	0.55	1.5	–	–	–	◪ 285	0.55	1.5	–	–	–	–	–	–	–	–	–
 																				
W-MR chip breaker has wiper edge and is designed for finishing of Steels. It features positive rake angle and stable, wide T-land. It's also conditionally suitable for Stainless steels and Cast irons.																				
WNMG 080408W-MR:T9425	◐	0.8	■ 300	0.45	1.5	◪ 180	0.41	1.5	◪ 285	0.45	1.5	–	–	–	–	–	–	–	–	–
WNMG 080412W-MR:T9425	◐	1.2	■ 300	0.55	1.5	◪ 180	0.50	1.5	◪ 285	0.55	1.5	–	–	–	–	–	–	–	–	–

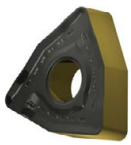
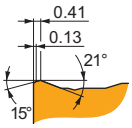
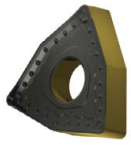
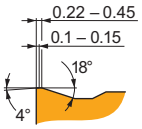
● Stable working conditions ◐ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

WNMM

	IC (mm)	D1 (mm)	L (mm)	S (mm)
0804	12.700	5.16	8.70	4.76
1306	19.050	7.94	13.00	6.35



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

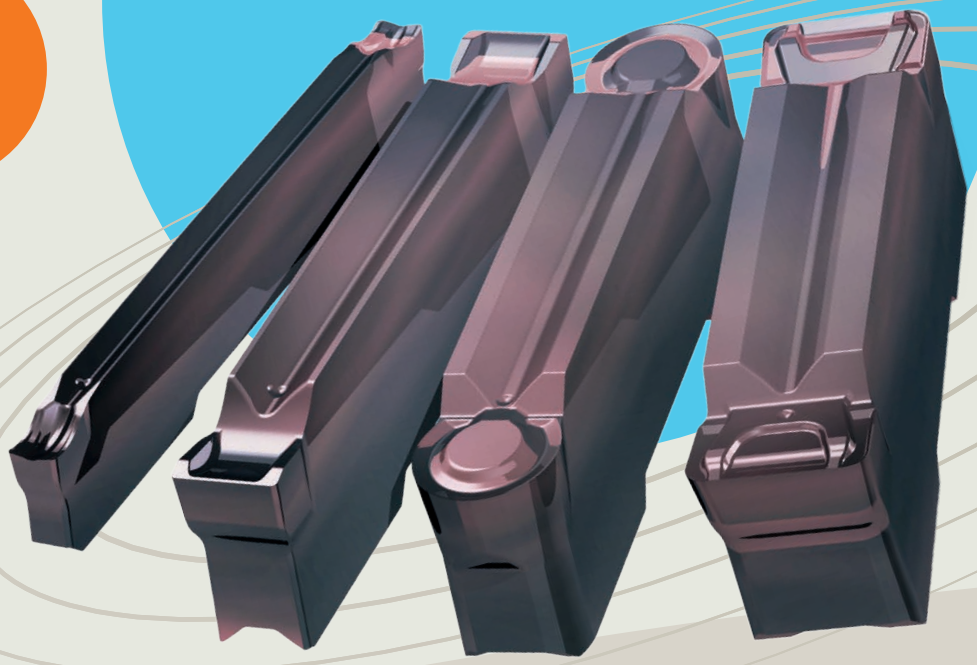
Product	● ⬌ ✱	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
 																				
NR2 chip breaker is robust and the first choice for heavy roughing of Stainless steels. It features positive rake angle and negative/negative, extra-wide double T-land. It's also suitable for Steels, and conditionally for Cast irons and Super-alloys.																				
WNMM 080412E-NR2:T9425	⬌	1.2	■	315	0.45	4.0	■	185	0.41	4.0	◪	295	0.45	4.0	–	–	–	◪	70	0.32	3.2	–	–	–
 																				
OR chip breaker is robust and the first choice for heavy roughing of Steels. It features positive rake angle and negative/stable, extra-wide double T-land. It's also suitable for Cast irons, and conditionally for Stainless steels and Super-alloys.																				
WNMM 080408E-OR:T9425	⬌	0.8	■	310	0.40	4.0	◪	185	0.36	4.0	■	290	0.40	4.0	–	–	–	◪	65	0.28	3.2	–	–	–
WNMM 080412E-OR:T9425	✱	1.2	■	315	0.45	4.0	◪	185	0.41	4.0	■	295	0.45	4.0	–	–	–	◪	70	0.36	3.2	–	–	–
WNMM 080416E-OR:T9425	✱	1.6	■	320	0.50	4.0	◪	190	0.45	4.0	■	300	0.50	4.0	–	–	–	◪	70	0.40	3.2	–	–	–
WNMM 130612E-OR:T9425	✱	1.2	■	300	0.45	6.0	◪	180	0.41	6.0	■	285	0.45	6.0	–	–	–	◪	65	0.36	4.8	–	–	–
WNMM 130616E-OR:T9425	✱	1.6	■	310	0.50	6.0	◪	185	0.45	6.0	■	290	0.50	6.0	–	–	–	◪	65	0.40	4.8	–	–	–

● Stable working conditions ⬌ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

DORMER PRAMET™

G8415 grade

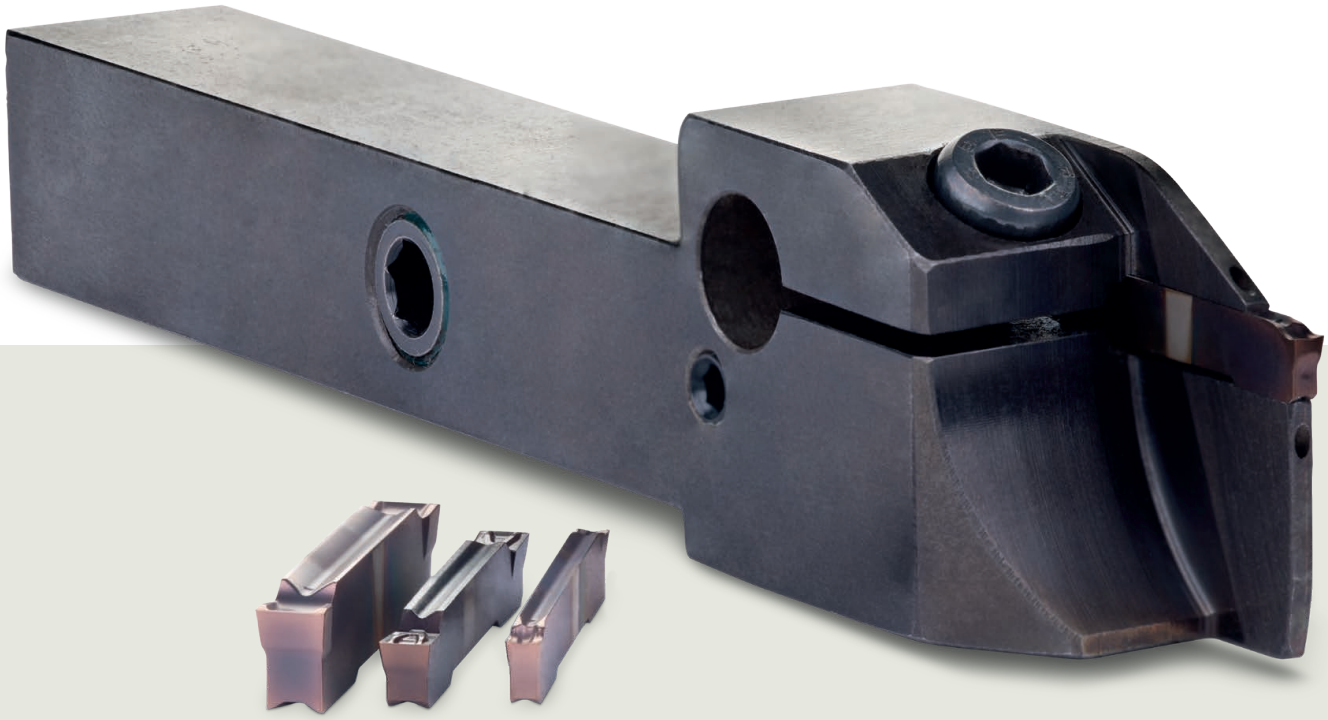
Elevate your machining efficiency with reliable performance



Certainty
at every turn™

New unique PVD grade for parting-off and grooving applications

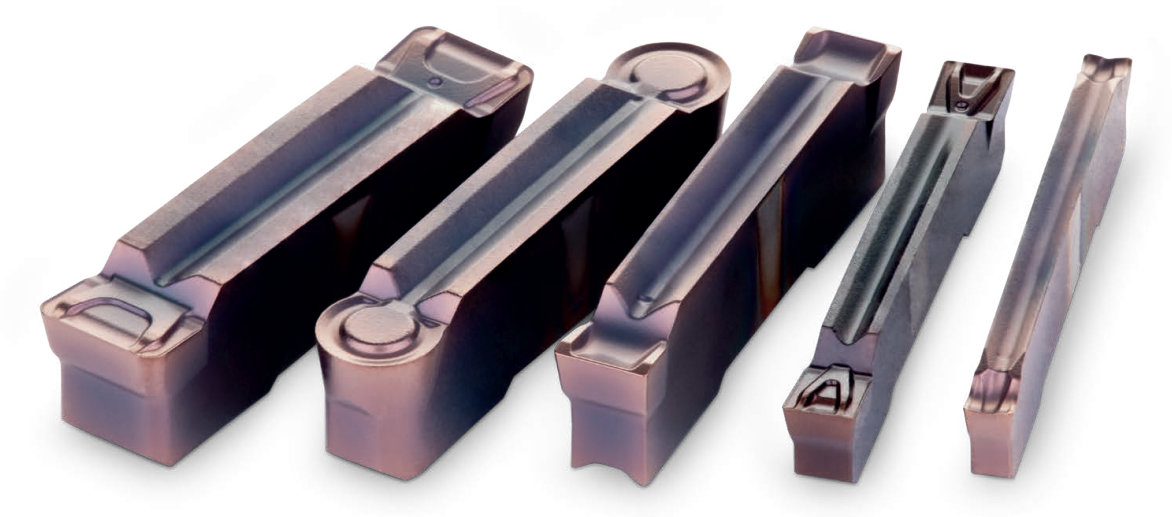
Elevate your machining efficiency with reliable performance



The new G8415 grade delivers consistent and reliable performance in steels, stainless steel, cast iron, heat-resistant and hardened materials. Featuring a unique TiBN sliding top layer and durable multi-layer PVD coating, it offers excellent wear resistance and stability, even in challenging conditions.

Available with all GL chipbreakers, the G8415 is a practical and efficient choice for parting-off, grooving and copy profiling applications.

Related products



GL. D-PR

Double-ended insert for parting-off and grooving

GL. D-PM

Double-ended insert for deep parting-off

GL. D-MM

Double-ended insert for grooving and copy profiling

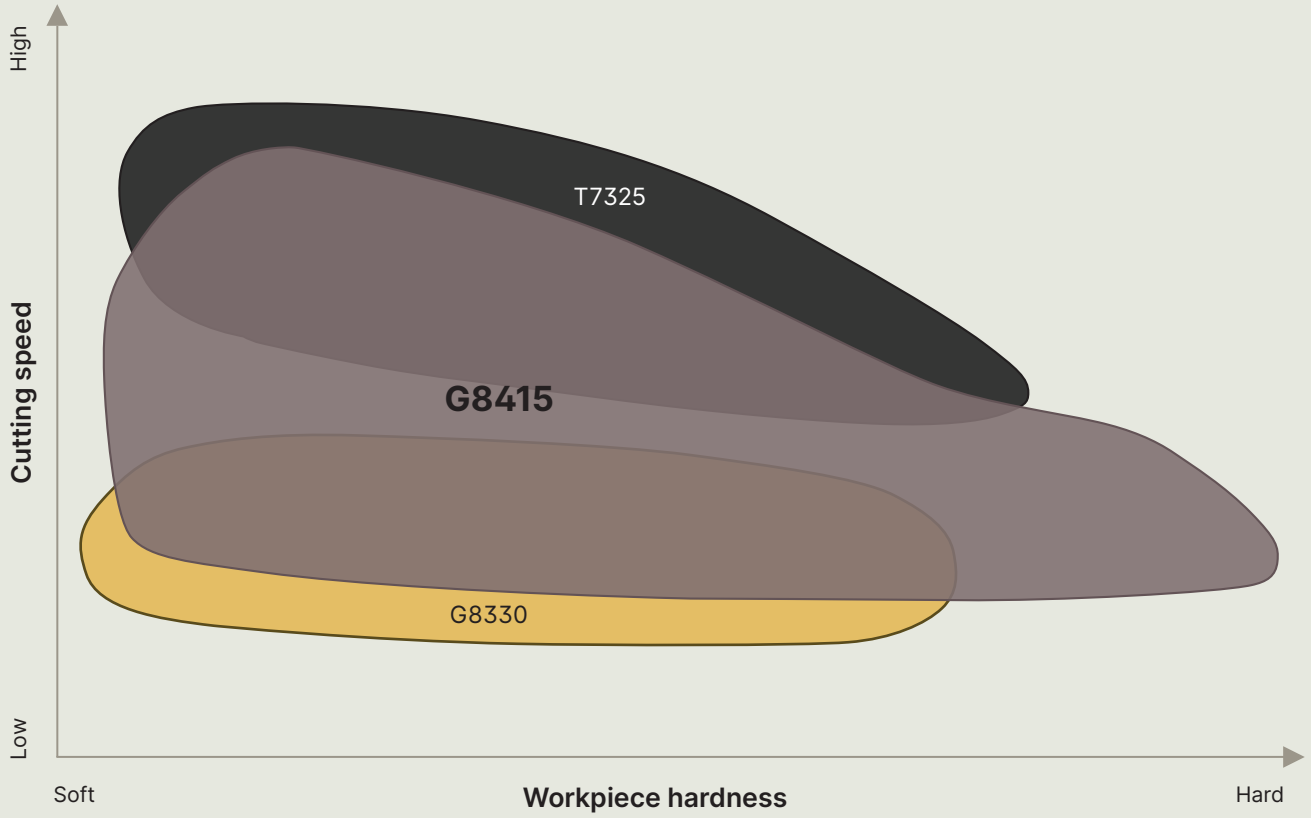
GL. D-GM

Double-ended insert for grooving and longitudinal turning

Features & benefits

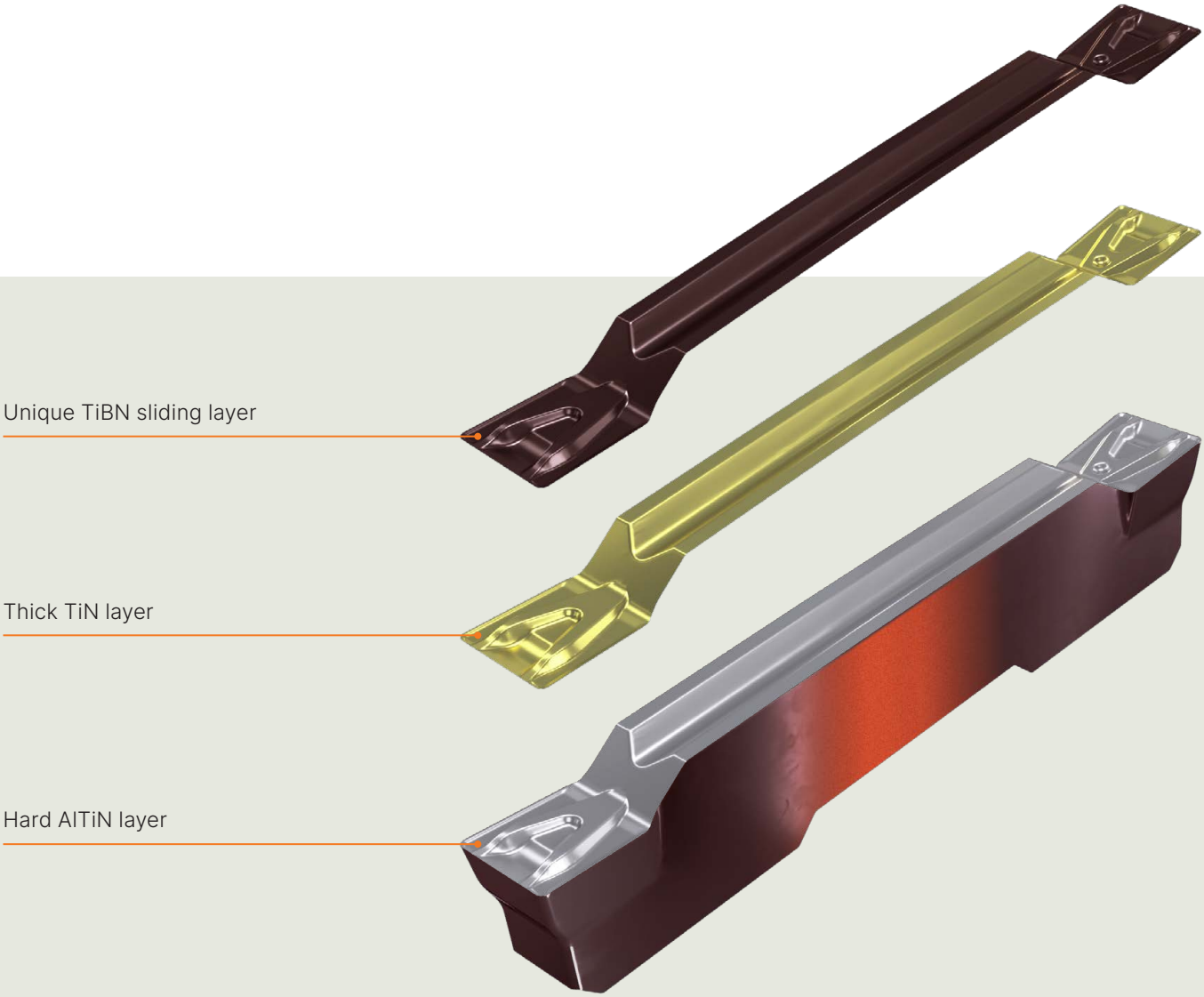
New generation multi-layered PVD coating combined with high-end sub-micron carbide grade.	→	**Versatile use** for a broad range of workpieces.
Unique TiBN sliding top layer reduces built-up edge formation.	→	**Enhanced cutting performance** ensures smooth chip flow and improved quality of machined surfaces.
Thick TiN layer with low compressive residual stress, and hard AlTiN layer with newly developed composition.	→	**Extended tool life** even in adverse cutting conditions.
Available chipbreakers (PM, PR, GM, MM) optimize performance per application.	→	**Application-specific versatility** ensures reliable performance for parting-off, grooving and profiling tasks.

Application area of G8415 turning grades



Grade composition

Precision-engineered coating layers for maximum tool life and performance



Success stories

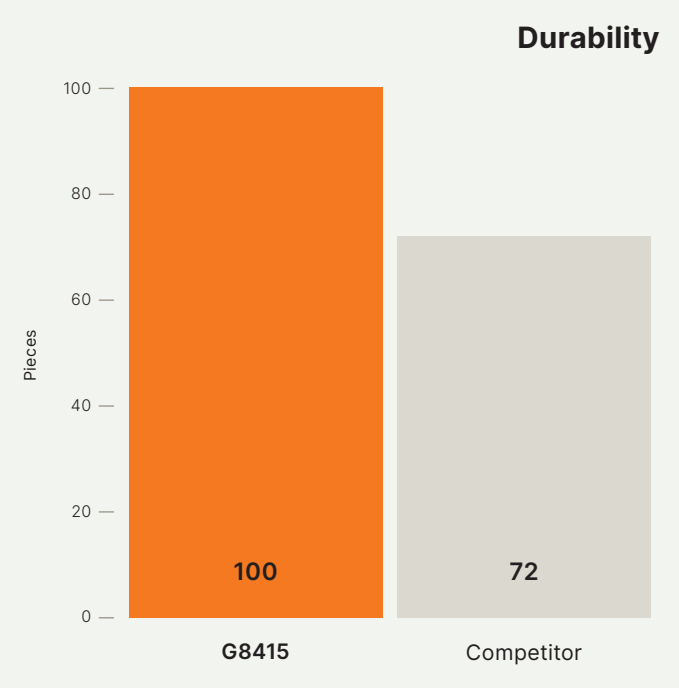
Increase tool life by **39%** with superior durability

Customer result: The G8415 grade significantly outperformed the competitor's solution, extending tool life by 39% in threaded pin machining operations. This improvement reduces tool changes and downtime, leading to enhanced productivity and lower cost per part in steel parting-off applications.

Segment	General engineering
Application	Parting-off
Component	Threaded pin
Material	SAE 1045
Coolant	Yes
Dormer Pramet solution	GL3-D300M02-PM:G8415

Machining data			
n	f_n	CD	CW
1350	0.035	8.0	3.0

P2.2



n = spindle speed (rev/min), f_n = feed per revolution (mm/rev), CD = cutting depth (mm), CW = cutting width (mm)

Success stories

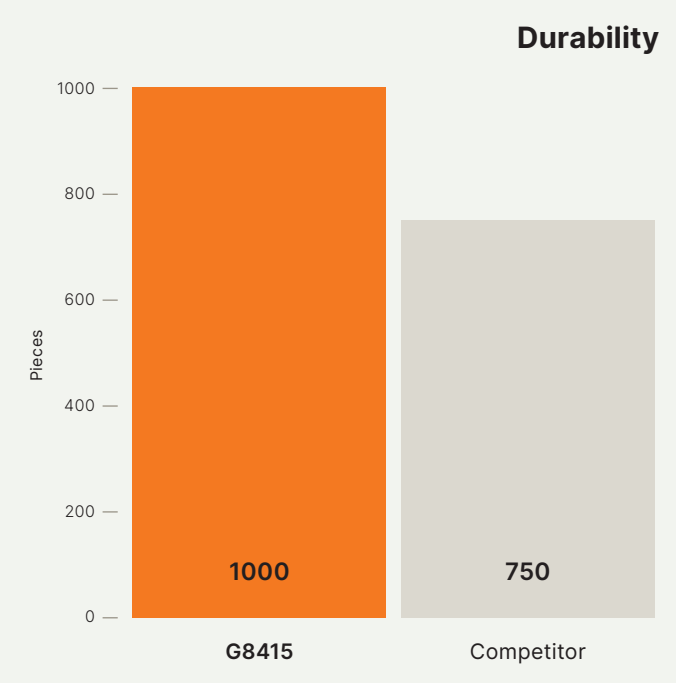
Extend tool life by **33%** while ensuring consistent results

Customer result: The G8415 delivered outstanding performance compared to the competitor's solution. It demonstrated 33% longer tool life, with each cutting edge achieving 1000 cuts before being replaced, compared to 750 cuts with the competitor's grade. This improvement allowed the customer to replace the cutting edges far less frequently, leading to reduced downtime.

Segment	Automotive
Application	Parting-off
Component	Ring
Material	18NiCrMo5
Coolant	Yes
Dormer Pramet solution	GL3-D300M02-PR:G8415

Machining data			
n	f_n	CD	CW
656	0.2	15.0	3.0

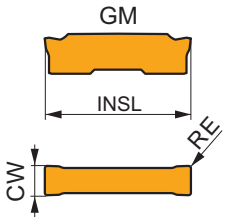
P3.2



n = spindle speed (rev/min), f_n = feed per revolution (mm/rev), CD = cutting depth (mm), CW = cutting width (mm)

GL. D - GM

	CW (mm)	CWTOLL (mm)	CWTOLU (mm)	INSL (mm)
200	2.00	-0.05	0.05	25.0
300	3.00	-0.05	0.05	25.0
400	4.00	-0.05	0.05	25.0
500	5.00	-0.05	0.05	25.0
600	6.00	-0.05	0.05	25.0



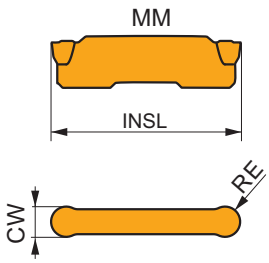
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

GM versatile geometry for grooving and longitudinal turning, and continuous to interrupted cuts.

Product	●	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
GL2-D200M02-GM:G8415	●	0.2	155	0.15	0.8	80	0.14	0.8	140	0.15	0.8	–	–	–	35	0.11	0.6	–	–	–
GL3-D300M02-GM:G8415	●	0.2	155	0.20	1.0	80	0.18	1.0	140	0.20	1.0	–	–	–	35	0.14	0.8	–	–	–
GL3-D300M04-GM:G8415	●	0.4	155	0.20	1.0	80	0.18	1.0	140	0.20	1.0	–	–	–	35	0.14	0.8	–	–	–
GL4-D400M04-GM:G8415	●	0.4	155	0.25	1.2	80	0.23	1.2	140	0.25	1.2	–	–	–	35	0.18	1.0	–	–	–
GL5-D500M08-GM:G8415	●	0.8	155	0.30	1.2	80	0.27	1.2	140	0.30	1.2	–	–	–	35	0.21	1.0	–	–	–
GL6-D600M08-GM:G8415	●	0.8	155	0.30	1.2	80	0.27	1.2	140	0.30	1.2	–	–	–	35	0.21	1.0	–	–	–

GL. D - MM

	CW (mm)	CWTOLL (mm)	CWTOLU (mm)	INSL (mm)
200	2.00	-0.05	0.05	25.0
300	3.00	-0.05	0.05	25.0
400	4.00	-0.05	0.05	25.0
500	5.00	-0.05	0.05	26.0
600	6.00	-0.05	0.05	26.0



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

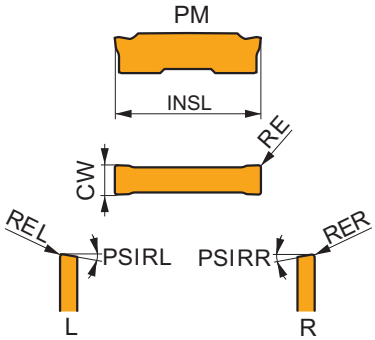
MM geometry, with full radius shape for copy profiling and longitudinal turning, and continuous to interrupted cuts.

Product	●	RE (mm)	P vc (m/min)	P f (mm/rev)	P ap (mm)	M vc (m/min)	M f (mm/rev)	M ap (mm)	K vc (m/min)	K f (mm/rev)	K ap (mm)	N vc (m/min)	N f (mm/rev)	N ap (mm)	S vc (m/min)	S f (mm/rev)	S ap (mm)	H vc (m/min)	H f (mm/rev)	H ap (mm)
GL2-D200MM0-MM:G8415	⬌	1.0	155	0.10	1.0	80	0.09	1.0	140	0.10	1.0	–	–	–	35	0.08	0.8	–	–	–
GL3-D300MM0-MM:G8415	⬌	1.5	155	0.20	1.2	80	0.18	1.2	140	0.20	1.2	–	–	–	35	0.14	1.0	–	–	–
GL4-D400MM0-MM:G8415	⬌	2.0	155	0.20	1.2	80	0.18	1.2	140	0.20	1.2	–	–	–	35	0.14	1.0	–	–	–
GL5-D500MM0-MM:G8415	⬌	2.5	155	0.25	1.2	80	0.23	1.2	140	0.25	1.2	–	–	–	35	0.18	1.0	–	–	–
GL6-D600MM0-MM:G8415	⬌	3.0	155	0.30	1.2	80	0.27	1.2	140	0.30	1.2	–	–	–	35	0.21	1.0	–	–	–

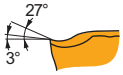
● Stable working conditions ⬌ Unstable working conditions ✱ Heavy working conditions ■ Primary use ◪ Possible use

GL. D - PM

	CW (mm)	CWTOLL (mm)	CWTOLU (mm)	INSL (mm)
200	2.00	-0.05	0.05	25.0
300	3.00	-0.05	0.05	25.0
400	4.00	-0.05	0.05	25.0



Suitability and starting values for cutting speed (vc) and feed (f). Refer to our Machining Calculator app for further calculations.

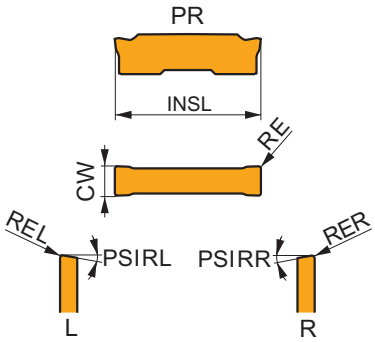


PM geometry with highly positive rake, first choice for parting-off, and continuous to slightly interrupted cuts.

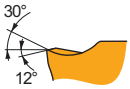
Product	●	RE (mm)	P vc (m/min)	P f (mm/rev)	M vc (m/min)	M f (mm/rev)	K vc (m/min)	K f (mm/rev)	N vc (m/min)	N f (mm/rev)	S vc (m/min)	S f (mm/rev)	H vc (m/min)	H f (mm/rev)	PSIRR (°)	PSIRL (°)
GL2-D200M02-PM:G8415	●	0.2	155	0.08	80	0.07	140	0.08	390	0.10	35	0.06	–	–	–	–
GL3-D300M02-PM:G8415	●	0.2	155	0.10	80	0.09	140	0.10	390	0.12	35	0.07	–	–	–	–
GL4-D400M02-PM:G8415	●	0.2	155	0.12	80	0.11	140	0.12	390	0.14	35	0.10	–	–	–	–

GL. D - PR

	CW (mm)	CWTOLL (mm)	CWTOLU (mm)	INSL (mm)
200	2.00	-0.05	0.05	25.0
300	3.00	-0.05	0.05	25.0
400	4.00	-0.05	0.05	25.0



Suitability and starting values for cutting speed (vc) and feed (f). Refer to our Machining Calculator app for further calculations.



PR geometry with negative T-land, first choice for difficult grooving and parting-off, and continuous to interrupted cuts.

Product	●	RE (mm)	P vc (m/min)	P f (mm/rev)	M vc (m/min)	M f (mm/rev)	K vc (m/min)	K f (mm/rev)	N vc (m/min)	N f (mm/rev)	S vc (m/min)	S f (mm/rev)	H vc (m/min)	H f (mm/rev)	PSIRR (°)	PSIRL (°)
GL2-D200M02-PR:G8415	●	0.2	155	0.10	80	0.09	140	0.10	–	–	–	–	25	0.07	–	–
GL3-D300M02-PR:G8415	●	0.2	155	0.12	80	0.11	140	0.12	–	–	–	–	25	0.08	–	–
GL4-D400M02-PR:G8415	●	0.2	155	0.15	80	0.14	140	0.15	–	–	–	–	25	0.11	–	–

● Stable working conditions ● Unstable working conditions ● Heavy working conditions ■ Primary use ◩ Possible use

Expanded solid carbide end mill range

Precision and durability for steels, stainless steels and cast iron machining

The expanded S9xx solid carbide end mill range introduces two new end mill types square, corner radius, multiple length index in metric and inch assortment. Designed for steel, stainless steel, cast iron, and optionally for non-ferrous materials, it ensures precision and durability across a variety of applications, such side milling, slotting, contouring and ramping.

With 204 new items, the S9xx series delivers versatile, reliable performance and excellent value for automotive subcontractors and general engineering.

Related products

2-flute square medium length

1/16 – 1 inch

4-flute square medium length

2 – 20 mm

1/16 – 1 inch

6-flute square medium length

6 – 20 mm

1/4 – 1 inch

4-flute chamfer

1/16 – 1 inch

2-flute corner radius

3 – 18 mm

4-flute corner radius

3 – 18 mm

1/8 – 1 inch

2-flute square long length

2 – 20 mm

4-flute square long length

2 – 20 mm

1/16 – 1 inch

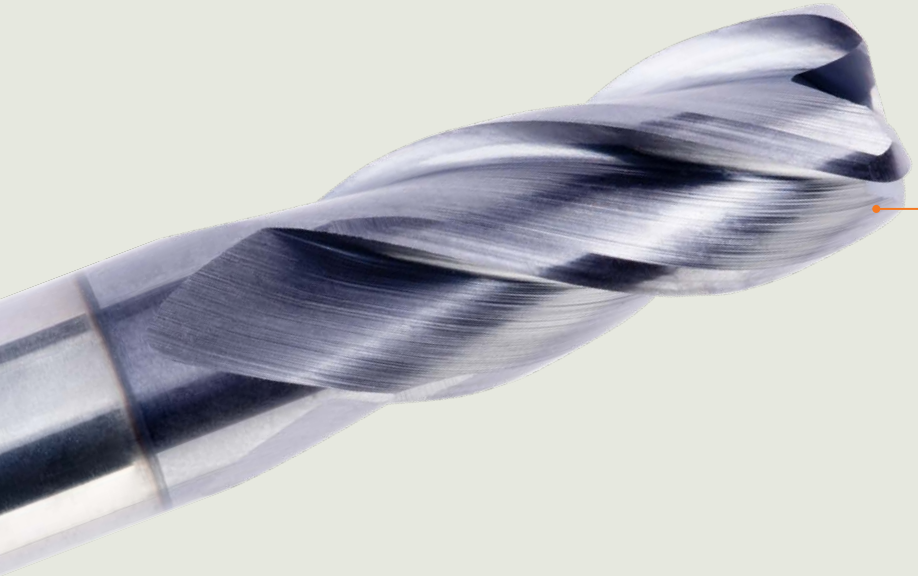
6-flute square long length

6 – 20 mm

1/4 – 1 inch

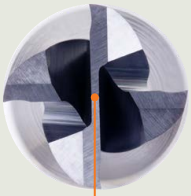
Features & benefits

TiAlN coating for outstanding wear resistance and increased tool life.	**Extended tool life** significantly increases productivity and reduces cost per component.
Versatile cutter geometries including square, corner radius and chamfer options and assorted designs with 2-, 4-, and 6-flute cutters in metric and imperial sizes.	**Operational versatility** enables a wide range of applications including side milling, slotting, contouring and ramping.
Multi-material capability: Suitable for steel, stainless steel, cast iron and optionally non-ferrous materials (stainless steel, expanding usability).	**Versatility** enabling consistent performance across diverse machining tasks or delivering reliable results across a wide range of machining operations.
Optimized flute geometry and robust design with square, chamfer and corner radius designs on end teeth reduce chipping.	**Improved process reliability** reduces downtime and ensures consistent high-quality results.

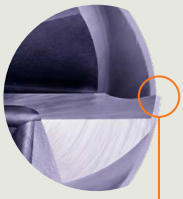


4 Flute

Technical information

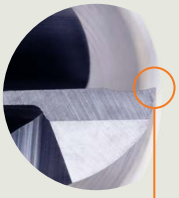


Center cut



CHW

Chamfer



Square

RE

Corner radius

RE

2 Flute

CHW RE

4 Flute

6 Flute

Success stories

Reduce machining time by **80%** in slotting

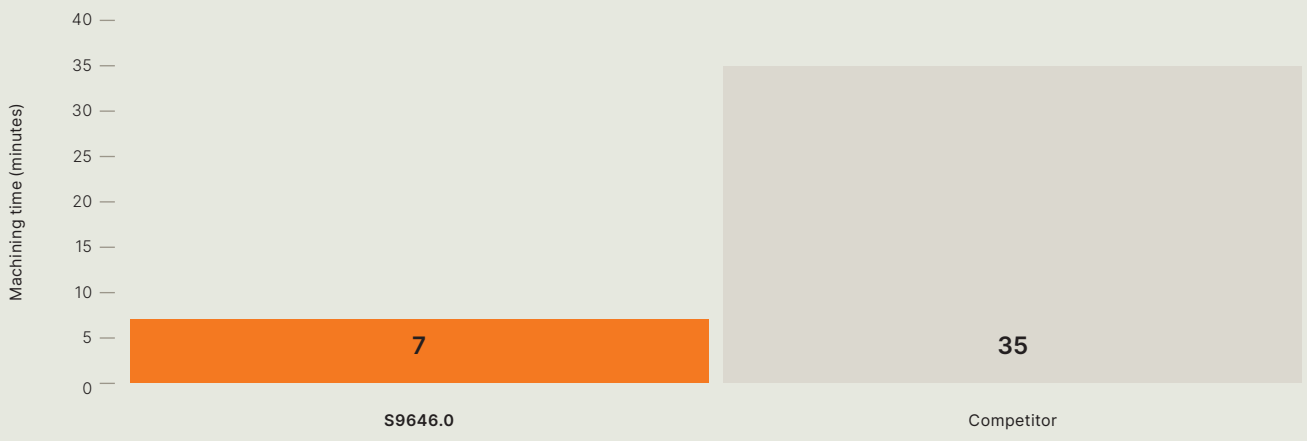
The S964 solid carbide end mill demonstrated outstanding performance in slotting operations on 304 stainless steel. The machining time was reduced from 35 minutes to just 7 minutes per operation, delivering a productivity boost of 400% compared to the competitor.

Segment	Application	Material	Coolant	Dormer Pramet solution
Medical	Slotting	304 Stainless Steel	Yes	S9646.0

Machining data	Competitor	S9646.0
Depth of cut a_p (mm)	0.5	2.0
Width of cut a_e (mm)	6.0	6.0
Cutting speed v_c (m/min)	55	70
Feed per tooth f_z (mm/tooth)	0.022	0.01
Feed rate v_f (m/min)	257	210

M3.1

Productivity (minutes)



Machining examples

Enhance tool life by **16.7%** in demanding milling applications

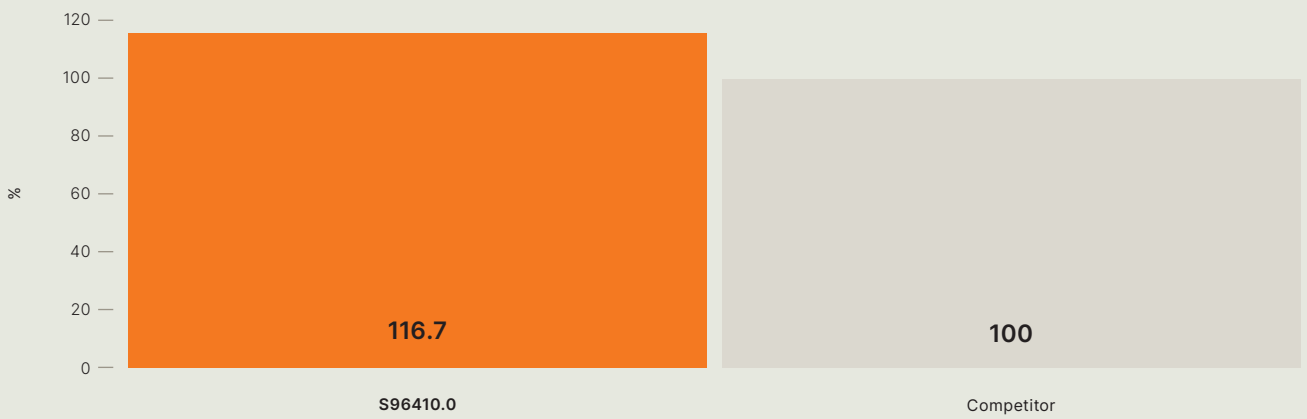
S96410.0 outperformed the competition by achieving 14 linear meters compared to 12 linear meters, extending tool life by 16.7%. The endmill demonstrated superior durability in ramping and slotting operations on SAE 1045 material with coolant, offering better durability and cost savings compared to the competitor's solution.

Segment	Application	Material	Coolant	Dormer Pramet solution
General engineering	Ramping and slotting	SAE 1045	Yes	S96410.0

Machining data	Competitor	S96410.0
Depth of cut a_p (mm)	10.0	10.0
Width of cut a_e (mm)	10.0	10.0
Cutting speed v_c (m/min)	120	120
Feed f_z (mm/tooth)	0.048	0.048
Feed v_f (m/min)	733	733

P2.2

Tool life (%)



Machining examples

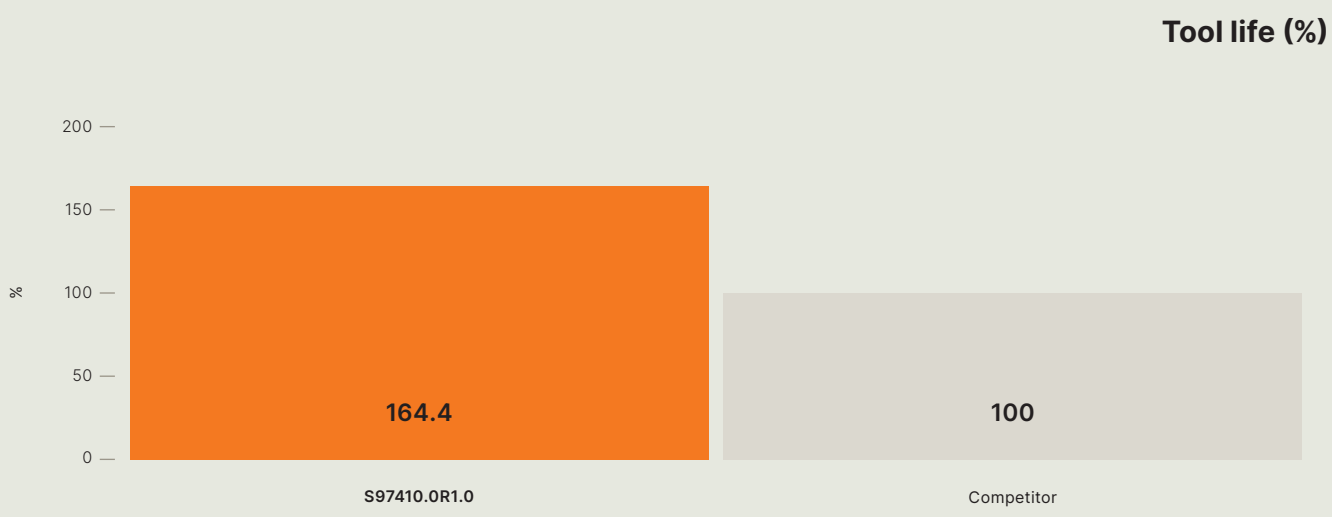
Achieve **64.4%** longer tool life in stainless steel

The S97410.0R1.0 extended tool life by 64.4% compared to the competition in side milling operations on stainless steel. Our endmill achieved 14.8 linear meters without even reaching end of tool life compared to 9 linear meters with the competitor's endmill.

Segment	Application	Material	Coolant	Dormer Pramet solution
General engineering	Side milling	316L Stainless Steel	Yes	S97410.0R1.0

Machining data	Competitor	S97410.0R1.0
Depth of cut a_p (mm)	5.0	5.0
Width of cut a_e (mm)	10.0	10.0
Cutting speed v_c (m/min)	35	35
Feed f_z (mm/tooth)	0.042	0.042
Feed v_f (m/min)	187	187

M3.1



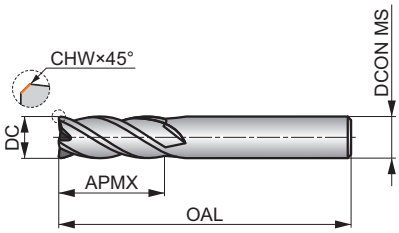
Material code (BMC)		HM	HM	HM	HM	HM	HM	HM	HM	HM
Mill Profile		N	N	N	N	N	N	N	N	N
Number of flutes (NOF)		NOF 4	NOF 2	NOF 4	NOF 2	NOF 4	NOF 6	NOF 2	NOF 4	NOF 6
Cut length										
Flute Helix (FHA)		λ 34°	λ 28°	λ 34°	λ 28°	λ 34°	λ 45°	λ 28°	λ 34°	λ 45°
Radial rake angle (GAMF)		γ 9°	γ 9°	γ 9°	γ 9°	γ 9°	γ 9°	γ 9°	γ 9°	γ 9°
Shank			DIN 6535HA	DIN 6535HA		DIN 6535HA	DIN 6535HA	DIN 6535HA	DIN 6535HA	DIN 6535HA
Coating		TiAlN	TiAlN	TiAlN	TiAlN	TiAlN	TiAlN	TiAlN	TiAlN	TiAlN
Cutting diameter tolerance class (TCDC)		DC h10	DC h10	DC h10	DC h10	DC h10	DC h10	DC h10	DC h10	DC h10
Direction										
Basic standard group (BSG)		WORK NORM	WORK NORM	WORK NORM	WORK NORM	WORK NORM	WORK NORM	WORK NORM	WORK NORM	WORK NORM
Cutting Edge Shape		CHW	RE	RE						
Product Family Code		S954	S972	S974	S962	S964	S966	S982	S984	S986
PSF cutting diameters range		1/16" – 1"	3.00 – 18.00	3.00 – 18.00 1/8" – 1"	1/16" – 1"	2.00 – 20.00 1/16" – 1"	6.00 – 20.00 1/4" – 1"	2.00 – 20.00	2.00 – 20.00 1/16" – 1"	6.00 – 20.00 1/4" – 1"
		150	151	152	154	155	157	158	159	161
P	P1	■	■	■	■	■	■	■	■	■
	P2	■	■	■	■	■	■	■	■	■
	P3	■	■	■	■	■	■	■	■	■
	P4	■	■	■	■	■	■	■	■	■
M	M1	■	■	■	■	■	■	■	■	■
	M2	■	■	■	■	■	■	■	■	■
	M3	■	■	■	■	■	■	■	■	■
	M4									
K	K1	■	■	■	■	■	■	■	■	■
	K2	■	■	■	■	■	■	■	■	■
	K3	■	■	■	■	■	■	■	■	■
	K4	■	■	■	■	■	■	■	■	■
	K5	■	■	■	■	■	■	■	■	■
N	N1	◪	◪	◪	◪	◪	◪	◪	◪	◪
	N2	■	■	■	■	■	■	■	■	■
	N3	◪	◪	◪	◪	◪	◪	◪	◪	◪
	N4	◪	◪	◪	◪	◪	◪	◪	◪	◪
	N5									
S	S1									
	S2									
	S3									
	S4									
H	H1									
	H2									
	H3									
	H4									

■ Primary use ◪ Possible use

S954

4-Flute Solid Carbide Chamfered End Mill

Medium cut length, 4-flute design with 34° helix provides high rigidity for general profile and plunge milling applications. TiALN coating for higher temperature resistance and longer tool life.



HM	N	NOF 4
	λ 34°	γ 9°
	TiAlN	DC h10
	WORK NORM	

Workpiece material group suitability, starting values for cutting speed (m/min) and Alpha Code. Tables with feed per tooth and correction factors can be found starting from page 162.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
158 I	177 I	183 I	135 I	120 I	105 G	117 I	95 G	80 G	70 G	60 G	49 G	35 I	29 I
M2.1	**M2.2**	**M3.1**	**M3.2**	**K1.1**	**K1.2**	**K1.3**	**K2.1**	**K2.2**	**K2.3**	**K3.1**	**K3.2**	**K3.3**	**K4.1**
30 I	26 I	28 I	24 I	120 J	88 J	67 J	128 J	104 J	84 I	114 J	86 J	70 I	105 I
K4.2	**K4.3**	**K4.4**	**K4.5**	**K5.1**	**K5.2**	**K5.3**	**N1.1**	**N1.2**	**N1.3**	**N2.1**	**N2.2**	**N2.3**	**N3.1**
80 I	58 I	50 I	42 I	120 I	90 I	69 I	296 J	222 J	149 J	149 J	133 J	96 J	156 J
N3.2	**N3.3**	**N4.1**	**N4.2**	**N4.3**									
91 J	47 J	156 J	60 J	64 J									

DCON MS tolerance h6.

Product	DC (inch)	DC (mm)	DC (inch)	CHW (inch)	DCON MS (inch)	APMX (inch)	OAL (inch)	NOF
S9541/16	1/16	1.59	0.0630	0.003	0.125	0.250	1.500	4
S9543/32	3/32	2.38	0.0940	0.002	0.125	0.375	1.500	4
S9541/8	1/8	3.18	0.1250	0.004	0.125	0.500	1.500	4
S9545/32	5/32	3.97	0.1560	0.005	0.188	0.563	2.000	4
S9543/16	3/16	4.76	0.1880	0.005	0.188	0.625	2.000	4
S9547/32	7/32	5.56	0.2190	0.005	0.250	0.625	2.500	4
S9541/4	1/4	6.35	0.2500	0.005	0.250	0.750	2.500	4
S9545/16	5/16	7.94	0.3130	0.005	0.313	0.875	2.500	4
S9543/8	3/8	9.53	0.3750	0.006	0.375	0.875	2.500	4
S9547/16	7/16	11.11	0.4380	0.008	0.438	1.000	2.500	4
S9541/2	1/2	12.70	0.5000	0.008	0.500	1.000	3.000	4
S9549/16	9/16	14.29	0.5630	0.008	0.563	1.250	3.500	4
S9545/8	5/8	15.88	0.6250	0.008	0.625	1.250	3.500	4
S9543/4	3/4	19.05	0.7500	0.012	0.750	1.500	4.000	4
S9547/8	7/8	22.23	0.8750	0.008	0.875	1.500	4.000	4
S9541	1	25.40	1.0000	0.012	1.000	1.500	4.000	4

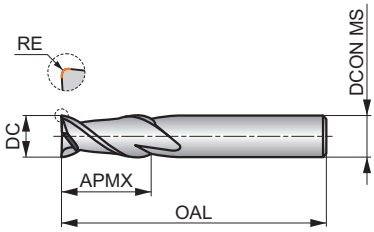
S972

DORMER PRAMET

2-Flute Solid Carbide Corner Radius End Mill

Medium cut length, 2-flute design with different corner radius available, 28° helix provides improved rigidity for milling standard slots. TiALN coating for higher temperature resistance and longer tool life.

HM	N	NOF 2
	λ 28°	γ 9°
DIN 6535HA	TiAlN	DC h10
	WORK NORM	



Workpiece material group suitability, starting values for cutting speed (m/min) and Alpha Code. Tables with feed per tooth and correction factors can be found starting from page 162.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
■ 158 J	■ 177 J	■ 183 J	■ 135 J	■ 120 J	■ 105 I	■ 117 J	■ 95 I	■ 80 I	■ 70 I	■ 60 I	■ 49 I	■ 55 I	■ 45 I
M2.1	M2.2	M3.1	M3.2	K1.1	K1.2	K1.3	K2.1	K2.2	K2.3	K3.1	K3.2	K3.3	K4.1
■ 47 I	■ 41 I	■ 44 I	■ 38 I	■ 120 J	■ 88 J	■ 67 J	■ 128 J	■ 104 J	■ 84 I	■ 114 J	■ 86 J	■ 70 I	■ 105 I
K4.2	K4.3	K4.4	K4.5	K5.1	K5.2	K5.3	N1.1	N1.2	N1.3	N2.1	N2.2	N2.3	N3.1
■ 80 I	■ 58 I	■ 50 I	■ 42 I	■ 120 I	■ 90 I	■ 69 I	◪ 296 J	◪ 222 J	■ 149 J	■ 149 J	■ 133 J	■ 96 J	■ 156 J
N3.2	N3.3	N4.1	N4.2	N4.3									
◪ 91 J	◪ 47 J	◪ 156 J	◪ 60 J	◪ 64 J									

DCON MS tolerance h6.

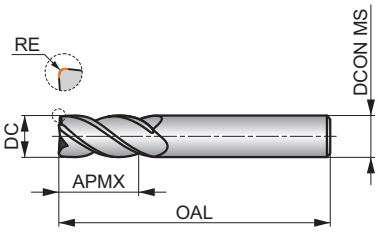
Product	DC (mm)	DC (inch)	RE (mm)	DCON MS (mm)	APMX (mm)	OAL (mm)	NOF
S9723.0XR0.3	3.00	0.1180	0.30	3.00	12.00	38.0	2
S9724.0XR0.3	4.00	0.1570	0.30	4.00	14.00	50.0	2
S9724.0XR0.5	4.00	0.1570	0.50	4.00	14.00	50.0	2
S9725.0XR0.3	5.00	0.1970	0.30	5.00	16.00	50.0	2
S9725.0XR0.5	5.00	0.1970	0.50	5.00	16.00	50.0	2
S9726.0XR0.5	6.00	0.2360	0.50	6.00	19.00	57.0	2
S9726.0XR1.0	6.00	0.2360	1.00	6.00	19.00	57.0	2
S9728.0XR0.5	8.00	0.3150	0.50	8.00	19.00	63.0	2
S9728.0XR1.0	8.00	0.3150	1.00	8.00	19.00	63.0	2
S97210.0XR0.5	10.00	0.3940	0.50	10.00	22.00	72.0	2
S97210.0XR1.0	10.00	0.3940	1.00	10.00	22.00	72.0	2
S97210.0XR2.0	10.00	0.3940	2.00	10.00	22.00	72.0	2
S97212.0XR1.0	12.00	0.4720	1.00	12.00	25.00	73.0	2
S97212.0XR2.0	12.00	0.4720	2.00	12.00	25.00	73.0	2
S97212.0XR3.0	12.00	0.4720	3.00	12.00	25.00	73.0	2
S97216.0XR1.0	16.00	0.6300	1.00	16.00	32.00	92.0	2
S97216.0XR2.0	16.00	0.6300	2.00	16.00	32.00	92.0	2
S97216.0XR3.0	16.00	0.6300	3.00	16.00	32.00	92.0	2
S97218.0XR2.0	18.00	0.7090	2.00	18.00	32.00	92.0	2

S974

DORMER PRAMET

4-Flute Solid Carbide Corner Radius End Mill

Medium cut length, 4-flute design with different corner radius available, 34° helix provides improved surface finish, when milling contours where a corner radius is requires. TiALN coating for higher temperature resistance and longer tool life.



HM	N	NOF 4
	λ 34°	γ 9°
DIN 6535HA	TiAlN	DC h10
	WORK NORM	

Workpiece material group suitability, starting values for cutting speed (m/min) and Alpha Code. Tables with feed per tooth and correction factors can be found starting from page 162.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
■ 158 J	■ 177 J	■ 183 J	■ 135 J	■ 120 J	■ 105 I	■ 117 J	■ 95 I	■ 80 I	■ 70 I	■ 60 I	■ 49 I	■ 55 I	■ 45 I
M2.1	M2.2	M3.1	M3.2	K1.1	K1.2	K1.3	K2.1	K2.2	K2.3	K3.1	K3.2	K3.3	K4.1
■ 47 I	■ 41 I	■ 44 I	■ 38 I	■ 120 J	■ 88 J	■ 67 J	■ 128 J	■ 104 J	■ 84 I	■ 114 J	■ 86 J	■ 70 I	■ 105 I
K4.2	K4.3	K4.4	K4.5	K5.1	K5.2	K5.3	N1.1	N1.2	N1.3	N2.1	N2.2	N2.3	N3.1
■ 80 I	■ 58 I	■ 50 I	■ 42 I	■ 120 I	■ 90 I	■ 69 I	◪ 296 J	◪ 222 J	■ 149 J	■ 149 J	■ 133 J	■ 96 J	■ 156 J
N3.2	N3.3	N4.1	N4.2	N4.3									
◪ 91 J	◪ 47 J	◪ 156 J	◪ 60 J	◪ 64 J									

DCON MS tolerance h6.

Product	DC (inch)	DC (mm)	DC (inch)	RE (mm)	RE (inch)	DCON MS (mm)	DCON MS (inch)	APMX (mm)	APMX (inch)	OAL (mm)	OAL (inch)	NOF
S9743.0XR0.3	–	3.00	0.1180	0.30	0.0120	3.00	0.118	12.00	0.472	38.0	1.496	4
S9741/8XR.015 [1]	1/8	3.18	0.1250	0.38	0.0150	3.18	0.125	12.70	0.500	38.1	1.500	4
S9741/8XR.030 [1]	1/8	3.18	0.1250	0.76	0.0300	3.18	0.125	12.70	0.500	38.1	1.500	4
S9744.0XR0.3	–	4.00	0.1570	0.30	0.0120	4.00	0.157	14.00	0.551	50.0	1.969	4
S9744.0XR0.5	–	4.00	0.1570	0.50	0.0200	4.00	0.157	14.00	0.551	50.0	1.969	4
S9743/16XR.015 [1]	3/16	4.76	0.1880	0.38	0.0150	4.76	0.188	15.88	0.625	50.8	2.000	4
S9743/16XR.030 [1]	3/16	4.76	0.1880	0.76	0.0300	4.76	0.188	15.88	0.625	50.8	2.000	4
S9745.0XR0.3	–	5.00	0.1970	0.30	0.0120	5.00	0.197	16.00	0.630	50.0	1.969	4
S9745.0XR0.5	–	5.00	0.1970	0.50	0.0200	5.00	0.197	16.00	0.630	50.0	1.969	4
S9746.0XR0.5	–	6.00	0.2360	0.50	0.0200	6.00	0.236	19.00	0.748	57.0	2.244	4
S9746.0XR1.0	–	6.00	0.2360	1.00	0.0390	6.00	0.236	19.00	0.748	57.0	2.244	4
S9741/4XR.015 [1]	1/4	6.35	0.2500	0.38	0.0150	6.35	0.250	19.05	0.750	63.5	2.500	4
S9741/4XR.030 [1]	1/4	6.35	0.2500	0.76	0.0300	6.35	0.250	19.05	0.750	63.5	2.500	4
S9745/16XR.015 [1]	5/16	7.94	0.3130	0.38	0.0150	7.94	0.313	22.23	0.875	63.5	2.500	4
S9745/16XR.030 [1]	5/16	7.94	0.3130	0.76	0.0300	7.94	0.313	22.23	0.875	63.5	2.500	4
S9748.0XR0.5	–	8.00	0.3150	0.50	0.0200	8.00	0.315	19.00	0.748	63.0	2.480	4
S9748.0XR1.0	–	8.00	0.3150	1.00	0.0390	8.00	0.315	19.00	0.748	63.0	2.480	4
S9743/8XR.015 [1]	3/8	9.53	0.3750	0.38	0.0150	9.53	0.375	22.23	0.875	63.5	2.500	4
S9743/8XR.030 [1]	3/8	9.53	0.3750	0.76	0.0300	9.53	0.375	22.23	0.875	63.5	2.500	4
S97410.0XR0.5	–	10.00	0.3940	0.50	0.0200	10.00	0.394	22.00	0.866	72.0	2.835	4
S97410.0XR1.0	–	10.00	0.3940	1.00	0.0390	10.00	0.394	22.00	0.866	72.0	2.835	4
S97410.0XR2.0	–	10.00	0.3940	2.00	0.0790	10.00	0.394	22.00	0.866	72.0	2.835	4
S9747/16XR.020 [1]	7/16	11.11	0.4380	0.51	0.0200	11.11	0.438	25.40	1.000	63.5	2.500	4
S9747/16XR.045 [1]	7/16	11.11	0.4380	1.14	0.0450	11.11	0.438	25.40	1.000	63.5	2.500	4
S97412.0XR1.0	–	12.00	0.4720	1.00	0.0390	12.00	0.472	25.00	0.984	73.0	2.874	4

Product	DC	DC	DC	RE	RE	DCON MS	DCON MS	APMX	APMX	OAL	OAL	NOF
	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	
S97412.0XR2.0	–	12.00	0.4720	2.00	0.0790	12.00	0.472	25.00	0.984	73.0	2.874	4
S97412.0XR3.0	–	12.00	0.4720	3.00	0.1180	12.00	0.472	25.00	0.984	73.0	2.874	4
S9741/2XR.030 [1]	1/2	12.70	0.5000	0.76	0.0300	12.70	0.500	25.40	1.000	76.2	3.000	4
S9741/2XR.060 [1]	1/2	12.70	0.5000	1.52	0.0600	12.70	0.500	25.40	1.000	76.2	3.000	4
S9749/16XR.045 [1]	9/16	14.29	0.5630	1.14	0.0450	14.29	0.563	31.75	1.250	88.9	3.500	4
S9749/16XR.060 [1]	9/16	14.29	0.5630	1.52	0.0600	14.29	0.563	31.75	1.250	88.9	3.500	4
S9745/8XR.060 [1]	5/8	15.88	0.6250	1.52	0.0600	15.88	0.625	31.75	1.250	88.9	3.500	4
S9745/8XR.090 [1]	5/8	15.88	0.6250	2.29	0.0900	15.88	0.625	31.75	1.250	88.9	3.500	4
S97416.0XR1.0	–	16.00	0.6300	1.00	0.0390	16.00	0.630	32.00	1.260	92.0	3.622	4
S97416.0XR2.0	–	16.00	0.6300	2.00	0.0790	16.00	0.630	32.00	1.260	92.0	3.622	4
S97416.0XR3.0	–	16.00	0.6300	3.00	0.1180	16.00	0.630	32.00	1.260	92.0	3.622	4
S97418.0XR2.0	–	18.00	0.7090	2.00	0.0790	18.00	0.709	32.00	1.260	92.0	3.622	4
S9743/4XR.030 [1]	3/4	19.05	0.7500	0.76	0.0300	19.05	0.750	38.10	1.500	101.6	4.000	4
S9743/4XR.060 [1]	3/4	19.05	0.7500	1.52	0.0600	19.05	0.750	38.10	1.500	101.6	4.000	4
S9741XR.030 [1]	1	25.40	1.0000	0.76	0.0300	25.40	1.000	38.10	1.500	101.6	4.000	4

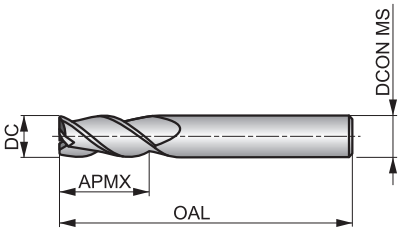
[1] Cylindrical shank.

S962

2-Flute Solid Carbide End Mill

Medium cut length, 2-flute design with 28° helix provides higher rigidity for milling standard slots. TiALN coating for higher temperature resistance and longer tool life.

HM	N	NOF 2
	λ 28°	γ 9°
	TiAlN	DC h10
	WORK NORM	



Workpiece material group suitability, starting values for cutting speed (m/min) and Alpha Code. Tables with feed per tooth and correction factors can be found starting from page 162.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
■ 158 I	■ 177 I	■ 183 I	■ 135 I	■ 120 I	■ 105 G	■ 117 I	■ 95 G	■ 80 G	■ 70 G	■ 60 G	■ 49 G	■ 35 I	■ 29 I
M2.1	**M2.2**	**M3.1**	**M3.2**	**K1.1**	**K1.2**	**K1.3**	**K2.1**	**K2.2**	**K2.3**	**K3.1**	**K3.2**	**K3.3**	**K4.1**
■ 30 I	■ 26 I	■ 28 I	■ 24 I	■ 120 J	■ 88 J	■ 67 J	■ 128 J	■ 104 J	■ 84 I	■ 114 J	■ 86 J	■ 70 I	■ 105 I
K4.2	**K4.3**	**K4.4**	**K4.5**	**K5.1**	**K5.2**	**K5.3**	**N1.1**	**N1.2**	**N1.3**	**N2.1**	**N2.2**	**N2.3**	**N3.1**
■ 80 I	■ 58 I	■ 50 I	■ 42 I	■ 120 I	■ 90 I	■ 69 I	◪ 296 J	◪ 222 J	■ 149 J	■ 149 J	■ 133 J	■ 96 J	■ 156 J
N3.2	**N3.3**	**N4.1**	**N4.2**	**N4.3**									
◪ 91 J	◪ 47 J	◪ 156 J	◪ 60 J	◪ 64 J									

DCON MS tolerance h6.

Product	DC (inch)	DC (mm)	DC (inch)	DCON MS (inch)	APMX (inch)	OAL (inch)	NOF
S9621/16	1/16	1.59	0.0630	0.125	0.250	1.500	2
S9623/32	3/32	2.38	0.0940	0.125	0.375	1.500	2
S9621/8	1/8	3.18	0.1250	0.125	0.500	1.500	2
S9625/32	5/32	3.97	0.1560	0.188	0.563	2.000	2
S9623/16	3/16	4.76	0.1880	0.188	0.625	2.000	2
S9627/32	7/32	5.56	0.2190	0.250	0.625	2.500	2
S9621/4	1/4	6.35	0.2500	0.250	0.750	2.500	2
S9625/16	5/16	7.94	0.3130	0.313	0.875	2.500	2
S9623/8	3/8	9.53	0.3750	0.375	0.875	2.500	2
S9627/16	7/16	11.11	0.4380	0.438	1.000	2.500	2
S9621/2	1/2	12.70	0.5000	0.500	1.000	3.000	2
S9629/16	9/16	14.29	0.5630	0.563	1.250	3.500	2
S9625/8	5/8	15.88	0.6250	0.625	1.250	3.500	2
S96211/16	11/16	17.46	0.6880	0.750	1.500	2.000	2
S9623/4	3/4	19.05	0.7500	0.750	1.500	4.000	2
S9627/8	7/8	22.23	0.8750	0.875	1.500	4.000	2
S9621	1	25.40	1.0000	1.000	1.500	4.000	2

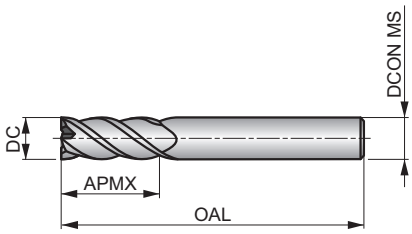
S964

DORMER PRAMET

4-Flute Solid Carbide End Mill

Medium cut length, 4-flute design with 34° helix provides high rigidity for profile milling. TiALN coating for higher temperature resistance and longer tool life.

HM	N	NOF 4
	λ 34°	γ 9°
DIN 6535HA	TiAlN	DC h10
	WORK NORM	



Workpiece material group suitability, starting values for cutting speed (m/min) and Alpha Code. Tables with feed per tooth and correction factors can be found starting from page 162.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
■ 158 I	■ 177 I	■ 183 I	■ 135 I	■ 120 I	■ 105 G	■ 117 I	■ 95 G	■ 80 G	■ 70 G	■ 60 G	■ 49 G	■ 35 I	■ 29 I
M2.1	M2.2	M3.1	M3.2	K1.1	K1.2	K1.3	K2.1	K2.2	K2.3	K3.1	K3.2	K3.3	K4.1
■ 30 I	■ 26 I	■ 28 I	■ 24 I	■ 120 J	■ 88 J	■ 67 J	■ 128 J	■ 104 J	■ 84 I	■ 114 J	■ 86 J	■ 70 I	■ 105 I
K4.2	K4.3	K4.4	K4.5	K5.1	K5.2	K5.3	N1.1	N1.2	N1.3	N2.1	N2.2	N2.3	N3.1
■ 80 I	■ 58 I	■ 50 I	■ 42 I	■ 120 I	■ 90 I	■ 69 I	◪ 296 J	◪ 222 J	■ 149 J	■ 149 J	■ 133 J	■ 96 J	■ 156 J
N3.2	N3.3	N4.1	N4.2	N4.3									
◪ 91 J	◪ 47 J	◪ 156 J	◪ 60 J	◪ 64 J									

DCON MS tolerance h6.

Product	DC (inch)	DC (mm)	DC (inch)	DCON MS (inch)	DCON MS (mm)	APMX (inch)	APMX (mm)	OAL (inch)	OAL (mm)	NOF
S9641/16 [1)]	1/16	1.59	0.0630	0.125	3.18	0.250	6.35	1.500	38.1	4
S9642.0	–	2.00	0.0790	0.118	3.00	0.236	6.00	1.496	38.0	4
S9643/32 [1)]	3/32	2.38	0.0940	0.125	3.18	0.375	9.53	1.500	38.1	4
S9642.5	–	2.50	0.0980	0.118	3.00	0.354	9.00	1.496	38.0	4
S9643.0	–	3.00	0.1180	0.118	3.00	0.472	12.00	1.496	38.0	4
S9641/8 [1)]	1/8	3.18	0.1250	0.125	3.18	0.500	12.70	1.500	38.1	4
S9645/32 [1)]	5/32	3.97	0.1560	0.188	4.76	0.563	14.29	2.000	50.8	4
S9644.0	–	4.00	0.1570	0.157	4.00	0.551	14.00	1.969	50.0	4
S9643/16 [1)]	3/16	4.76	0.1880	0.188	4.76	0.625	15.88	2.000	50.8	4
S9645.0	–	5.00	0.1970	0.197	5.00	0.630	16.00	1.969	50.0	4
S9647/32 [1)]	7/32	5.56	0.2190	0.250	6.35	0.625	15.88	2.500	63.5	4
S9646.0	–	6.00	0.2360	0.236	6.00	0.748	19.00	2.244	57.0	4
S9641/4 [1)]	1/4	6.35	0.2500	0.250	6.35	0.750	19.05	2.500	63.5	4
S9647.0	–	7.00	0.2760	0.315	8.00	0.748	19.00	2.480	63.0	4
S9645/16 [1)]	5/16	7.94	0.3130	0.313	7.94	0.875	22.23	2.500	63.5	4
S9648.0	–	8.00	0.3150	0.315	8.00	0.748	19.00	2.480	63.0	4
S9649.0	–	9.00	0.3540	0.394	10.00	0.827	21.00	2.835	72.0	4
S9643/8 [1)]	3/8	9.53	0.3750	0.375	9.53	0.875	22.23	2.500	63.5	4
S96410.0	–	10.00	0.3940	0.394	10.00	0.866	22.00	2.835	72.0	4
S9647/16 [1)]	7/16	11.11	0.4380	0.438	11.11	1.000	25.40	2.500	63.5	4
S96412.0	–	12.00	0.4720	0.472	12.00	0.984	25.00	2.874	73.0	4
S9641/2 [1)]	1/2	12.70	0.5000	0.500	12.70	1.000	25.40	3.000	76.2	4
S96414.0	–	14.00	0.5510	0.551	14.00	1.181	30.00	3.268	83.0	4
S9649/16 [1)]	9/16	14.29	0.5630	0.563	14.29	1.250	31.75	3.500	88.9	4
S9645/8 [1)]	5/8	15.88	0.6250	0.625	15.88	1.250	31.75	3.500	88.9	4

Product	DC	DC	DC	DCON MS	DCON MS	APMX	APMX	OAL	OAL	NOF
	(inch)	(mm)	(inch)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	
S96416.0	–	16.00	0.6300	0.630	16.00	1.260	32.00	3.622	92.0	4
S96418.0	–	18.00	0.7090	0.709	18.00	1.260	32.00	3.622	92.0	4
S9643/4 [1]	3/4	19.05	0.7500	0.750	19.05	1.500	38.10	4.000	101.6	4
S96420.0	–	20.00	0.7870	0.787	20.00	1.496	38.00	4.094	104.0	4
S9647/8 [1]	7/8	22.23	0.8750	0.875	22.23	1.500	38.10	4.000	101.6	4
S9641 [1]	1	25.40	1.0000	1.000	25.40	1.500	38.10	4.000	101.6	4

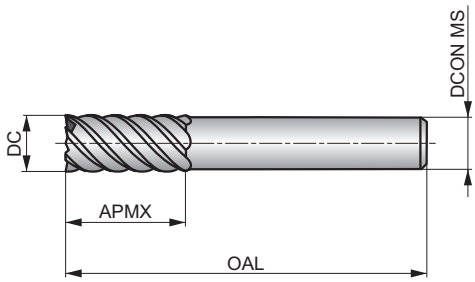
[1] Cylindrical shank.

S966

6-Flute Solid Carbide End Mill

Medium cut length, 6-flute design with 45° helix provides high rigidity for profile finishing. TiALN coating for higher temperature resistance and longer tool life.

HM	N	NOF 6
	λ 45°	γ 9°
DIN 6535HA	TiAlN	DC h10
	WORK NORM	



Workpiece material group suitability, starting values for cutting speed (m/min) and Alpha Code. Tables with feed per tooth and correction factors can be found starting from page 162.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
■ 85 F	■ 96 F	■ 99 F	■ 73 F	■ 65 F	■ 57 F	■ 63 F	■ 51 F	■ 43 F	■ 38 F	■ 32 F	■ 27 F	■ 35 I	■ 29 I
M2.1	M2.2	M3.1	M3.2	K1.1	K1.2	K1.3	K2.1	K2.2	K2.3	K3.1	K3.2	K3.3	K4.1
■ 30 I	■ 26 I	■ 28 I	■ 24 I	■ 65 J	■ 48 J	■ 36 J	■ 69 J	■ 56 J	■ 45 I	■ 62 J	■ 46 J	■ 38 I	■ 57 I
K4.2	K4.3	K4.4	K4.5	K5.1	K5.2	K5.3	N1.1	N1.2	N1.3	N2.1	N2.2	N2.3	N3.1
■ 43 I	■ 31 I	■ 27 I	■ 23 I	■ 65 I	■ 49 I	■ 37 I	◪ 296 J	◪ 222 J	■ 149 J	■ 149 J	■ 133 J	■ 96 J	■ 156 J
N3.2	N3.3	N4.1	N4.2	N4.3									
◪ 91 J	◪ 47 J	◪ 156 J	◪ 60 J	◪ 64 J									

DCON MS tolerance h6.

Product	DC (inch)	DC (mm)	DC (inch)	DCON MS (inch)	DCON MS (mm)	APMX (inch)	APMX (mm)	OAL (inch)	OAL (mm)	NOF
S9666.0	–	6.00	0.2360	0.236	6.00	0.748	19.00	2.244	57.0	6
S9661/4 [1]	1/4	6.35	0.2500	0.250	6.35	0.750	19.05	2.500	63.5	6
S9665/16 [1]	5/16	7.94	0.3130	0.313	7.94	0.875	22.23	2.500	63.5	6
S9668.0	–	8.00	0.3150	0.315	8.00	0.748	19.00	2.480	63.0	6
S9663/8 [1]	3/8	9.53	0.3750	0.375	9.53	0.875	22.23	2.500	63.5	6
S96610.0	–	10.00	0.3940	0.394	10.00	0.866	22.00	2.835	72.0	6
S9667/16 [1]	7/16	11.11	0.4380	0.438	11.11	1.000	25.40	2.500	63.5	6
S96612.0	–	12.00	0.4720	0.472	12.00	1.024	26.00	3.268	83.0	6
S9661/2 [1]	1/2	12.70	0.5000	0.500	12.70	1.000	25.40	3.000	76.2	6
S9669/16 [1]	9/16	14.29	0.5630	0.563	14.29	1.250	31.75	3.500	88.9	6
S9665/8 [1]	5/8	15.88	0.6250	0.625	15.88	1.250	31.75	3.500	88.9	6
S96616.0	–	16.00	0.6300	0.630	16.00	1.260	32.00	3.622	92.0	6
S96611/16 [1]	11/16	17.46	0.6880	0.750	19.05	1.500	38.10	4.000	101.6	6
S9663/4 [1]	3/4	19.05	0.7500	0.750	19.05	1.500	38.10	4.000	101.6	6
S96620.0	–	20.00	0.7870	0.787	20.00	1.496	38.00	4.094	104.0	6
S9667/8 [1]	7/8	22.23	0.8750	0.875	22.23	1.500	38.10	4.000	101.6	6
S9661 [1]	1	25.40	1.0000	1.000	25.40	1.500	38.10	4.000	101.6	6

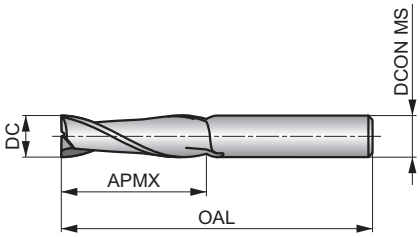
[1] Cylindrical shank.

S982

2-Flute Solid Carbide End Mill

Long cut length, 2-flute design with 28° helix provides higher rigidity for milling deep slots. TiALN coating for higher temperature resistance and longer tool life.

HM	N	NOF 2
	λ 28°	γ 9°
DIN 6535HA	TiAlN	DC h10
	WORK NORM	



Workpiece material group suitability, starting values for cutting speed (m/min) and Alpha Code. Tables with feed per tooth and correction factors can be found starting from page 162.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
■ 158 I	■ 177 I	■ 183 I	■ 135 I	■ 120 I	■ 105 G	■ 117 I	■ 95 G	■ 80 G	■ 70 G	■ 60 G	■ 49 G	■ 35 I	■ 29 I
M2.1	M2.2	M3.1	M3.2	K1.1	K1.2	K1.3	K2.1	K2.2	K2.3	K3.1	K3.2	K3.3	K4.1
■ 30 I	■ 26 I	■ 28 I	■ 24 I	■ 120 J	■ 88 J	■ 67 J	■ 128 J	■ 104 J	■ 84 I	■ 114 J	■ 86 J	■ 70 I	■ 105 I
K4.2	K4.3	K4.4	K4.5	K5.1	K5.2	K5.3	N1.1	N1.2	N1.3	N2.1	N2.2	N2.3	N3.1
■ 80 I	■ 58 I	■ 50 I	■ 42 I	■ 120 I	■ 90 I	■ 69 I	◪ 296 J	◪ 222 J	■ 149 J	■ 149 J	■ 133 J	■ 96 J	■ 156 J
N3.2	N3.3	N4.1	N4.2	N4.3									
◪ 91 J	◪ 47 J	◪ 156 J	◪ 60 J	◪ 64 J									

DCON MS tolerance h6.

Product	DC (mm)	DC (inch)	DCON MS (mm)	APMX (mm)	OAL (mm)	NOF
S9822.0	2.00	0.0790	3.00	19.00	60.0	2
S9822.5	2.50	0.0980	3.00	19.00	60.0	2
S9823.0	3.00	0.1180	3.00	19.00	60.0	2
S9824.0	4.00	0.1570	4.00	19.00	60.0	2
S9825.0	5.00	0.1970	5.00	19.00	60.0	2
S9826.0	6.00	0.2360	6.00	31.00	75.0	2
S9827.0	7.00	0.2760	8.00	31.00	75.0	2
S9828.0	8.00	0.3150	8.00	31.00	75.0	2
S9829.0	9.00	0.3540	10.00	31.00	75.0	2
S98210.0	10.00	0.3940	10.00	31.00	75.0	2
S98212.0	12.00	0.4720	12.00	50.00	100.0	2
S98214.0	14.00	0.5510	14.00	57.00	125.0	2
S98216.0	16.00	0.6300	16.00	57.00	125.0	2
S98218.0	18.00	0.7090	18.00	57.00	125.0	2
S98220.0	20.00	0.7870	20.00	57.00	125.0	2

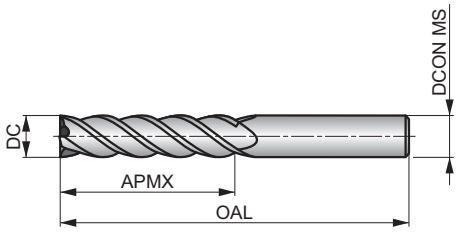
S984

DORMER PRAMET

4-Flute Solid Carbide End Mill

Long cut length, 4-flute design with 34° helix provides high rigidity for milling deep walls. TiALN coating improves performance and extends the tool life.

HM	N	NOF 4
	λ 34°	γ 9°
DIN 6535HA	TiAlN	DC h10
	WORK NORM	



Workpiece material group suitability, starting values for cutting speed (m/min) and Alpha Code. Tables with feed per tooth and correction factors can be found starting from page 162.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
■ 158 I	■ 177 I	■ 183 I	■ 135 I	■ 120 I	■ 105 G	■ 117 I	■ 95 G	■ 80 G	■ 70 G	■ 60 G	■ 49 G	■ 35 I	■ 29 I
M2.1	M2.2	M3.1	M3.2	K1.1	K1.2	K1.3	K2.1	K2.2	K2.3	K3.1	K3.2	K3.3	K4.1
■ 30 I	■ 26 I	■ 28 I	■ 24 I	■ 120 J	■ 88 J	■ 67 J	■ 128 J	■ 104 J	■ 84 I	■ 114 J	■ 86 J	■ 70 I	■ 105 I
K4.2	K4.3	K4.4	K4.5	K5.1	K5.2	K5.3	N1.1	N1.2	N1.3	N2.1	N2.2	N2.3	N3.1
■ 80 I	■ 58 I	■ 50 I	■ 42 I	■ 120 I	■ 90 I	■ 69 I	◪ 296 J	◪ 222 J	■ 149 J	■ 149 J	■ 133 J	■ 96 J	■ 156 J
N3.2	N3.3	N4.1	N4.2	N4.3									
◪ 91 J	◪ 47 J	◪ 156 J	◪ 60 J	◪ 64 J									

DCON MS tolerance h6.

Product	DC (inch)	DC (mm)	DC (inch)	DCON MS (mm)	DCON MS (inch)	APMX (mm)	APMX (inch)	OAL (mm)	OAL (inch)	NOF
S9841/16 [1]	1/16	1.59	0.0630	3.18	0.125	19.05	0.750	50.8	2.000	4
S9842.0	–	2.00	0.0790	3.00	0.118	19.00	0.748	60.0	2.362	4
S9843/32 [1]	3/32	2.38	0.0940	3.18	0.125	19.05	0.750	50.8	2.000	4
S9842.5	–	2.50	0.0980	3.00	0.118	19.00	0.748	60.0	2.362	4
S9843.0	–	3.00	0.1180	3.00	0.118	19.00	0.748	60.0	2.362	4
S9841/8 [1]	1/8	3.18	0.1250	3.18	0.125	19.05	0.750	50.8	2.000	4
S9845/32 [1]	5/32	3.97	0.1560	4.76	0.188	19.05	0.750	63.5	2.500	4
S9844.0	–	4.00	0.1570	4.00	0.157	19.00	0.748	60.0	2.362	4
S9843/16 [1]	3/16	4.76	0.1880	4.76	0.188	19.05	0.750	63.5	2.500	4
S9845.0	–	5.00	0.1970	5.00	0.197	19.00	0.748	60.0	2.362	4
S9847/32 [1]	7/32	5.56	0.2190	6.35	0.250	28.57	1.125	76.2	3.000	4
S9846.0	–	6.00	0.2360	6.00	0.236	31.00	1.220	75.0	2.953	4
S9841/4 [1]	1/4	6.35	0.2500	6.35	0.250	28.57	1.125	76.2	3.000	4
S9847.0	–	7.00	0.2760	8.00	0.315	31.00	1.220	75.0	2.953	4
S9845/16 [1]	5/16	7.94	0.3130	7.94	0.313	28.57	1.125	76.2	3.000	4
S9848.0	–	8.00	0.3150	8.00	0.315	31.00	1.220	75.0	2.953	4
S9849.0	–	9.00	0.3540	10.00	0.394	31.00	1.220	75.0	2.953	4
S9843/8 [1]	3/8	9.53	0.3750	9.53	0.375	28.57	1.125	76.2	3.000	4
S98410.0	–	10.00	0.3940	10.00	0.394	31.00	1.220	100.0	3.937	4
S9847/16 [1]	7/16	11.11	0.4380	11.11	0.438	50.80	2.000	101.6	4.000	4
S98412.0	–	12.00	0.4720	12.00	0.472	50.00	1.969	100.0	3.937	4
S9841/2 [1]	1/2	12.70	0.5000	12.70	0.500	57.15	2.250	127.0	5.000	4
S98414.0	–	14.00	0.5510	14.00	0.551	57.00	2.244	125.0	4.921	4
S9849/16 [1]	9/16	14.29	0.5630	14.29	0.563	50.80	2.000	101.6	4.000	4
S9845/8 [1]	5/8	15.88	0.6250	15.88	0.625	57.15	2.250	127.0	5.000	4

Product	DC	DC	DC	DCON MS	DCON MS	APMX	APMX	OAL	OAL	NOF
	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	
S98416.0	–	16.00	0.6300	16.00	0.630	57.00	2.244	125.0	4.921	4
S98418.0	–	18.00	0.7090	18.00	0.709	57.00	2.244	125.0	4.921	4
S9843/4 [1]	3/4	19.05	0.7500	19.05	0.750	57.15	2.250	127.0	5.000	4
S98420.0	–	20.00	0.7870	20.00	0.787	57.00	2.244	125.0	4.921	4
S9847/8 [1]	7/8	22.23	0.8750	22.23	0.875	50.80	2.000	101.6	4.000	4
S9841 [1]	1	25.40	1.0000	25.40	1.000	57.15	2.250	127.0	5.000	4

[1] Cylindrical shank.

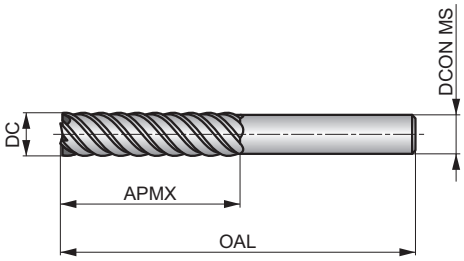
S986

DORMER PRAMET

6-Flute Solid Carbide End Mill

Long cut length, 6-flute design with 45° helix provides high rigidity for finishing of deep walls. TiALN coating for higher temperature resistance and longer tool life.

HM	N	NOF 6
	λ 45°	γ 9°
DIN 6535HA	TiAlN	DC h10
	WORK NORM	



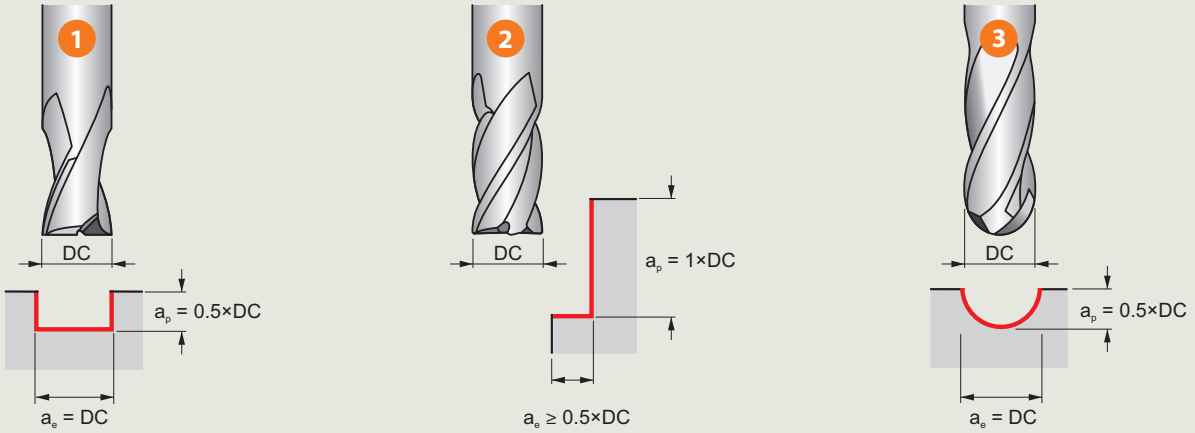
Workpiece material group suitability, starting values for cutting speed (m/min) and Alpha Code. Tables with feed per tooth and correction factors can be found starting from page 162.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
■ 85 F	■ 96 F	■ 99 F	■ 73 F	■ 65 F	■ 57 F	■ 63 F	■ 51 F	■ 43 F	■ 38 F	■ 32 F	■ 27 F	■ 35 I	■ 29 I
M2.1	M2.2	M3.1	M3.2	K1.1	K1.2	K1.3	K2.1	K2.2	K2.3	K3.1	K3.2	K3.3	K4.1
■ 30 I	■ 26 I	■ 28 I	■ 24 I	■ 65 J	■ 48 J	■ 36 J	■ 69 J	■ 56 J	■ 45 I	■ 62 J	■ 46 J	■ 38 I	■ 57 I
K4.2	K4.3	K4.4	K4.5	K5.1	K5.2	K5.3	N1.1	N1.2	N1.3	N2.1	N2.2	N2.3	N3.1
■ 43 I	■ 31 I	■ 27 I	■ 23 I	■ 65 I	■ 49 I	■ 37 I	◪ 296 J	◪ 222 J	■ 149 J	■ 149 J	■ 133 J	■ 96 J	■ 156 J
N3.2	N3.3	N4.1	N4.2	N4.3									
◪ 91 J	◪ 47 J	◪ 156 J	◪ 60 J	◪ 64 J									

DCON MS tolerance h6.

Product	DC (inch)	DC (mm)	DC (inch)	DCON MS (mm)	DCON MS (inch)	APMX (mm)	APMX (inch)	OAL (mm)	OAL (inch)	NOF
S9866.0	–	6.00	0.2360	6.00	0.236	31.00	1.220	75.0	2.953	6
S9861/4 [1]	1/4	6.35	0.2500	6.35	0.250	28.57	1.125	76.2	3.000	6
S9865/16 [1]	5/16	7.94	0.3130	7.94	0.313	28.57	1.125	76.2	3.000	6
S9868.0	–	8.00	0.3150	8.00	0.315	31.00	1.220	75.0	2.953	6
S9863/8 [1]	3/8	9.53	0.3750	9.53	0.375	28.57	1.125	76.2	3.000	6
S98610.0	–	10.00	0.3940	10.00	0.394	31.00	1.220	100.0	3.937	6
S9867/16 [1]	7/16	11.11	0.4380	11.11	0.438	50.80	2.000	101.6	4.000	6
S98612.0	–	12.00	0.4720	12.00	0.472	50.00	1.969	100.0	3.937	6
S9861/2 [1]	1/2	12.70	0.5000	12.70	0.500	50.80	2.000	101.6	4.000	6
S98614.0	–	14.00	0.5510	14.00	0.551	57.00	2.244	125.0	4.921	6
S9869/16 [1]	9/16	14.29	0.5630	14.29	0.563	50.80	2.000	101.6	4.000	6
S9865/8 [1]	5/8	15.88	0.6250	15.88	0.625	57.15	2.250	127.0	5.000	6
S98616.0	–	16.00	0.6300	16.00	0.630	57.00	2.244	125.0	4.921	6
S98618.0	–	18.00	0.7090	18.00	0.709	57.00	2.244	125.0	4.921	6
S9863/4 [1]	3/4	19.05	0.7500	19.05	0.750	57.15	2.250	127.0	5.000	6
S98620.0	–	20.00	0.7870	20.00	0.787	57.00	2.244	125.0	4.921	6
S9867/8 [1]	7/8	22.23	0.8750	22.23	0.875	57.15	2.250	101.6	4.000	6
S9861 [1]	1	25.40	1.0000	25.40	1.000	57.15	2.250	127.0	5.000	6

[1] Cylindrical shank.



Feed per tooth f_z (mm) depending on the working conditions it might be necessary to adjust these values ±25 %.
ONLY if plunging into solid material with a centre cutting end mill the values in this table should be considered as f_n (feed per revolution).

How to use this table to find the feed per tooth f_z:

1. Find your Alpha Code on the product page (example: 199K, "**K**" is the Alpha Code).
2. Find the closest diameter for your cutting application in the top row of the table.
3. Find your Alpha Code in the left column of the table.
4. The intersection (cell) of the Diameter and Alpha Code is the feed per tooth f_z.

FOR SOLID CARBIDE MILLING CUTTERS ONLY

		ø DC (mm)																
		1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	12.0	14.0	16.0	18.0	20.0	22.0	25.0
Feed rates (mm/tooth)	A	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009	0.010	0.011	0.014	0.015	0.017	0.019	0.021	0.025	0.028
	B	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009	0.010	0.011	0.014	0.015	0.017	0.019	0.021	0.025	0.028
	C	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009	0.010	0.011	0.014	0.015	0.017	0.019	0.021	0.025	0.028
	D	0.002	0.003	0.004	0.005	0.007	0.008	0.009	0.010	0.011	0.012	0.014	0.015	0.017	0.019	0.021	0.025	0.028
	E	0.002	0.003	0.004	0.008	0.009	0.012	0.013	0.014	0.015	0.016	0.019	0.021	0.024	0.026	0.028	0.030	0.034
	F	0.002	0.003	0.006	0.010	0.013	0.016	0.017	0.019	0.021	0.022	0.026	0.029	0.032	0.035	0.039	0.042	0.047
	G	0.002	0.005	0.008	0.014	0.018	0.022	0.024	0.026	0.028	0.031	0.035	0.040	0.044	0.048	0.053	0.057	0.064
	I	0.003	0.006	0.011	0.019	0.024	0.030	0.032	0.036	0.039	0.042	0.049	0.054	0.061	0.066	0.073	0.079	0.088
	J	0.004	0.009	0.014	0.026	0.033	0.041	0.044	0.048	0.053	0.057	0.066	0.074	0.083	0.090	0.099	0.107	0.120
	K	0.006	0.012	0.019	0.035	0.044	0.054	0.059	0.064	0.070	0.076	0.088	0.098	0.110	0.120	0.132	0.142	0.160
	N	0.008	0.016	0.025	0.047	0.058	0.072	0.078	0.086	0.094	0.101	0.117	0.131	0.146	0.160	0.175	0.189	0.212
	O	0.010	0.021	0.034	0.062	0.078	0.096	0.104	0.114	0.124	0.135	0.156	0.174	0.195	0.213	0.233	0.252	0.283
	P	0.014	0.028	0.045	0.083	0.104	0.128	0.138	0.152	0.166	0.180	0.207	0.231	0.259	0.283	0.311	0.335	0.376
	R	0.018	0.037	0.060	0.110	0.138	0.170	0.184	0.202	0.221	0.239	0.276	0.308	0.345	0.377	0.414	0.446	0.501
	S	0.024	0.049	0.080	0.147	0.183	0.226	0.245	0.269	0.294	0.318	0.367	0.410	0.459	0.502	0.550	0.593	0.667

Polygon Shank Coupling (PSC) holders for modular BS blades

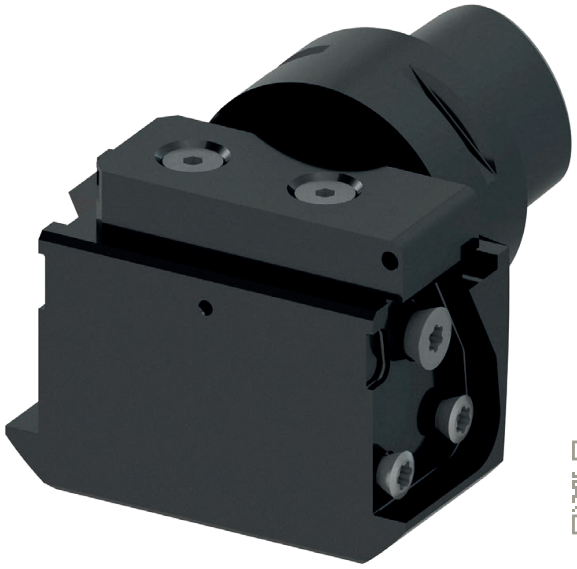
Expand your machining capabilities with cost-effective precision

Our Polygon Shank Coupling (PSC) holders deliver an economical solution for external radial turning applications, seamlessly integrating with our existing BS blade inventory.

Designed for right- or left-side assembly, these modular holders enhance versatility in parting-off and grooving operations without requiring new blade investments.

Related products

C.-BS-F EXT
C4 – C6



GLS BS

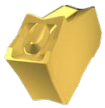
XLCF (NRL) BS

XLXFL BS AXIAL

GL. 2–6

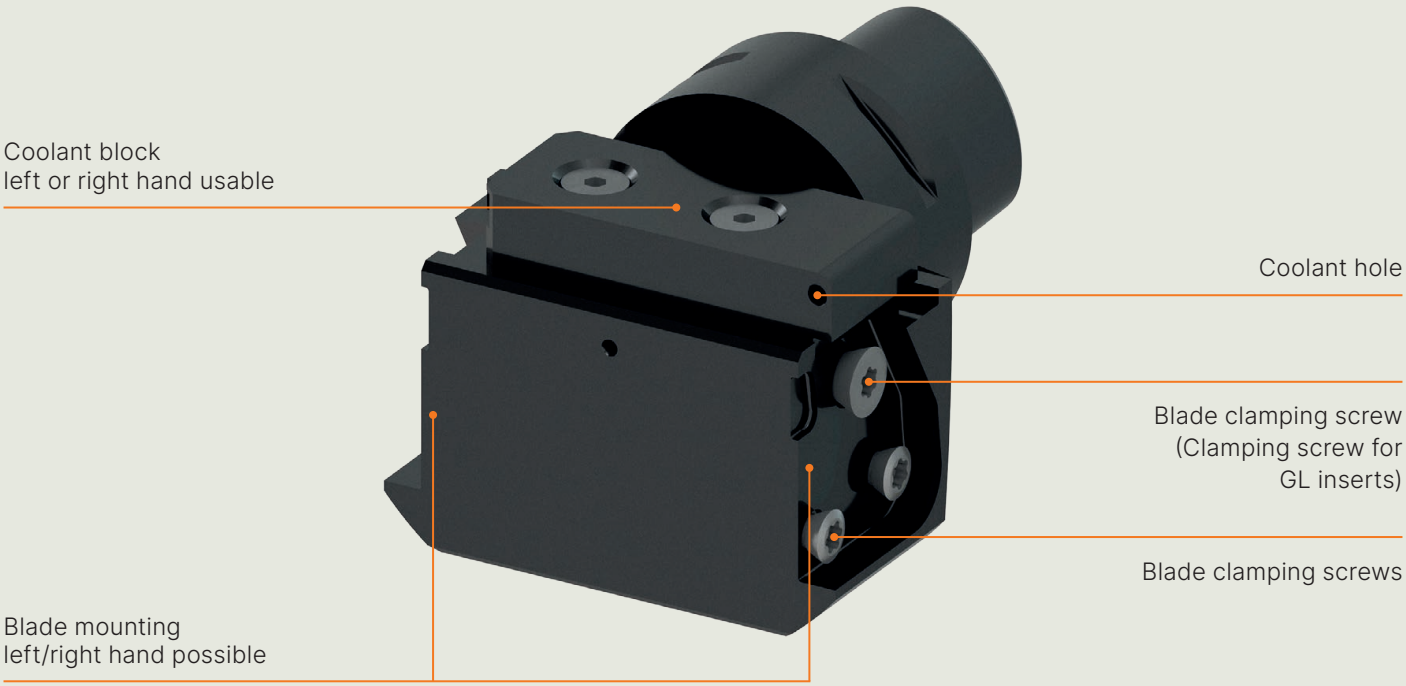
LFMX 1.4 – 6.35

LFMX 3.1

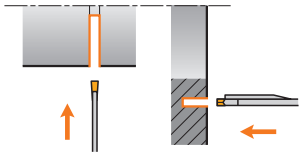


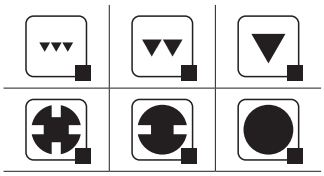
Features & benefits

Coolant block design.	**Directs coolant flow** precisely to the cutting edge and improves chip evacuation for better surface quality and fewer interruptions.
Optimized cooling.	**Extended durability and reduced wear** increases overall productivity.
Assembling of the blades on both left and right sides.	**Versatile tool holding solutions** supports a wide range of machining applications.
Modular design.	**Ability to reuse existing BS blades** lowers investment needs and optimizes resources.
Robust construction.	**Optimized stability and reliable performance** delivers consistent, high-quality results.



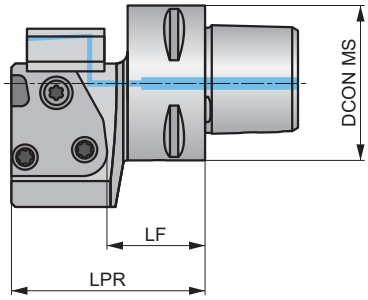
C.-BS-F EXT

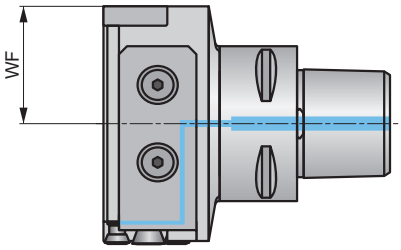




Modular tool holder for BS blades with Polygon Shank Coupling - External

Modular tool holder for BS type grooving and parting-off blades with adjustable coolant block. Tool shank according to ISO 26623 (Polygon Shank Coupling).





	Product	LF (mm)	LPR (mm)	DCON MS (mm)	WF (mm)		kg			
	C4-BS-SFN3050	25.3	50	40	30.3	✓	0.65	GI003	CO700	CC04
	C5-BS-SFN3050	25.3	50	50	30.3	✓	0.83	GI003	CO700	CC04
	C6-BS-SFN4260	35.3	60	63	42.3	✓	1.73	GI003	CO700	CC05

GI003	XLC.. 25..15...	XLC.. 25..25...	GL.BS	XLXFL 25...

CO700	US 45013-T20P	5.0	M5	US 46017-T20P	5.0	M6	FLAG T20P

CO700=2x US 45013-T20P

CC04	HCS 0416	4.0	M4	CHP-O5X1	CHP-BL2048	HXK 2.5
CC05	HCS 0416	4.0	M4	CHP-O5X1	CHP-BL2068	HXK 2.5

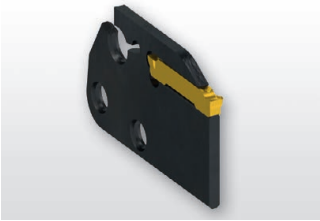
CC04=2xHCS 0416 + 2xCHP-O5x1, CC05=2xHCS 0416 + 2xCHP-O5x1

GLS BS

P M K N S H

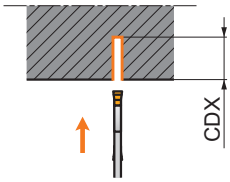
DORMER PRAMET

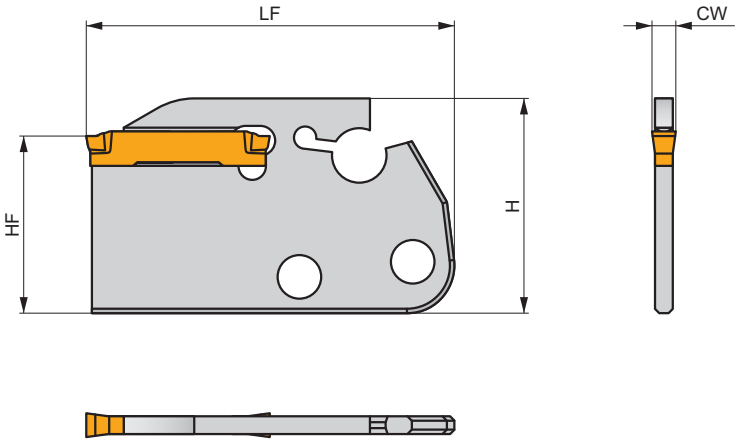
G

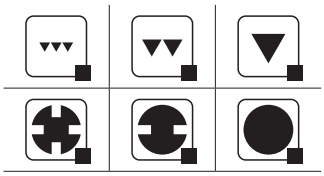


Grooving and Parting-off Blade for GL Inserts, for MS-EN Tool Holder

Blade for modular tool holder MS-EN, designed for GL inserts. Suited for grooving and parting-off applications. Blades treated for longer tool life.







	Product	HF (mm)	H (mm)	LF (mm)	CW (mm)	CDX (mm)	kg	
	GL2-S29CBS	24	29	50	2.00	24	0.01	GI334
	GL3-S29CBS	24	29	50	3.00	24	0.02	GI335
	GL4-S29CBS	24	29	50	4.00	24	0.02	GI336
	GL5-S29CBS	24	29	50	5.00	24	0.03	GI337
	GL6-S29CBS	24	29	50	6.00	24	0.04	GI338

GI334	GL2..	–
GI335	GL3..	–
GI336	GL4..	–
GI337	GL5..	–
GI338	GL6-D600..	GL6-D800..

XLCF(NRL) BS

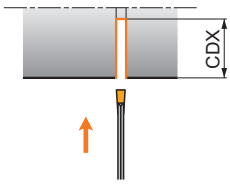
P M K N S H

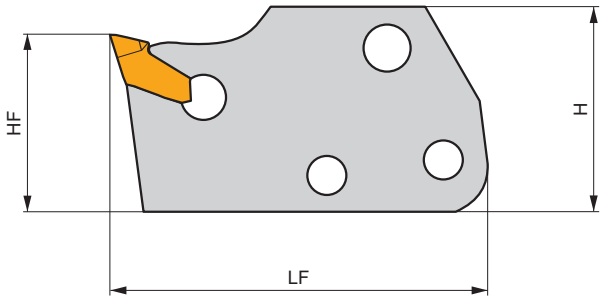
DORMER PRAMET

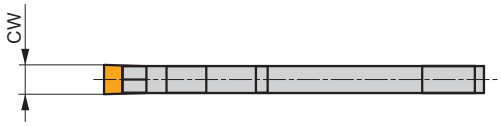
X

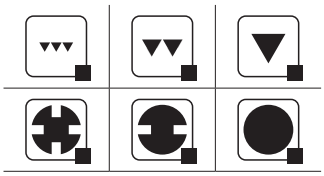
Radial Grooving Blade for Modular MS-EN Tool Holder for LFMX Inserts

Modular grooving blade for grooving with single-sided LFMX inserts. Suited for grooving or parting-off (max. 25 mm cutting depth) applications. Blades treated for longer tool life.









	Product	HF (mm)	H (mm)	LF (mm)	CW (mm)	CDX (mm)	kg		
R	XLCFR 250115-1.60	24	29	40	1.50	15	0.01	GI132	KV
	XLCFR 250115-2.00	24	29	40	2.00	15	0.05	GI061	KV
L	XLCFL 250115-1.60	24	29	40	1.50	15	0.04	GI132	KV
	XLCFL 250115-2.00	24	29	40	2.00	15	0.05	GI061	KV
N	XLCFN 250215-3.00	24	29	40	3.10	15	0.04	GI001	KV
	XLCFN 250225-3.00	24	29	50	3.10	25	0.02	GI001	KV
	XLCFN 250315-4.00	24	29	40	4.10	15	0.04	GI002	KV
	XLCFN 250325-4.00	24	29	50	4.10	25	0.04	GI002	KV
	XLCFN 250425-5.00	24	29	50	5.10	25	0.04	GI004	KV
	XLCFN 250525-6.35	24	29	50	6.35	25	0.07	GI005	KV

GI001	LFMX 3.1-.	–	–
GI002	LFMX 4.1-.	–	–
GI004	LFMX 5.1-.	–	–
GI005	LFMX 6.35-.	–	–
GI061	LFMX 2.0-.	LFMX 2.2-.	–
GI132	LFMX 1.4-.	LFMX 1.5-.	LFMX 1.6-.

KV	KV 5x70

XLXFL BS AXIAL

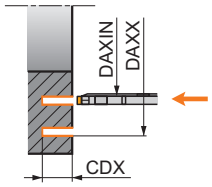
P M K N S H

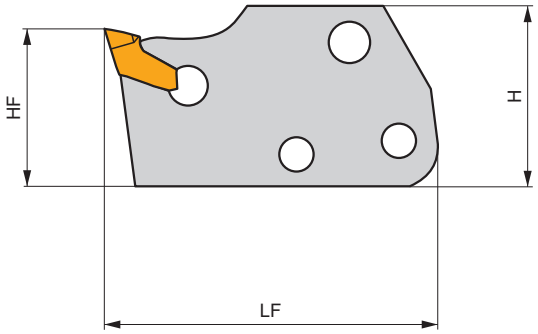
DORMER PRAMET

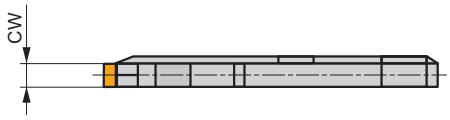
X

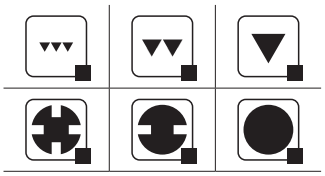
Axial Grooving Blade for Modular MS-EN Tool Holder for LFMX Inserts

Modular grooving blade for grooving with single-sided LFMX inserts. Suited for axial grooving (max. 20 mm cutting depth) applications. Can be fitted to MS-EN tool holder. Blades treated for longer tool life.









	Product	H (mm)	HF (mm)	LF (mm)	CW (mm)	CDX (mm)	DAXIN (mm)	DAXX (mm)	kg		
L	XLXFL 250220-3.00-60	29	24	46	3.10	20	60	85	0.05	GI001	KV
	XLXFL 250220-3.00-80	29	24	46	3.10	20	80	105	0.05	GI001	KV
	XLXFL 250220-3.00-100	29	24	46	3.10	20	100	155	0.03	GI001	KV
	XLXFL 250220-3.00-150	29	24	46	3.10	20	150	280	0.03	GI001	KV

GI001	LFMX 3.1-.

KV	KV 5x70

Holders with ISO S clamping style for internal turning operations

Machine deeper holes with enhanced process stability

Our new holders ISO S provide an effective solution for internal turning operations on lathes, featuring integrated coolant supply for stable tool life. Designed with extended overall lengths, these holders enable you to machine deeper holes and access hard-to-reach internal geometries without special setups.

Please note: With this new range, we are discontinuing previous tool types. Discontinued items are marked on our website and remain available while stocks last. Replacement product names are displayed for easy reference. Be aware that dimensions, angles, and spare parts may differ from previous versions.

Related products

SCLC(RL) INT

Internal tools for
CC..06; CC..09; CC..12

Shank sizes DCON MS:
08; 10; 12; 16; 20; 25; 32

KAPR 95°

SDQC(RL) INT

Internal tools for DC..07; DC..11

Shank sizes DCON MS:
10; 12; 16; 20; 25

KAPR 107.5°

SDUC(RL) INT

Internal tools for DC..07; DC..11

Shank sizes DCON MS:
10; 12; 16; 20; 25

KAPR 93°

STFC(RL) INT

Internal tools for TC..11; TC..16

Shank sizes DCON MS:
12; 16; 20; 25; 32

KAPR 91°

Features & benefits

Internal coolant supply delivers coolant directly to the cutting edge.	**Stable tool life** ensures consistent performance and reliable chip evacuation.
Extended overall lengths provide higher overhang capability.	**Access to deeper holes** enables machining of hard-to-reach internal geometries.

Product Line Replacement Table

ISO S internal turning tools with internal coolant and extended design

Outdated			New		Differences		
					Functional length - millimeter (LF)		
PSF	MID	Ordering code	MID	Ordering code	Old	New	
SCLC (RL) INT	6760285	A08H-SCLCR 06	8998323	A08H-SCLCR06-**A**	100	100	Same
SCLC (RL) INT	6761028	A08H-SCLCL 06	8998322	A08H-SCLCL06-**A**	100	100	Same
SCLC (RL) INT	6756827	A10H-SCLCR 06	8957512	A10**K**-SCLCR 06	100	125	Longer
SCLC (RL) INT	6756872	A10H-SCLCL 06	8922972	A10**K**-SCLCL 06	100	125	Longer
SCLC (RL) INT	6756828	A12K-SCLCR 06	8922974	A12**M**-SCLCR 06	125	150	Longer
SCLC (RL) INT	6756869	A12K-SCLCL 06	8922973	A12**M**-SCLCL 06	125	150	Longer
SCLC (RL) INT	6756716	A16M-SCLCR 09-A	8922976	A16**R**-SCLCR 09	150	200	Longer
SCLC (RL) INT	6756717	A16M-SCLCL 09-A	8922975	A16**R**-SCLCL 09	150	200	Longer
SCLC (RL) INT	6757212	A20Q-SCLCR 09	8922978	A20**S**-SCLCR 09	180	250	Longer
SCLC (RL) INT	6756856	A20Q-SCLCL 09	8922977	A20**S**-SCLCL 09	180	250	Longer
SCLC (RL) INT	6756874	A25R-SCLCL 09	8922979	A25**T**-SCLCL 09	200	300	Longer
SCLC (RL) INT	6756870	A25R-SCLCR 09	9003069	A25**T**-SCLCR 09	200	300	Longer
SCLC (RL) INT	7773890	A25T-SCLCL 12	7773890	A25T-SCLCL 12	300	300	Same
SCLC (RL) INT	6756870	A25R-SCLCR 09	8922980	A25**T**-SCLCR 12	200	300	Longer
SCLC (RL) INT	6756641	A32S-SCLCR 12-A	8922982	A32**T**-SCLCR 12	250	300	Longer
SCLC (RL) INT	6756640	A32S-SCLCL 12-A	8922981	A32**T**-SCLCL 12	250	300	Longer
SDQC (RL) INT	6756996	A10H-SDQCR 07	8922984	A10**K**-SDQCR 07	100	125	Longer
SDQC (RL) INT	6757007	A10H-SDQCL 07	8922983	A10**K**-SDQCL 07	100	125	Longer
SDQC (RL) INT	6757020	A12K-SDQCR 07	8922986	A12**M**-SDQCR 07	125	150	Longer
SDQC (RL) INT	6757008	A12K-SDQCL 07	8922985	A12**M**-SDQCL 07	125	150	Longer
SDQC (RL) INT	6756997	A16M-SDQCR 07	8922988	A16**R**-SDQCR 07	150	200	Longer
SDQC (RL) INT	6757009	A16M-SDQCL 07	8922987	A16**R**-SDQCL 07	150	200	Longer
SDQC (RL) INT	6757001	A20Q-SDQCR 11	8922990	A20**S**-SDQCR 11	180	250	Longer
SDQC (RL) INT	6757297	A20Q-SDQCL 11	8922989	A20**S**-SDQCL 11	180	250	Longer
SDQC (RL) INT	6757002	A25R-SDQCR 11	8922992	A25**T**-SDQCR 11	200	300	Longer
SDQC (RL) INT	6757298	A25R-SDQCL 11	8922991	A25**T**-SDQCL 11	200	300	Longer
SDUC (RL) INT	6757102	A10H-SDUCR 07	8922994	A10**K**-SDUCR 07	100	125	Longer
SDUC (RL) INT	6757005	A10H-SDUCL 07	8922993	A10**K**-SDUCL 07	100	125	Longer
SDUC (RL) INT	6757103	A12K-SDUCR 07	8922996	A12**M**-SDUCR 07	125	150	Longer
SDUC (RL) INT	6757006	A12K-SDUCL 07	8922995	A12**M**-SDUCL 07	125	150	Longer
SDUC (RL) INT	6757104	A16M-SDUCR 07	8922998	A16**R**-SDUCR 07	150	200	Longer
SDUC (RL) INT	6757151	A16M-SDUCL 07	8922997	A16**R**-SDUCL 07	150	200	Longer
SDUC (RL) INT	6757105	A20Q-SDUCR 11	8923000	A20**S**-SDUCR 11	180	250	Longer
SDUC (RL) INT	6757152	A20Q-SDUCL 11	8922999	A20**S**-SDUCL 11	180	250	Longer
SDUC (RL) INT	6757107	A25R-SDUCR 11	8923002	A25**T**-SDUCR 11	200	300	Longer
SDUC (RL) INT	6756857	A25R-SDUCL 11	8923001	A25**T**-SDUCL 11	200	300	Longer
STFC (RL) INT	6761011	A12M-STFCR 11	8998325	A12M-STFCR 11-**A**	150	150	Same
STFC (RL) INT	6761010	A12M-STFCL 11	8998324	A12M-STFCL 11-**A**	150	150	Same
STFC (RL) INT	6761017	A25R-STFCR 16	8923004	A25**T**-STFCR 16	200	300	Longer
STFC (RL) INT	6761016	A25R-STFCL 16	8923003	A25**T**-STFCL 16	200	300	Longer
STFC (RL) INT	6761013	A16R-STFCR 11	8998327	A16R-STFCR 11-**A**	200	200	Same
STFC (RL) INT	6761012	A16R-STFCL 11	8998326	A16R-STFCL 11-**A**	200	200	Same
STFC (RL) INT	6761019	A32S-STFCR 16	8923006	A32**T**-STFCR 16	250	300	Longer
STFC (RL) INT	6761018	A32S-STFCL 16	8923005	A32**T**-STFCL 16	250	300	Longer
STFC (RL) INT	6761015	A20S-STFCR 11	8998329	A20S-STFCR 11-**A**	250	250	Same
STFC (RL) INT	6761014	A20S-STFCL 11	8998328	A20S-STFCL 11-**A**	250	250	Same

SCLC(RL) INT

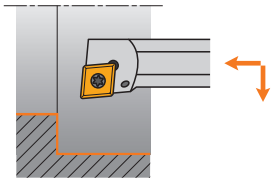
P M K N S H

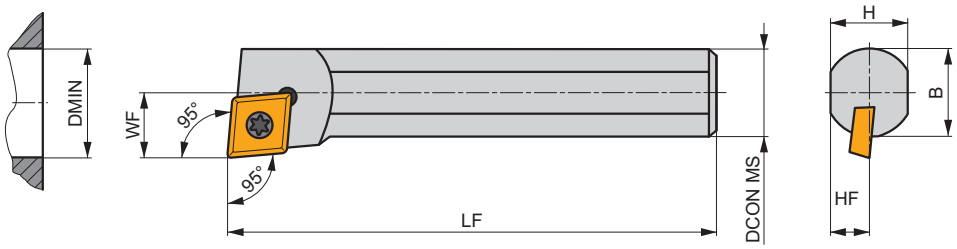
DORMER PRAMET

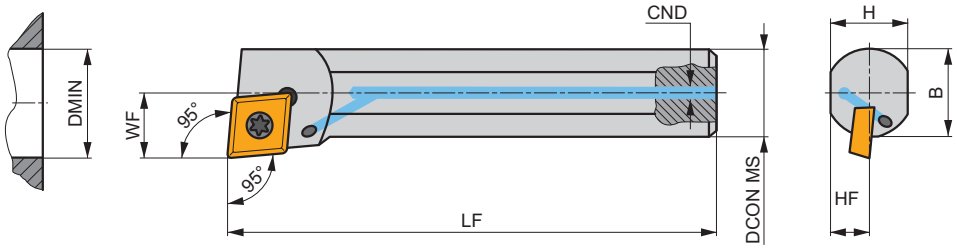
S

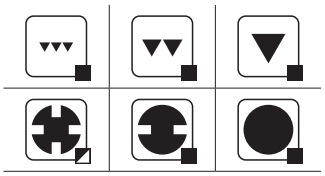
Internal Screw Lock Boring Bar with 95° Cutting Angle for CC.. Inserts

Internal Right/Left hand boring bar, through coolant available, 95° cutting angle for screw type CC.. inserts. For internal longitudinal turning with shoulder, taper and chamfer turning. Body treated for longer tool life.









	Product	DCON MS (mm)	DMIN (mm)	WF (mm)	H (mm)	B (mm)	LF (mm)	CND (mm)	LAMS (°)	GAMO (°)		kg		
R	A08H-SCLCR 06-A	8	10	5	7	–	100	–	-14	0	✓	0.04	GI045	SC06M
	A10K-SCLCR 06	10	12	6	9	–	125	–	-11	0	✓	0.06	GI045	SC06M
	A12M-SCLCR 06	12	16	9	11	–	150	–	-7	0	✓	0.11	GI045	SC06M
	A16R-SCLCR 09	16	20	11	15	–	200	–	-8	0	✓	0.26	GI041	SC09M
	A20S-SCLCR 09	20	25	13	18	–	250	–	-6	0	✓	0.50	GI041	SC09M
	A25T-SCLCR 09	25	32	17	23	–	300	–	-3	0	✓	0.89	GI041	SC09
	A25T-SCLCR 12	25	32	17	23	–	300	–	-5	0	✓	0.90	GI011	CO480
	A32T-SCLCR 12	32	40	22	30	–	300	–	-10	0	✓	1.58	GI011	SC12
L	A08H-SCLCL 06-A	8	10	5	7	–	100	–	-14	0	✓	0.03	GI045	SC06M
	A10K-SCLCL 06	10	12	6	9	–	125	–	-11	0	✓	0.06	GI045	SC06M
	A12M-SCLCL 06	12	16	9	11	–	150	–	-7	0	✓	0.11	GI045	SC06M
	A16R-SCLCL 09	16	20	11	15	–	200	–	-8	0	✓	0.25	GI041	SC09M
	A20S-SCLCL 09	20	25	13	18	–	250	–	-6	0	✓	0.50	GI041	SC09M
	A25T-SCLCL 09	25	32	17	23	–	300	–	-3	0	✓	0.90	GI041	SC09
	A25T-SCLCL 12	25	32	17	23	–	300	–	-5	0	✓	0.90	GI011	CO480
	A32T-SCLCL 12	32	40	22	30	–	300	–	-10	0	✓	1.58	GI011	SC12

GI011	CC.. 1204..
GI041	CC.. 09T3..
GI045	CC.. 0602..

		Nm					
CO480	US 2017-T15P	3.0	M 4	11	–	–	FLAG T15P/3,5

		Nm					
SC06M	US 2046-T07P	0.9	M 2.5	5.1	–	–	FLAG T07P
SC09	US 2010-T15P	3.0	M 3.5	10.1	–	–	FLAG T15P/3,5
SC09M	US 2009-T15P	3.0	M 3.5	8.1	–	–	FLAG T15P/3,5
SC12	US 2018-T15P	3.0	M 4	14	SCS 232-02	MS 9003	FLAG T15P/4

SDQC(RL) INT

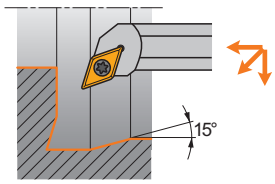
P M K N S H

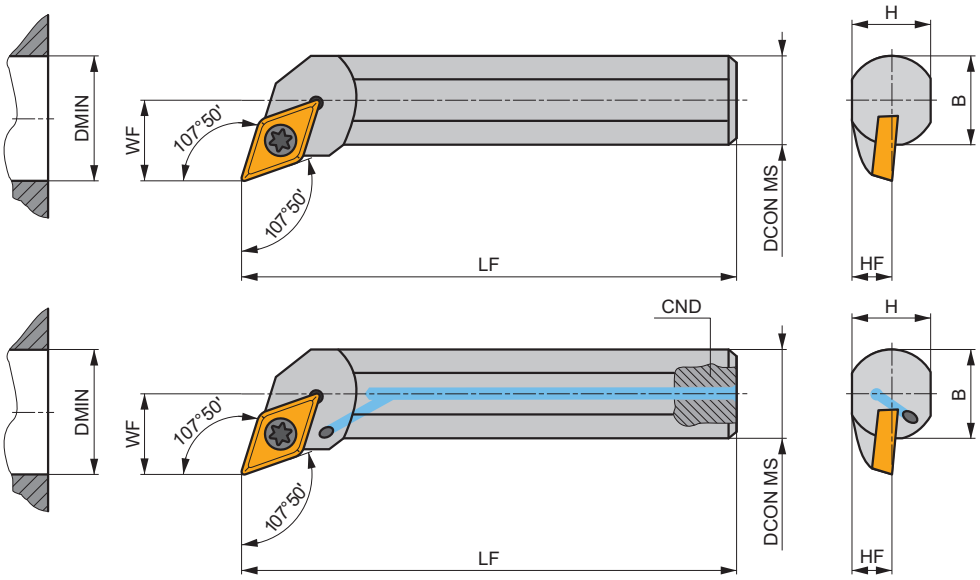
DORMER PRAMET

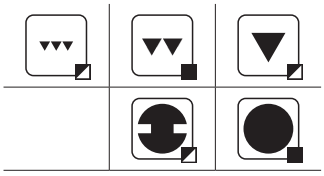
S

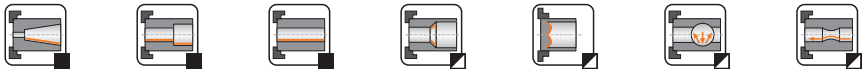
Internal Screw Lock Boring Bar with 107.5° Cutting Angle for DC.. Inserts

Internal Right/Left hand boring bar, through coolant available, 107.5° cutting angle for screw type DC.. inserts. For internal longitudinal turning with shoulder, taper, copying and chamfer turning. Body treated for longer tool life.









	Product	DCON MS (mm)	DMIN (mm)	WF (mm)	H (mm)	B (mm)	LF (mm)	CND (mm)	LAMS (°)	GAMO (°)		kg		
R	A10K-SDQCR 07	10	13	7	9	–	125	–	-10	0	✓	0.08	GI052	CO481
	A12M-SDQCR 07	12	16	9	11	–	150	–	-7	0	✓	0.11	GI052	SD07
	A16R-SDQCR 07	16	20	11	15	–	200	–	-5	0	✓	0.25	GI052	SD07
	A20S-SDQCR 11	20	25	13	18	–	250	–	-6	0	✓	0.54	GI012	SD11M
	A25T-SDQCR 11	25	32	17	23	–	300	–	-4	0	✓	0.89	GI012	SD11I
L	A10K-SDQCL 07	10	13	7	9	–	125	–	-10	0	✓	0.06	GI052	CO481
	A12M-SDQCL 07	12	16	9	11	–	150	–	-7	0	✓	0.11	GI052	SD07
	A16R-SDQCL 07	16	20	11	15	–	200	–	-5	0	✓	0.25	GI052	SD07
	A20S-SDQCL 11	20	25	13	18	–	250	–	-6	0	✓	0.49	GI012	SD11M
	A25T-SDQCL 11	25	32	17	23	–	300	–	-4	0	✓	0.89	GI012	SD11I

GI012	DC.. 11T3..
GI052	DC.. 0702..

		Nm			
CO481	US 2048-T07P	0.9	M 2.5	5.7	FLAG T07P
SD07	US 2003-T07P	0.8	M 2.5	6.5	FLAG T07P
SD11I	US 2010-T15P	3.0	M 3.5	10.1	FLAG T15P/3,5
SD11M	US 2009-T15P	3.0	M 3.5	8.1	FLAG T15P/3,5

SDUC(RL) INT

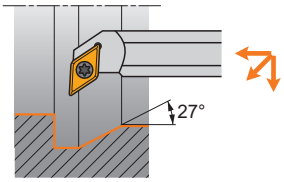
P M K N S H

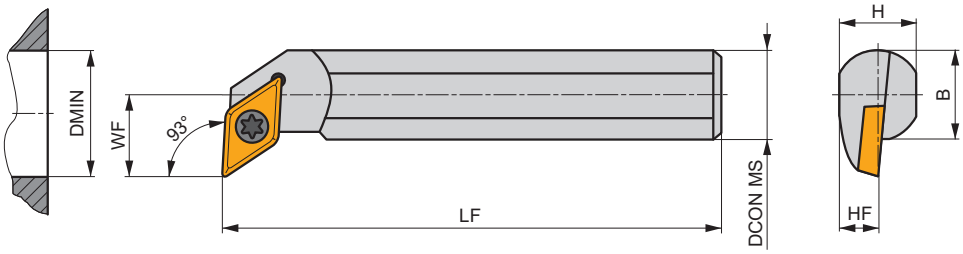
DORMER PRAMET

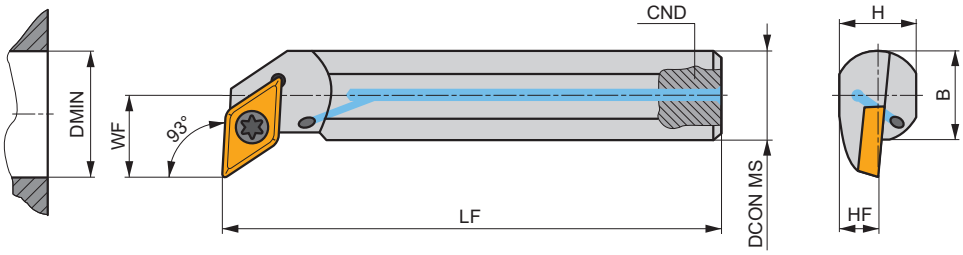
S

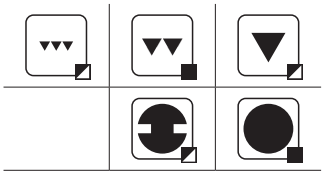
Internal Screw Lock Boring Bar with 93° Cutting Angle for DC.. Inserts

Internal Right/Left hand boring bar, through coolant available, 93° cutting angle for screw type DC.. inserts. For internal longitudinal turning with shoulder, taper, copying and chamfer turning. Body treated for longer tool life.









	Product	DCON MS (mm)	DMIN (mm)	WF (mm)	H (mm)	B (mm)	LF (mm)	CND (mm)	LAMS (°)	GAMO (°)		kg		
R	A10K-SDUCR 07	10	13	7	9	–	125	–	-9	0	✓	0.07	GI052	CO481
	A12M-SDUCR 07	12	16	9	11	–	150	–	-7	0	✓	0.11	GI052	SD07
	A16R-SDUCR 07	16	20	11	15	–	200	–	-4	0	✓	0.25	GI052	SD07
	A20S-SDUCR 11	20	25	13	18	–	250	–	-6	0	✓	0.50	GI012	SD11M
	A25T-SDUCR 11	25	32	17	23	–	300	–	-3	0	✓	0.90	GI012	SD11I
L	A10K-SDUCL 07	10	13	7	9	–	125	–	-9	0	✓	0.08	GI052	CO481
	A12M-SDUCL 07	12	16	9	11	–	150	–	-7	0	✓	0.13	GI052	SD07
	A16R-SDUCL 07	16	20	11	15	–	200	–	-4	0	✓	0.25	GI052	SD07
	A20S-SDUCL 11	20	25	13	18	–	250	–	-6	0	✓	0.50	GI012	SD11M
	A25T-SDUCL 11	25	32	17	23	–	300	–	-3	0	✓	0.90	GI012	SD11I

GI012	DC.. 11T3..
GI052	DC.. 0702..

		Nm			
CO481	US 2048-T07P	0.9	M 2.5	5.7	FLAG T07P
SD07	US 2003-T07P	0.8	M 2.5	6.5	FLAG T07P
SD11I	US 2010-T15P	3.0	M 3.5	10.1	FLAG T15P/3,5
SD11M	US 2009-T15P	3.0	M 3.5	8.1	FLAG T15P/3,5

STFC(RL) INT

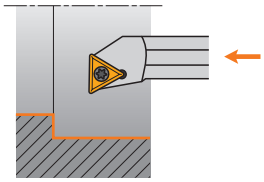
P M K N S H

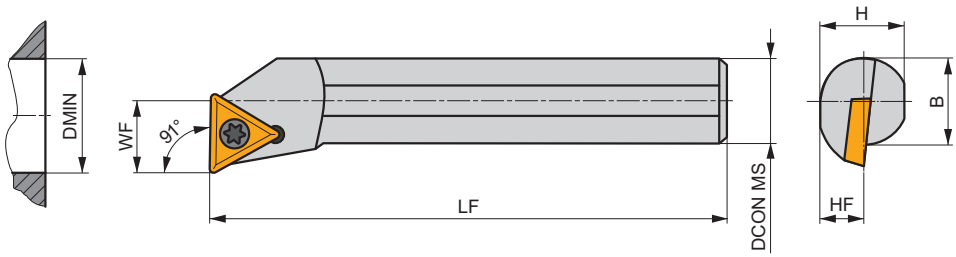
DORMER PRAMET

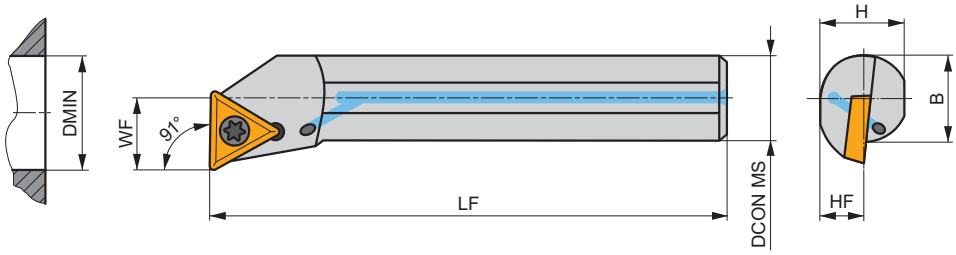
S

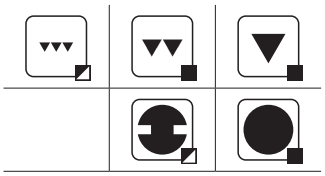
Internal Screw Lock Boring Bar with 91° Cutting Angle for TC.. Inserts

Internal Right/Left hand boring bar, through coolant available, 91° cutting angle for screw type TC.. inserts. Suited for internal taper and longitudinal turning with shoulder and chamfer turning. Body treated for longer tool life.









	Product	DCON MS (mm)	DMIN (mm)	WF (mm)	H (mm)	B (mm)	LF (mm)	LAMS (°)	GAMO (°)		kg		
R	A12M-STFCR 11-A	12	16	9	11	–	150	-7	0	✓	0.12	GI056	C0481
	A16R-STFCR 11-A	16	20	11	15	–	200	-4	0	✓	0.25	GI056	ST11
	A20S-STFCR 11-A	20	25	13	18	–	250	-3	0	✓	0.50	GI056	ST11
	A25T-STFCR 16	25	32	17	23	–	300	-3	0	✓	0.90	GI016	ST16I
	A32T-STFCR 16	32	40	22	30	–	300	-8	0	✓	1.58	GI016	ST16I
L	A12M-STFCL 11-A	12	16	9	11	–	150	-7	0	✓	0.12	GI056	C0481
	A16R-STFCL 11-A	16	20	11	15	–	200	-4	0	✓	0.28	GI056	ST11
	A20S-STFCL 11-A	20	25	13	18	–	250	-3	0	✓	0.50	GI056	ST11
	A25T-STFCL 16	25	32	17	23	–	300	-3	0	✓	0.90	GI016	ST16I
	A32T-STFCL 16	32	40	22	30	–	300	-8	0	✓	1.58	GI016	ST16I

GI016	TC.. 16T3..
GI056	TC.. 1102..

		Nm			
C0481	US 2048-T07P	0.9	M 2.5	5.7	FLAG T07P
ST11	US 2003-T07P	0.8	M 2.5	6.5	FLAG T07P
ST16I	US 2010-T15P	3.0	M 3.5	10.1	FLAG T15P/3,5

ISO group		WMG (Work Material Group)				Hardness (HB or HRC)	Ultimate Tensile Strength (MPa)
P	P1	P1.1	Free machining steel (carbon steels with increased machinability)		Sulfurized	< 240 HB	≤ 830
		P1.2			Sulfurized and phosphorized	< 180 HB	≤ 620
		P1.3			Sulfurized/phosphorized and leaded	< 180 HB	≤ 620
	P2	P2.1	Plain carbon steel (steels comprised of mainly iron and carbon)		Containing <0.25 % C	< 180 HB	≤ 620
		P2.2			Containing <0.55 % C	< 240 HB	≤ 830
		P2.3			Containing >0.55 % C	< 300 HB	≤ 1030
	P3	P3.1	Alloy steel (carbon steels with an alloying content ≤ 10%)		Annealed	< 180 HB	≤ 620
		P3.2			Hardened and tempered	180 – 260 HB	> 620 ≤ 900
		P3.3				260 – 360 HB	> 900 ≤ 1240
	P4	P4.1	Tool steel (special alloy steel for tools, dies and molds)		Annealed	< 26 HRC	≤ 900
		P4.2			Hardened and tempered	26 – 39 HRC	> 900 ≤ 1240
		P4.3				39 – 45 HRC	> 1240 ≤ 1450
M	M1	M1.1	Ferritic stainless steel (straight chromium non-hardenable alloys)			< 160 HB	≤ 520
		M1.2				160 – 220 HB	> 520 ≤ 700
	M2	M2.1	Martensitic stainless steel (straight chromium hardenable alloys)		Annealed	< 200 HB	≤ 670
		M2.2			Quenched and tempered	200 – 280 HB	> 670 ≤ 950
		M2.3			Precipitation-hardened	280 – 380 HB	> 950 ≤ 1300
	M3	M3.1	Austenitic stainless steel (chromium-nickel and chromium-nickel-manganese alloys)			< 200 HB	≤ 750
		M3.2				200 – 260 HB	> 750 ≤ 870
		M3.3				260 – 300 HB	> 870 ≤ 1040
	M4	M4.1	Austenitic-ferritic (DUPLEX) or super-austenitic stainless steel			< 300 HB	≤ 990
		M4.2	Precipitation hardening austenitic stainless steel			300 – 380 HB	≤ 1320
K	K1	K1.1	Gray iron or Automotive Gray iron (GG) (iron-carbon castings with a lamellar graphite microstructure)		Ferritic or ferritic-pearlitic	< 180 HB	≤ 190
		K1.2			Ferritic-pearlictic or pearlitic	180 – 240 HB	> 190 ≤ 310
		K1.3			Pearlitic	240 – 280 HB	> 310 ≤ 390
	K2	K2.1	Malleable iron (GTS/GTW) (iron-carbon castings with a graphite-free microstructure)		Ferritic	< 160 HB	≤ 400
		K2.2			Ferritic or pearlitic	160 – 200 HB	> 400 ≤ 550
		K2.3			Pearlitic	200 – 240 HB	> 550 ≤ 660
	K3	K3.1	Ductile iron (GGG) (iron-carbon castings with a nodular graphite microstructure)		Ferritic	< 180 HB	≤ 560
		K3.2			Ferritic or pearlitic	180 – 220 HB	> 560 ≤ 680
		K3.3			Pearlitic	220 – 260 HB	> 680 ≤ 800
	K4	K4.1	Austenitic gray iron (ASTM A436) (iron-carbon alloy castings with an austenitic lamellar graphite microstructure)			< 180 HB	≤ 190
		K4.2	Austenitic ductile iron (ASTM A439 or ASTM A571) (iron-carbon alloy castings with an austenitic nodular graphite microstructure)			< 240 HB	≤ 740
		K4.3	Austempered ductile iron (ASTM A897) (iron-carbon alloy castings with an ausferrite microstructure)			< 280 HB	> 840 ≤ 980
		K4.4				280 – 320 HB	> 980 ≤ 1130
		K4.5				320 – 360 HB	> 1130 ≤ 1280
	K5	K5.1	Compacted graphite iron CGI (ASTM A842) (iron-carbon castings with a vermicular graphite structure)		Ferritic	< 180 HB	≤ 400
		K5.2			Ferritic-pearlitic	180 – 220 HB	> 400 ≤ 450
		K5.3			Pearlitic	220 – 260 HB	> 450 ≤ 500
N	N1	N1.1	Commercially pure wrought aluminium			< 60 HB	≤ 240
		N1.2	Wrought aluminium alloys		Half hard tempered	60 – 100 HB	> 240 ≤ 400
		N1.3			Full hard tempered	100 – 150 HB	> 400 ≤ 590
	N2	N2.1	Cast aluminium alloys			< 75 HB	≤ 240
		N2.2				75 – 90 HB	> 240 ≤ 270
		N2.3				90 – 140 HB	> 270 ≤ 440
	N3	N3.1	Free-cutting copper-alloys materials with excellent machining properties			–	–
		N3.2	Short-chip copper-alloys with good to moderate machining properties			–	–
		N3.3	Electrolytic copper and long-chip copper-alloys with moderate to poor machining properties			–	–
	N4	N4.1	Thermoplastic polymers			–	–
		N4.2	Thermosetting polymers			–	–
		N4.3	Reinforced polymers or composites			–	–
	N5	N5.1	Graphite			–	–
S	S1	S1.1	Titanium or titanium alloys			< 200 HB	≤ 660
		S1.2				200 – 280 HB	> 660 ≤ 950
		S1.3				280 – 360 HB	> 950 ≤ 1200
	S2	S2.1	Fe-based high-temperature alloys			< 200 HB	≤ 690
		S2.2				200 – 280 HB	> 690 ≤ 970
	S3	S3.1	Ni-based high-temperature alloys			< 280 HB	≤ 940
		S3.2				280 – 360 HB	> 940 ≤ 1200
	S4	S4.1	Co-based high-temperature alloys			< 240 HB	≤ 800
		S4.2				240 – 320 HB	> 800 ≤ 1070
H	H1	H1.1	Chilled cast iron			< 440 HB	–
	H2	H2.1	Hardened cast iron			< 55 HRC	–
		H2.2				> 55 HRC	–
	H3	H3.1	Hardened steel < 55 HRC			< 51 HRC	–
		H3.2				51 – 55 HRC	–
	H4	H4.1	Hardened steel > 55 HRC			55 – 59 HRC	–
		H4.2				> 59 HRC	–

Notes

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