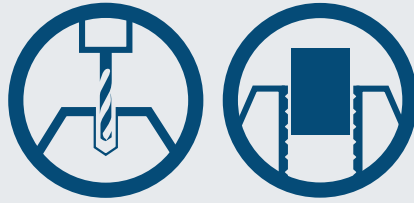


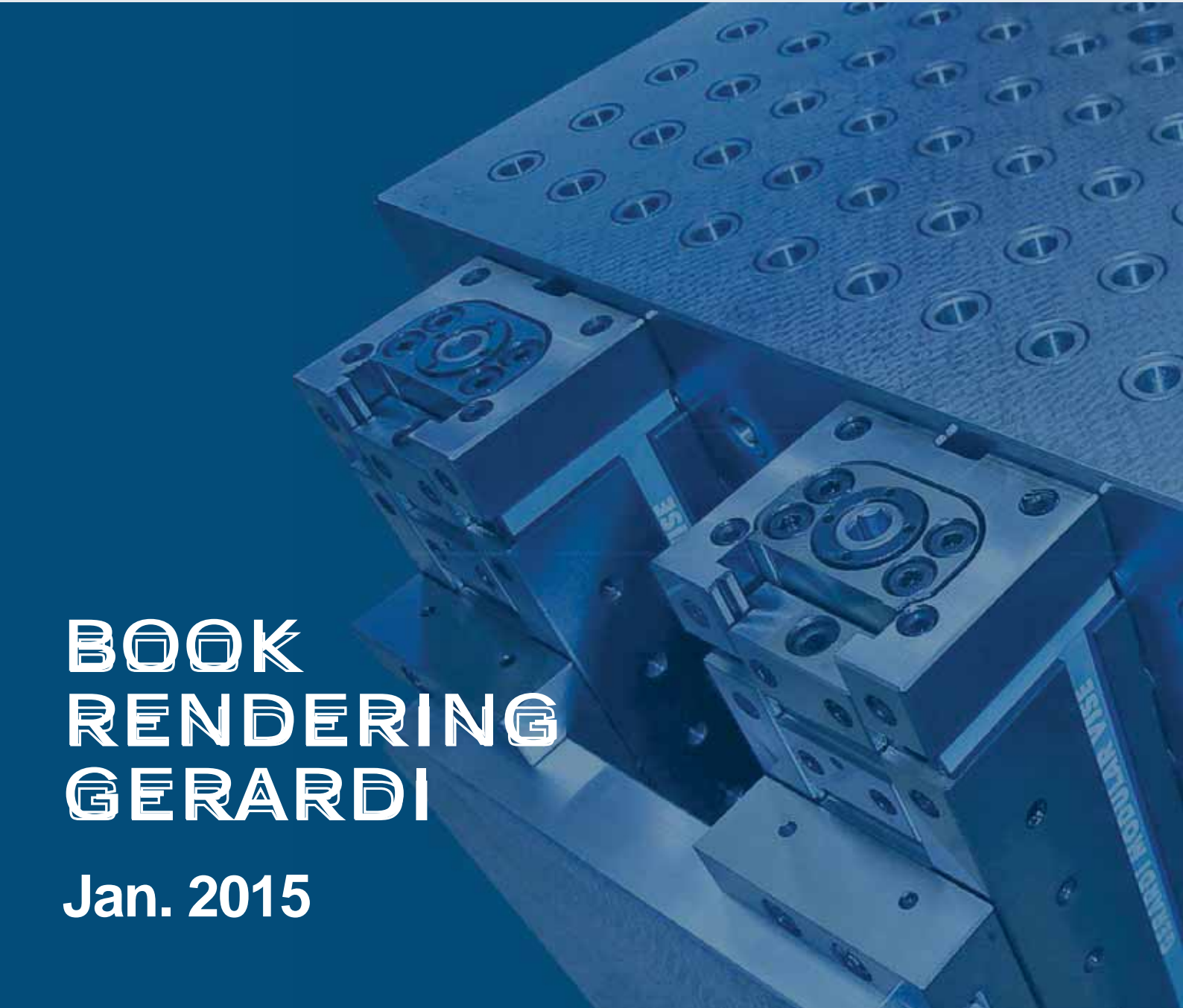


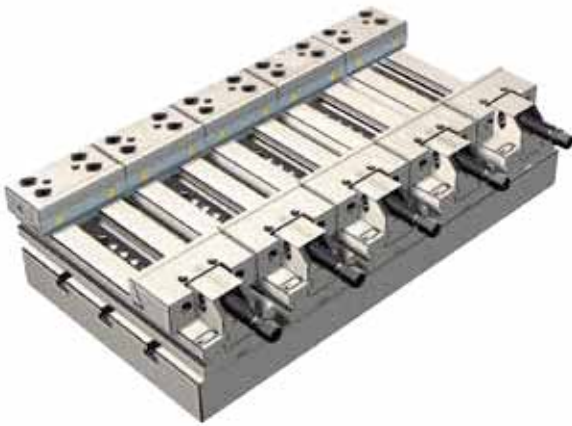
WORKHOLDING and TOOLING



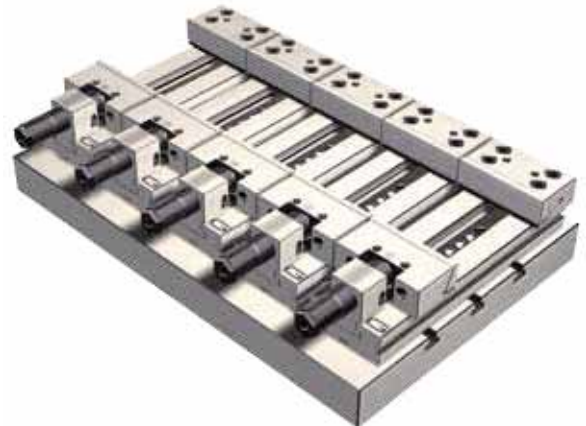
**BOOK
RENDERING
GERARDI**

Jan. 2015

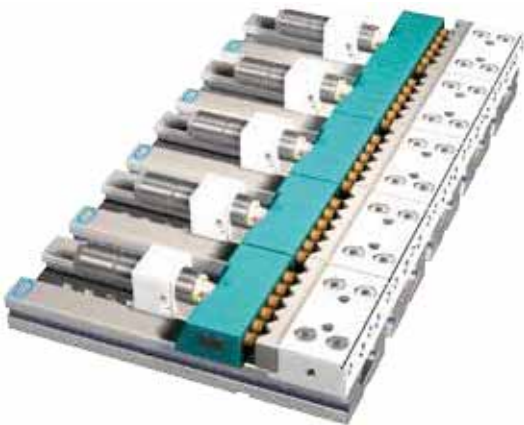




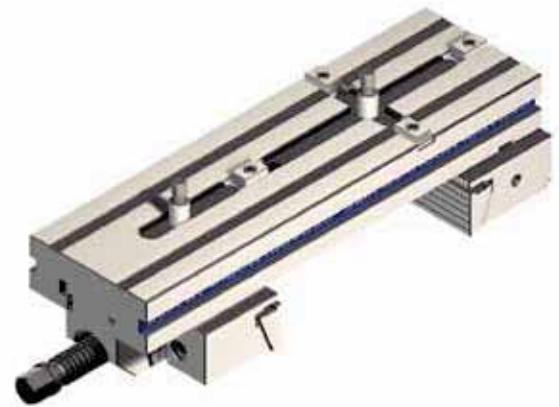
Morse Modulari di Precisione accoppiabili ed allineabili per serraggi multipli
 Precision Modular vises matchable for gang operations



Morse Modulari di Precisione accoppiabili ed allineabili per serraggi multipli idraulici
 Precision Modular vises matchable for gang operations and hydraulic clamping



Morse Modulari di Precisione accoppiabili ed allineabili per serraggi multipli idraulici con ganasce speciali
 Precision Modular vises matchable for gang operations and hydraulic clamping with special jaws



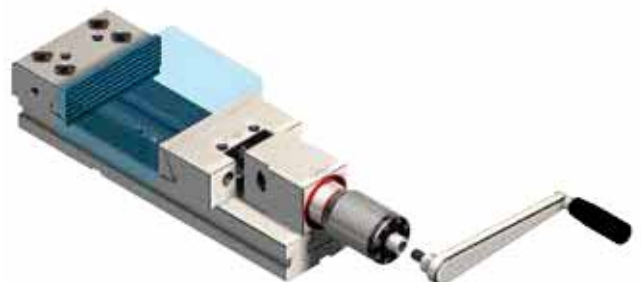
Alternative di posizionamento: 2 chiavi trasversali - 2 chiavi longitudinali - 2 spine cilindriche rettificate di posizionamento
 Positioning Alternatives: 2 cross key ways - 2 longitudinal key ways - 2 ground holes



Miglior controllo per verifica allineamento morsa (ganasca fissa - chiave trasversale)
 Best check for vise alignment accuracy (fixed jaw - cross key)

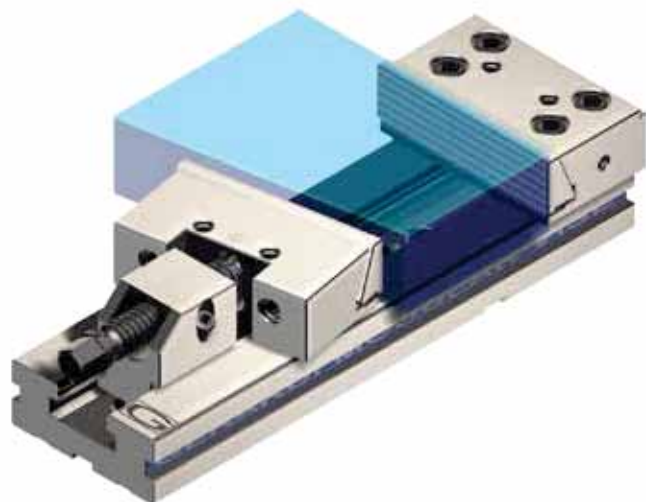


Vista esploso
 Explosion view

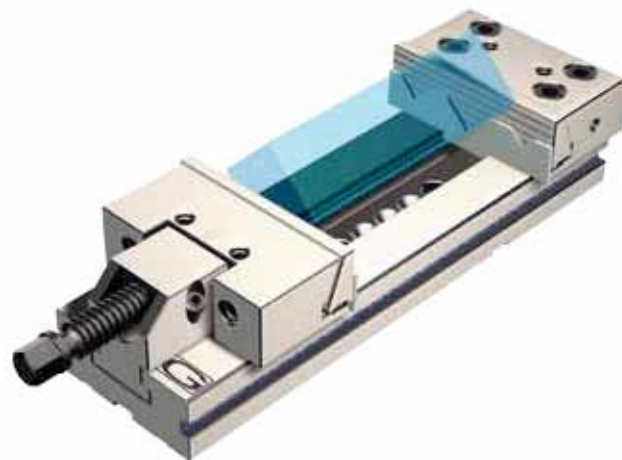


Art. 257

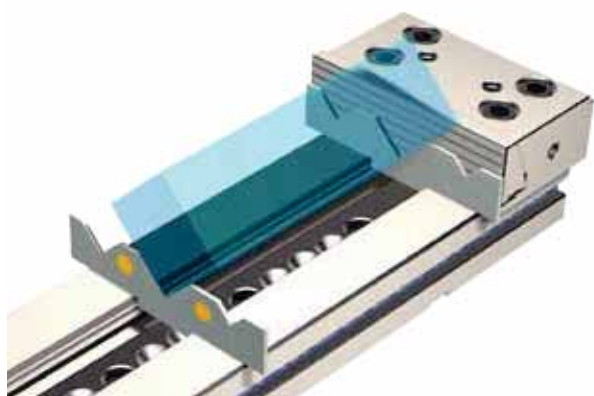
Gruppo di serraggio vite idraulica per sforzi minimi (non per maggior potenza)
 Hand hydraulic clamping group for minimum efforts (not for bigger power)



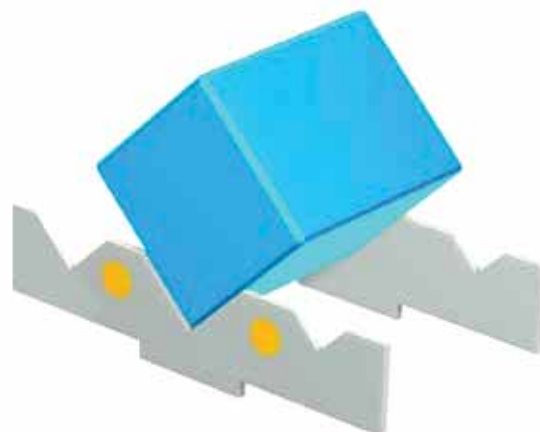
Ganascia mobile oscillante
Floating movable jaw



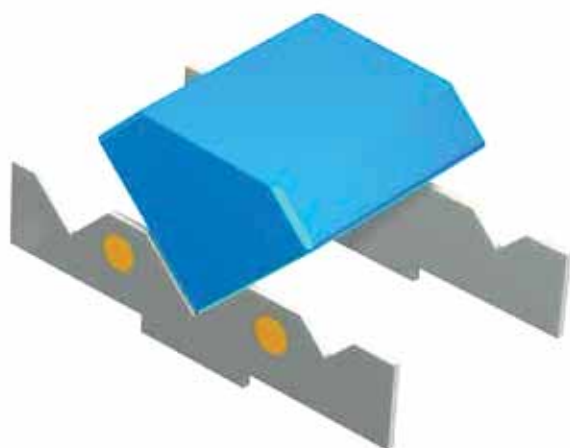
Morsa STD con piastre parallele magnetiche angolari Art. 314
STD vise with angle magnetic parallels plates Art. 314



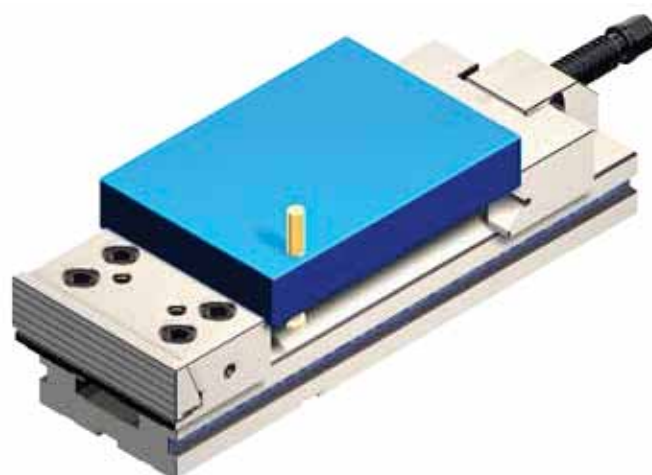
Art. 314
Coppia di piastre parallele angolari magnetiche
Pair of magnetic angular parallels plates



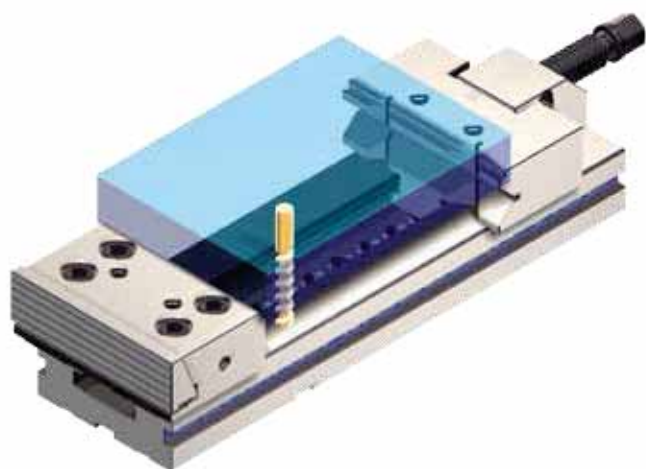
Esempio di applicazione
Application example



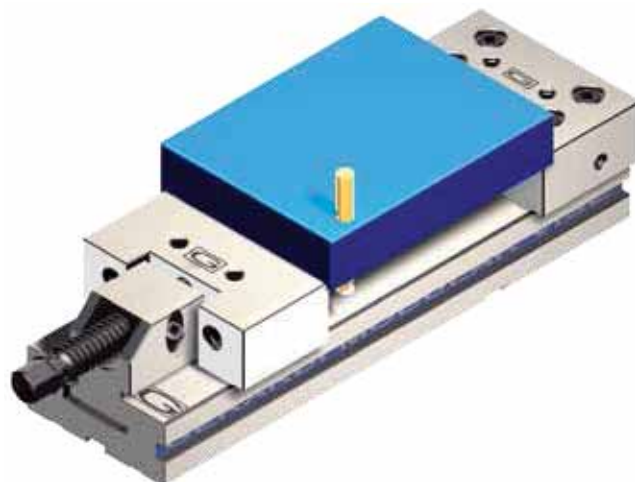
Esempio di applicazione
Application example



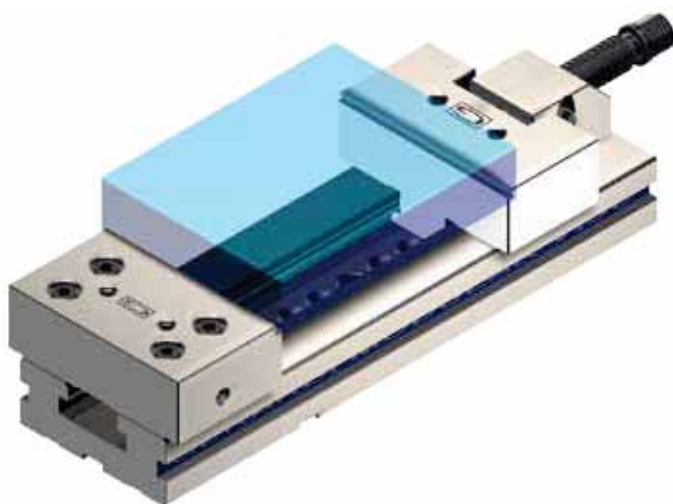
Gradini per eseguire fori passanti
Steps for drill through operations



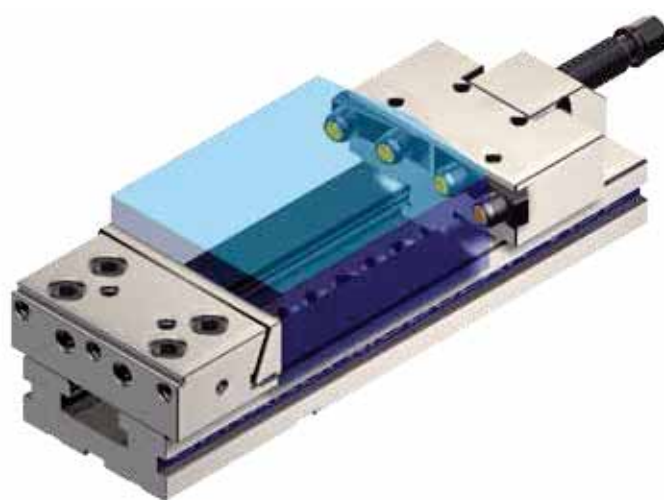
Gradini per eseguire fori passanti
Steps for drill through operations



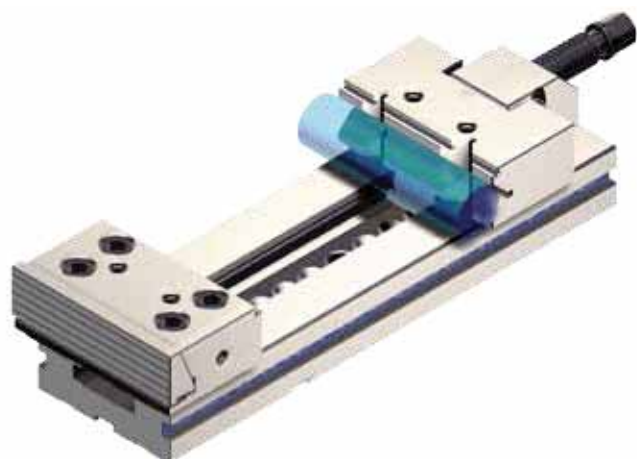
Ganasce monoblocco a gradino per fori passanti
Solid steps jaws for drill through operations



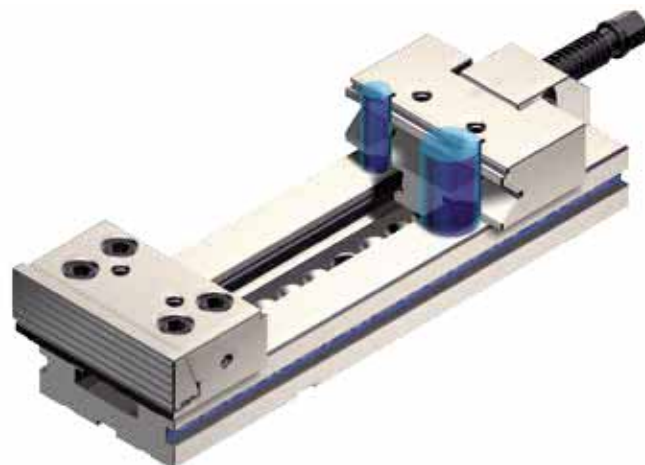
Ganasce monoblocco a gradino per fori passanti
Solid steps jaws for drill through operations



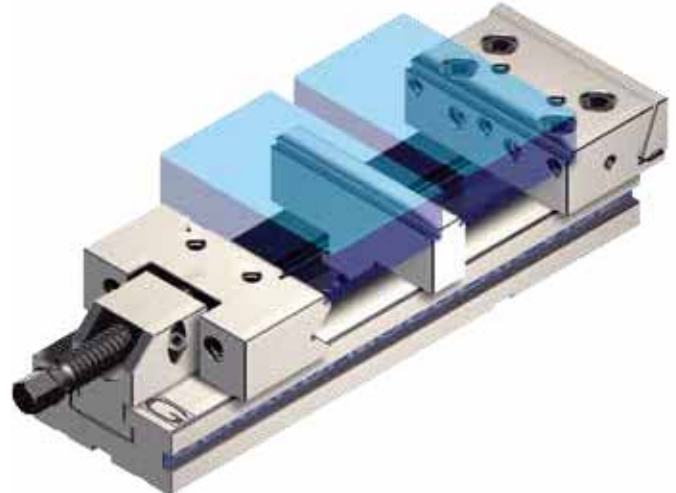
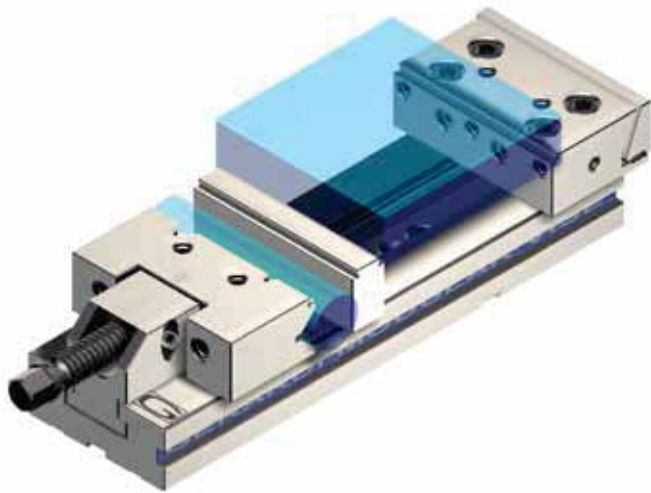
Ganasce con segmenti oscillanti e puntalini basculanti per grezzi molto irregolari
Floating elements for very rough workpieces



Ganascia prismatica per serraggio pezzi tondi in verticale & orizzontale



Prismatic jaw for round workpieces vertical & horizontal clamping

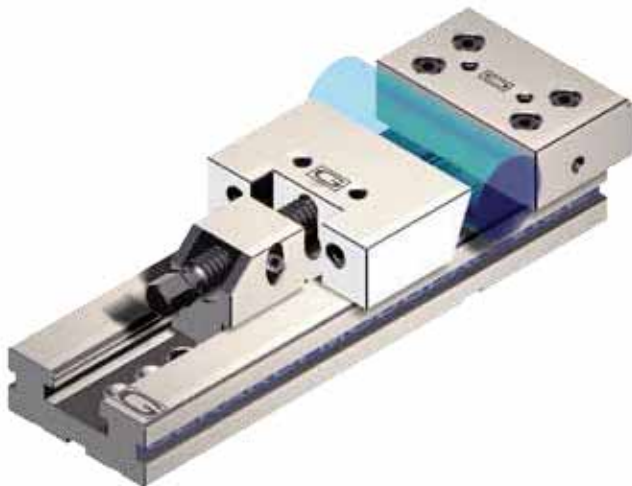


Art. 212

Ganascia mobile intermedia - Intermediate movable jaw

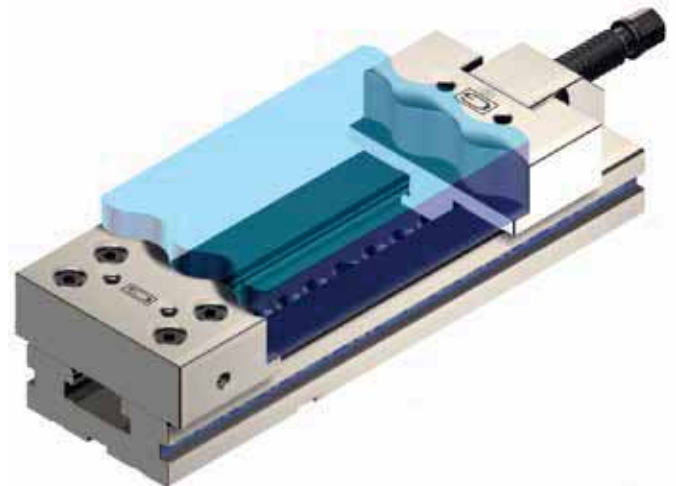
Art. 212

Ganascia mobile intermedia - Intermediate movable jaw



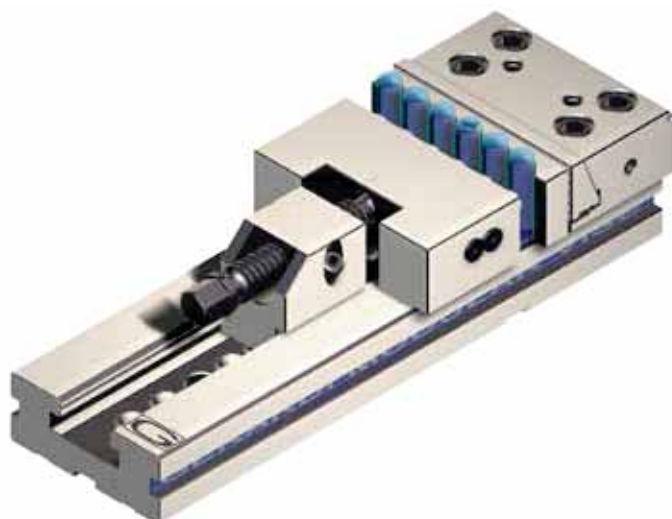
Art. 210

Ganascia mobile per pezzi tondi
 Movable jaw for round workpieces



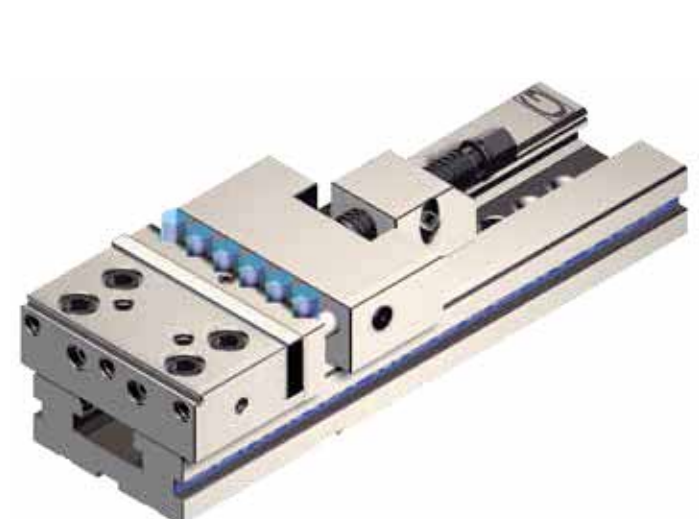
Art. 160 (Fixed) - Art 166 (Movable)

Ganascia tenera lavorabile per serrare pezzi di forme particolari
 Soft steel machineable jaw for special shape workpieces



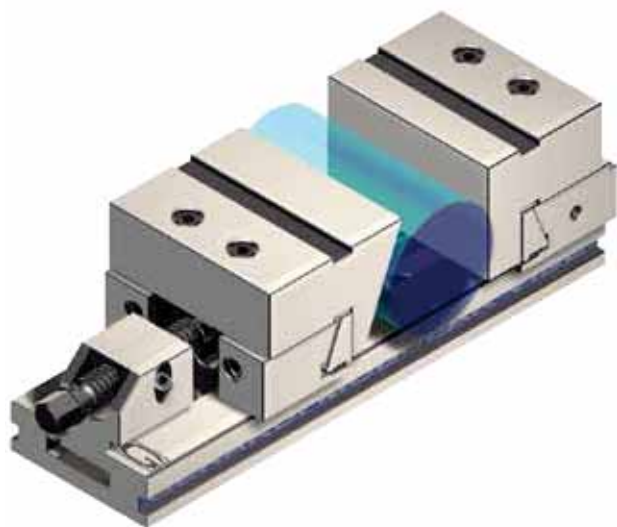
Art. 188

Ganascia mobile oleodinamica per serraggi in verticale di piccoli tondi
 Hydraulic-control movable jaw for small round workpieces vertical clamping



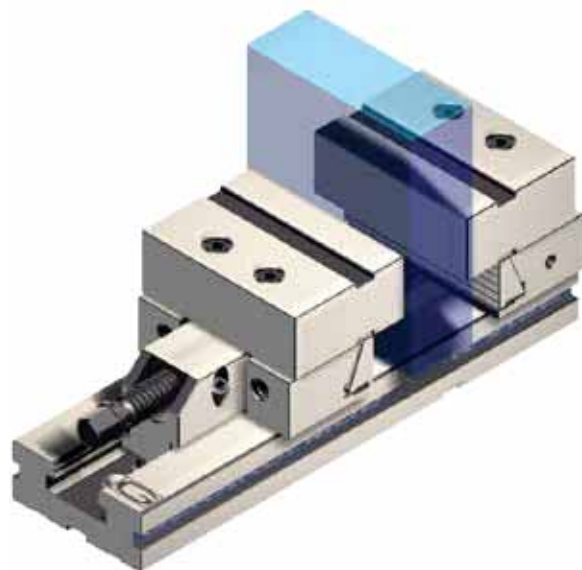
Art. 188

Ganascia mobile oleodinamica per serraggi in verticale di piccoli tondi
 Hydraulic-control movable jaw for small round workpieces vertical clamping



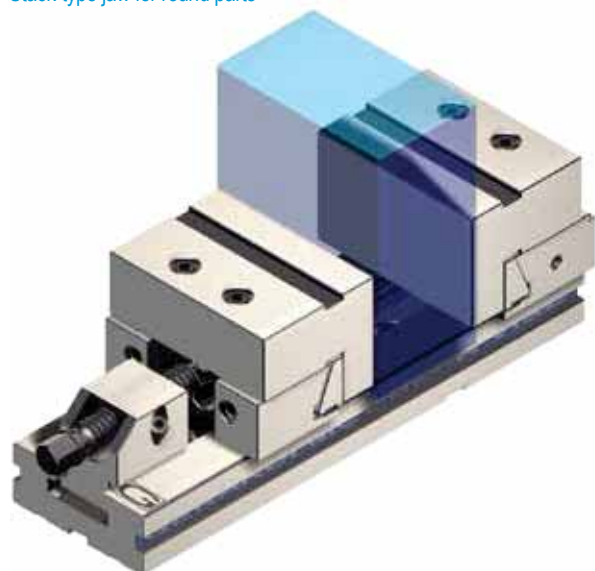
Art. 131

Ganascia sovrapponibile per pezzi tonde
Stack-type jaw for round parts



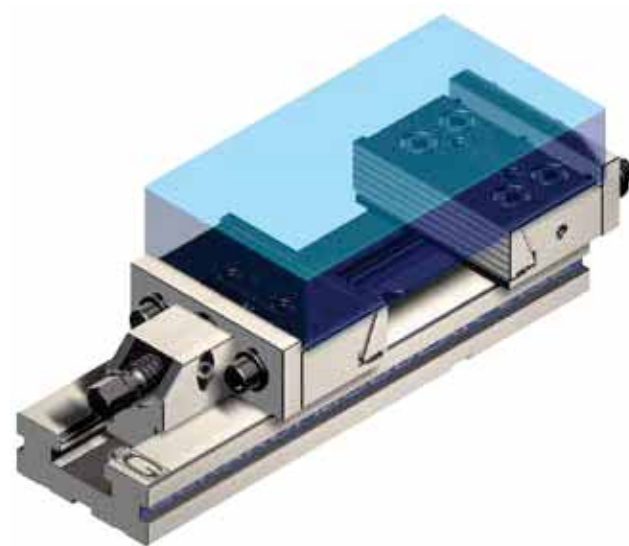
Art. 136

Ganascia sovrapponibile piana
Stack-type plain jaw



Art. 138

Ganascia sovrapponibile a squadra
Stack-type angle plate jaw



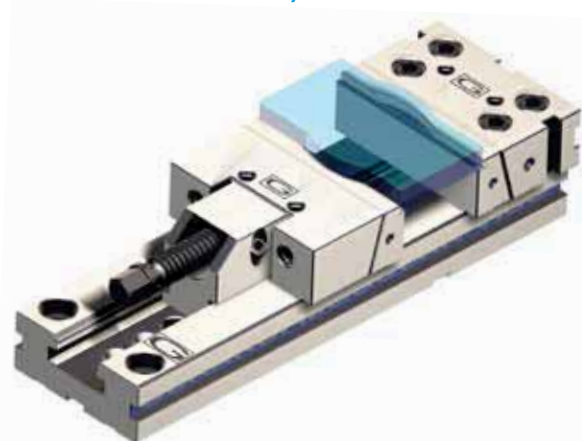
Art. 132/133

Prolunghe con viti per ganascia mobile e fissa
Extensions for movable and fixed jaw with screws



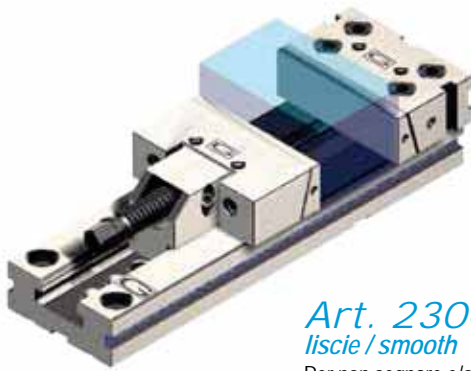
Art. 1A

Morsa con piastre ganascie
a CAMBIO RAPIDO (SISTEMA A PETTINE)
Vise with QUICK CHANGE jaw plates (COMB SYSTEM)



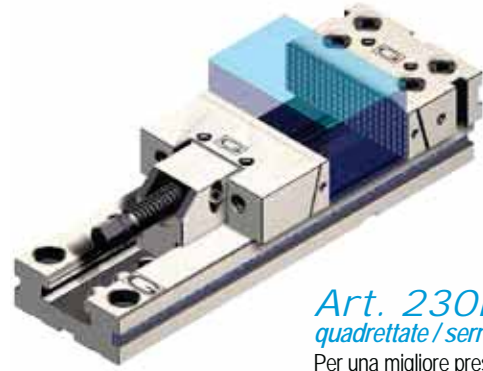
Art. 230B

Tenere lavorabili / Soft steel machineable
Per pezzi con forme particolari
For special workpiece shapes



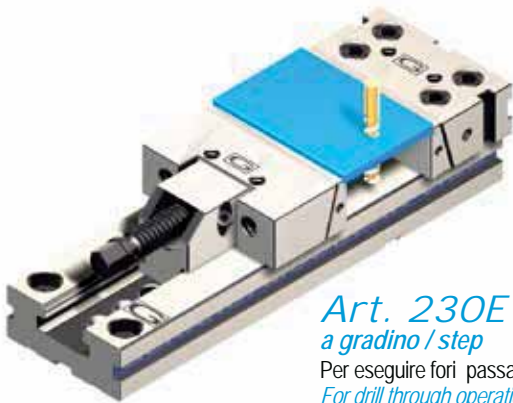
Art. 230C
liscie / smooth

Per non segnare e/o danneggiare i particolari
In order not to damage workpieces



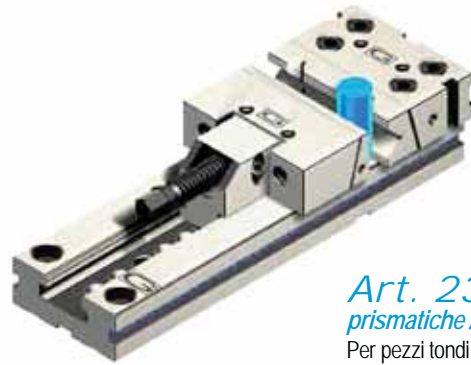
Art. 230D
quadrettate / serrated

Per una migliore presa pezzo
For a better clamping action



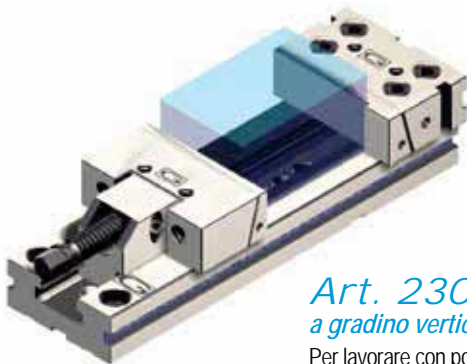
Art. 230E
a gradino / step

Per eseguire fori passanti
For drill through operations



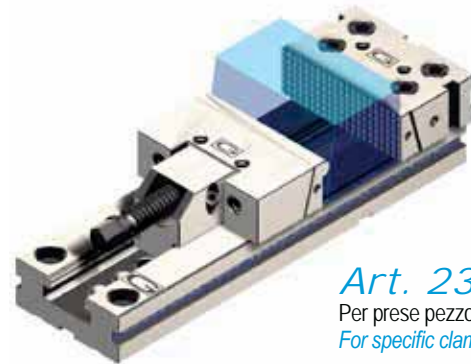
Art. 230F
prismatiche / prismatic

Per pezzi tondi
For round workpiece



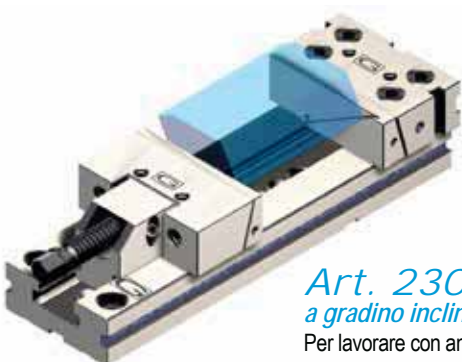
Art. 230G
a gradino verticale / vertical step

Per lavorare con posizioni speciali
In order to clamp at specific position



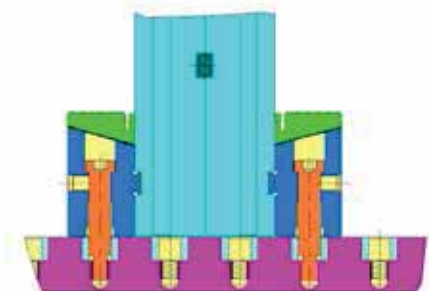
Art. 230H

Per prese pezzo particolari
For specific clamping surfaces



Art. 230M
a gradino inclinato / angle step

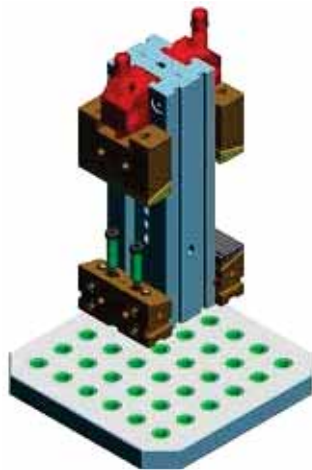
Per lavorare con angoli - *In order to clamp at specific angles*



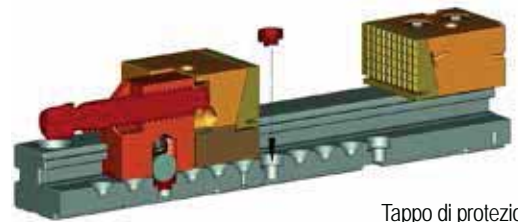
Ancoraggio e posizionamento su reticolo
Grid clamping and positioning



Ancoraggio e posizionamento
 con staffe e chiavette
*Positioning and clamping through
 vise clamps and keys nuts*



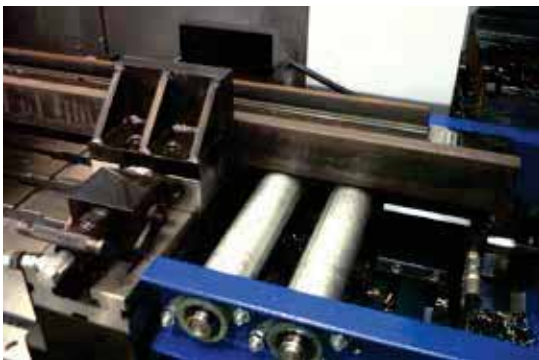
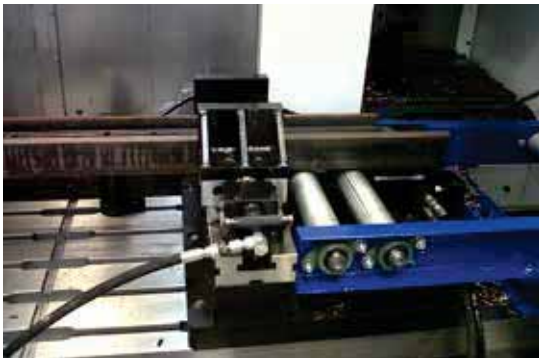
Ancoraggio e
 posizionamento su reticolo
Grid clamping and positioning



Tappo di protezione
Protection cap



Morsa STD Art.1 rialzata con moltiplicatore di forza Art.257 e
 ganasce oscillanti rialzate regolabili con inserti
*STD Art.1 vise with bottom spacer/rise with Art.257 power multiplier
 and adjustable floating higher jaws with inserts*



Morse Modulari automatizzate tramite cilindri idraulici e con supporto di bloccaggio a
 cambio rapido e personalizzate con sovra ganasce intercambiabili per la lavorazione
 di un telaio di un carrello elevatore.
*Modular vises automatically operated through hydraulic cylinders with quick
 change blocking device and customized with interchangeable stack type jaws
 for machining a forklift frame*



Morse modulari montate verticalmente su cubo portapezzi
 per lavorazioni su centro orizzontale
*Modular Vises vertically assembled on a tombstone
 for horizontal machining centre.*



Morse standard
 automatizzate
 su una macchina
 con tavola lunga
 30 metri
*Automated
 standard Vises
 on a 30 meter
 long machine tool*



Morse Art.1 montate su tavola basculante per macchina a 5 assi
Art.1 vises assembled on a dividing head for a 5 axis machine



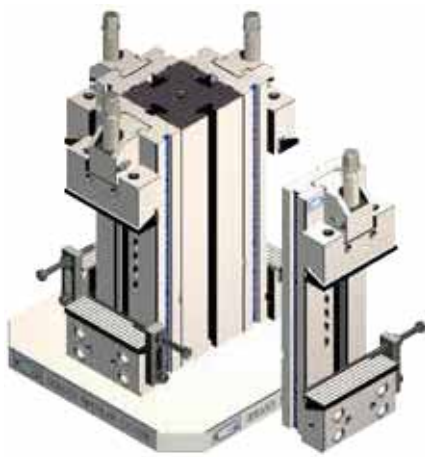
Attrezzatura speciale per lavorazione piastre, sovravole e pallet in una sola ripresa
 Attrezzatura speciale per lavorazione piastre, sovravole e pallet in una sola ripresa



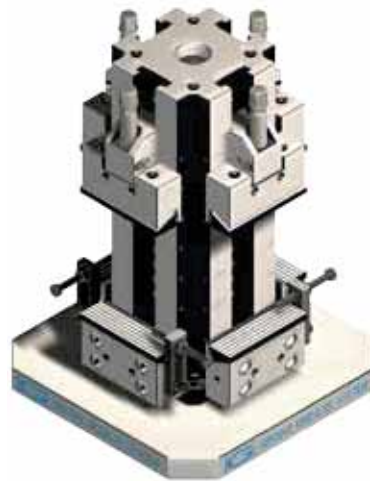
Attrezzatura speciale su richiesta
 Special feature on request



Attrezzatura speciale su richiesta
 Special feature on request



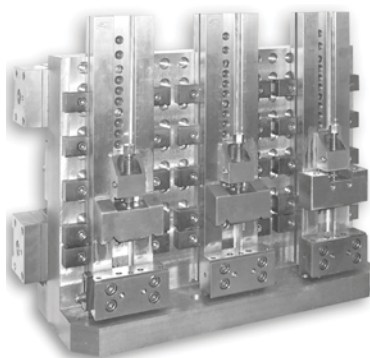
Art. 750
 Morse standard montate verticalmente N° 4
 morse STD Art.1 + N° 1 Art.450
Standard vises mounted vertically
 N° 4 vises STD Art.1 + N° 1 Art.450



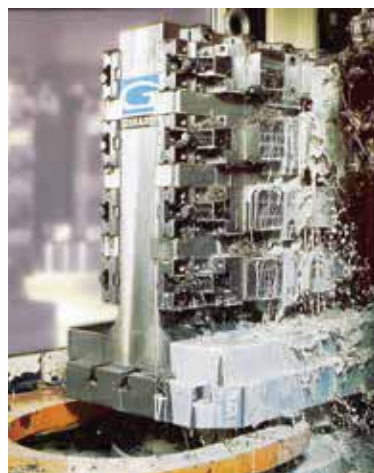
Art. 700
 Cubo-morsa modulare standard (Monoblocco)
Standard modular vise tower (Solid)



Art. 53D
 Cubo per piastre riportate con montate piastre ed elementi modulari con sovraganasce
Tombstone with modular plates, fixed and movable vise sections and stack type jaws assembled



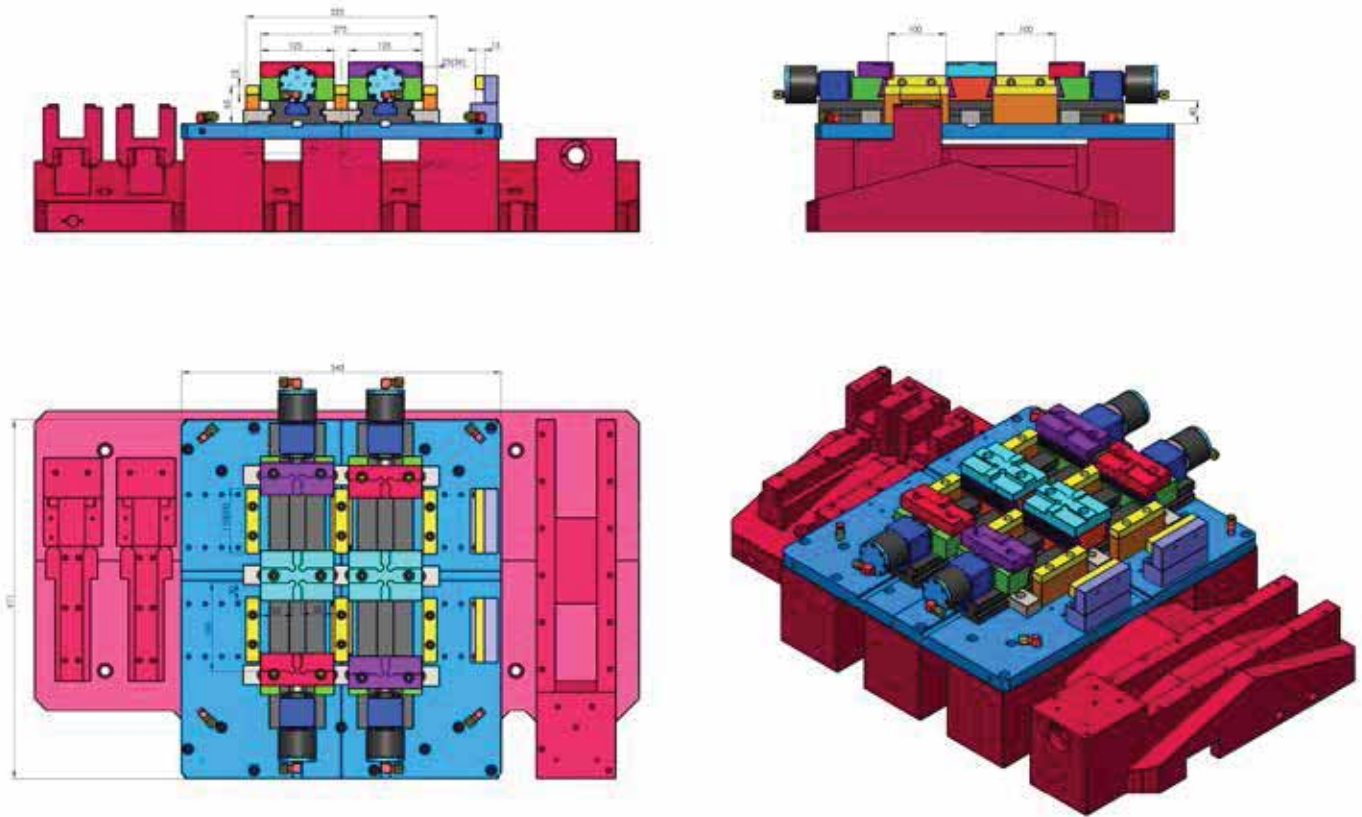
Morse STD montate verticalmente
STD vises vertically assembled



Morse XL doppie montate su spalla in orizzontale
XL double vises horizontally assembled on a 2 sides tombstone



Morse STD montate verticalmente
STD vises vertically assembled



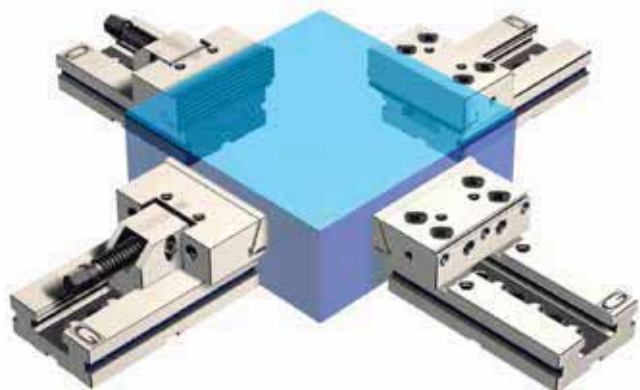
Art. 30

Morse Art.30 con ganasce a gradino speciali scaricate e cilindri idraulici
Art.30 vises with special step jaws and hydraulic cylinders

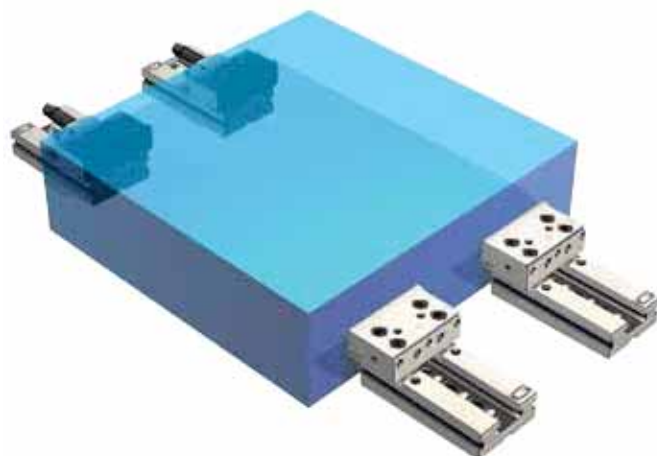


Morse Modulari XL doppie automatizzate tramite cilindri idraulici e personalizzate con sovra ganasce intercambiabili per presa pezzo in punti specifici con spine di riferimento per posizionamento preciso.

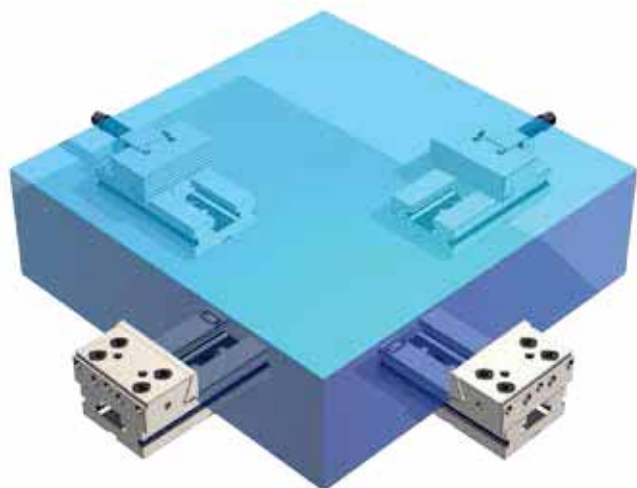
Double XL Modular vises automatically operated through hydraulic cylinders and customized with interchangeable stack type jaws for workpiece clamping in specific points with positioning pins as reference.



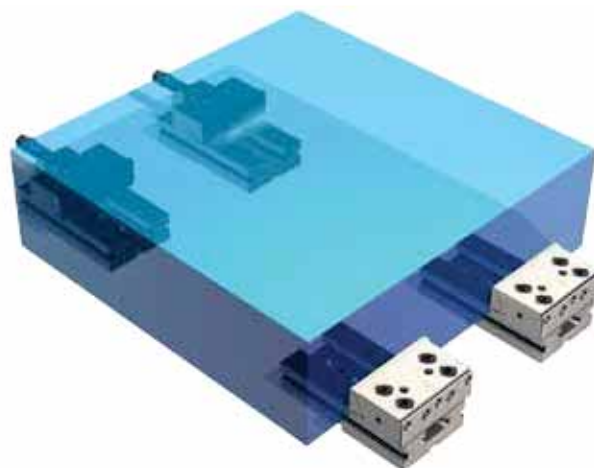
Particolare appoggiato direttamente sulla tavola della macchina
Huge workpiece clamped directly on the machine table



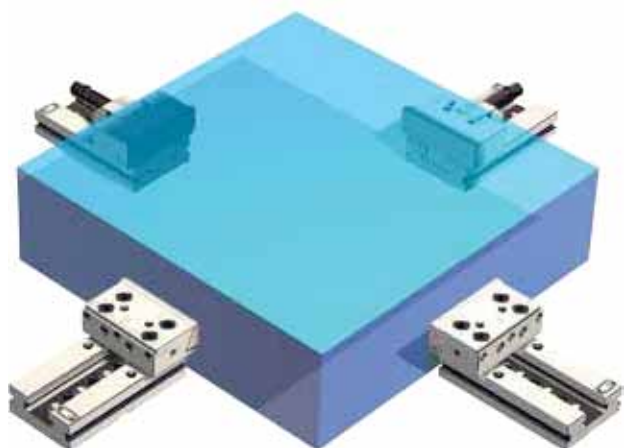
Particolare di grosse dimensioni appoggiato direttamente sulla tavola della macchina
Huge workpiece clamped directly on the machine table



Particolare serrato tramite 4 elementi modulari :
 2 sezioni mobili Art.102 e 2 sezioni fisse Art.103
*Workpiece clamped through 4 modular elements:
 2 movable sections Art.102 and 2 fixed sections Art.103*



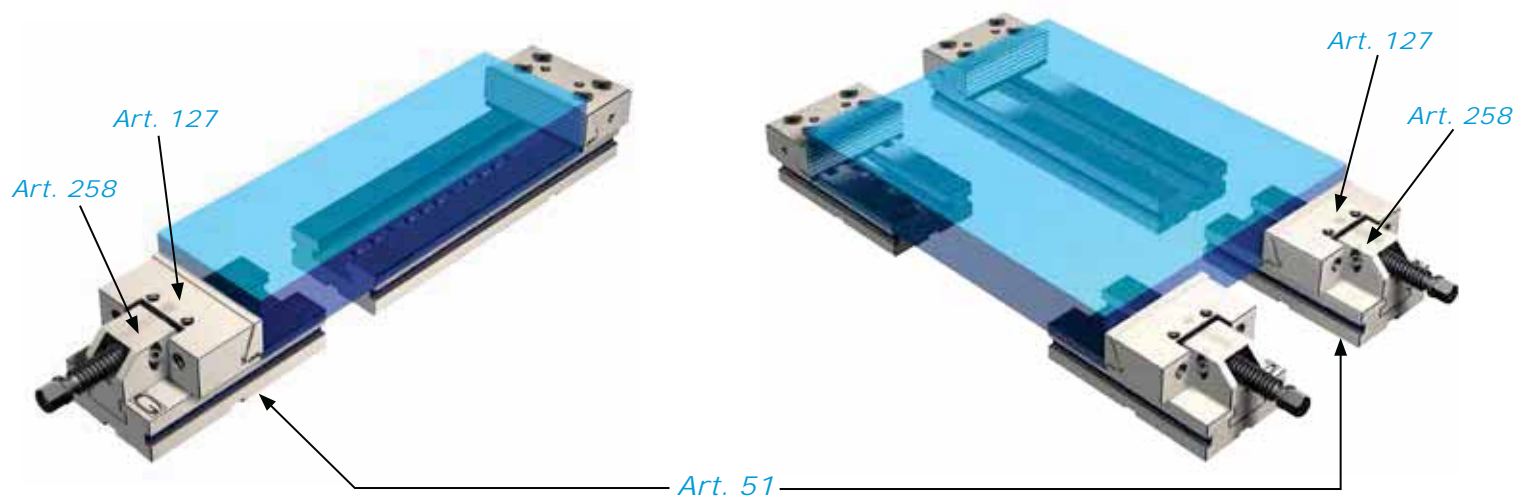
Particolare serrato tramite 4 elementi modulari :
 2 sezioni mobili Art.102 e 2 sezioni fisse Art.103
*Workpiece clamped through 4 modular elements:
 2 movable sections Art.102 and 2 fixed sections Art.103*



Particolare di grosse dimensioni appoggiato direttamente sulla tavola della macchina
Huge workpiece clamped directly on the machine table

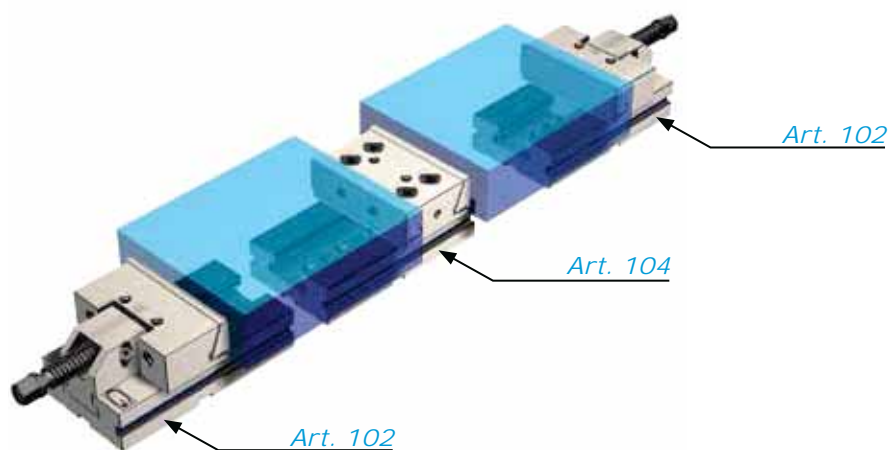


Particolare appoggiato direttamente sul piano spalla e serrato tramite una sezione mobile Art.102 e n.3 appoggi fissi.
Workpiece positioned directly on the tombstone and clamped through 1 movable section art.102 and n.3 fixed reference points.

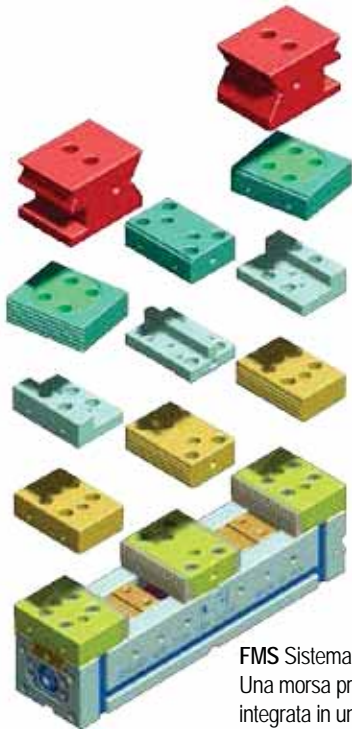


Art. 1 + Art. 51

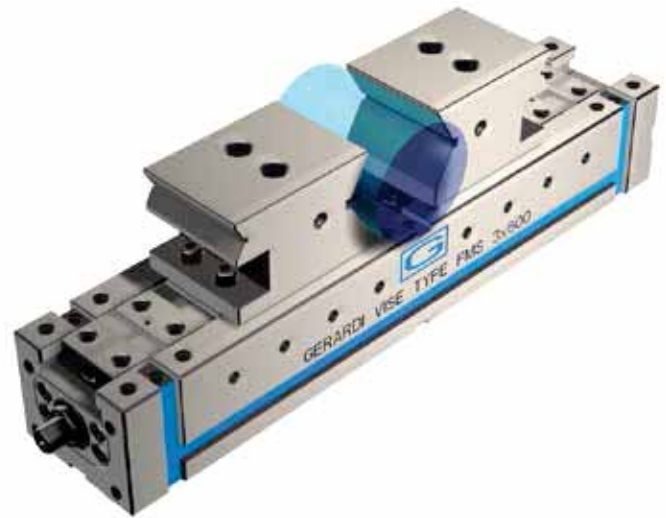
Per realizzare una sezione mobile è sufficiente sfilare il gruppo di bloccaggio (Art. 208) + la ganaschia mobile (Art. 127) ed inserirli in un elemento di prolunga (Art.51)
In order to get a movable vise section it is enough to remove the blocking device (Art. 208) + the movable jaw (Art.127) and to assemble them on an extension base (Art.51)



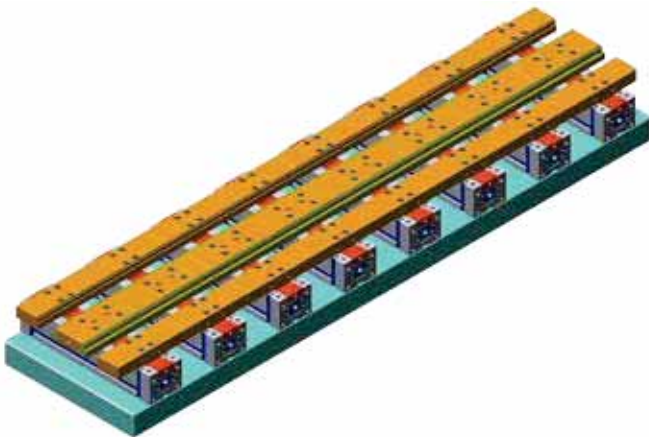
Elemento modulare fisso doppio (Art.104) + 2 elementi modulari mobili (Art.102)
Double fixed vise section (Art.104) + 2 movable vises sections (Art.102)



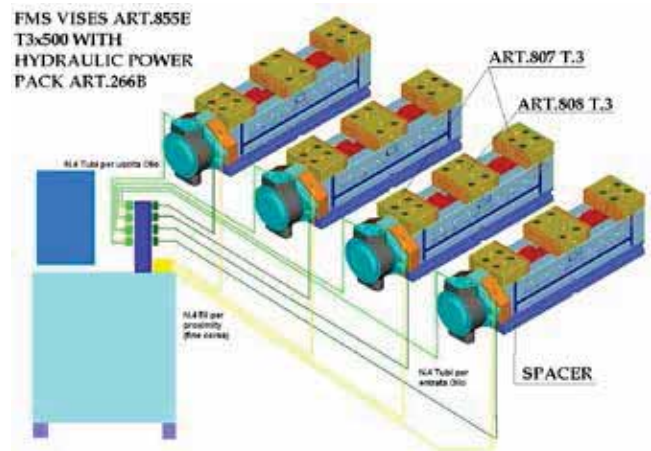
FMS Sistema Modulare Flessibile
 Una morsa progettata per essere modulare ed essere integrata in un enorme sistema modulare
FMS Flexible Modular System
 A vise designed to be modular and to be integrated into a widest workholding system



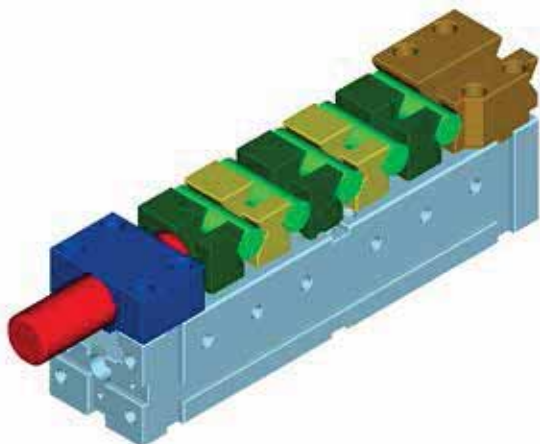
Morsa FMS autocentrante per tondi
FMS self-centering vise for round workpieces



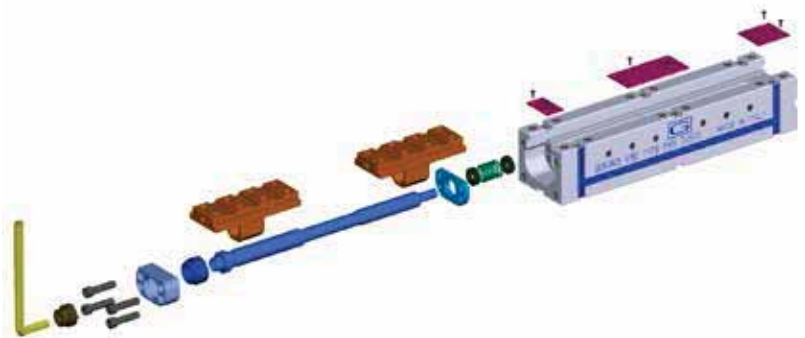
Ganascia speciale FMS per serrare barre molto lunghe
Special widest FMS jaws in order to clamp very long straight bars



Morse FMS con centralina



Utilizzo di una base FMS per serrare 4 pezzi con cilindro idraulico
FMS vise base used to clamp 4 workpieces through hydraulic cylinder



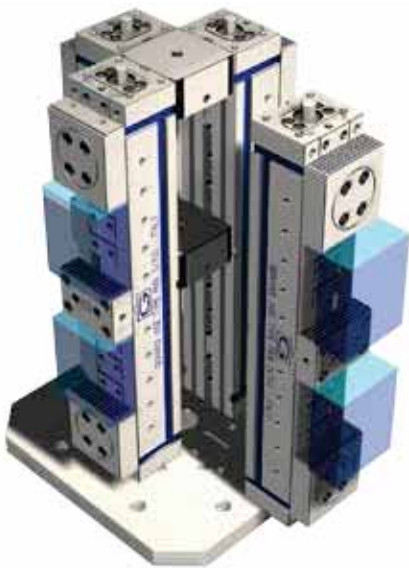
Esplosione dei componenti
Explosion view



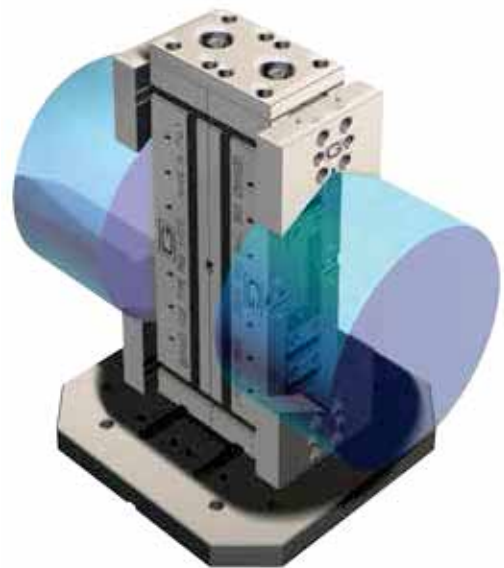
1° Fase di smontaggio morsa FMS
1st operation for FMS vise disassembling



2° Fase di smontaggio morsa FMS
2nd Operation for FMS vise disassembling



4 Morse FMS montate a croce tra loro tramite distanziali
4 FMS vises assembled crossway through spacers



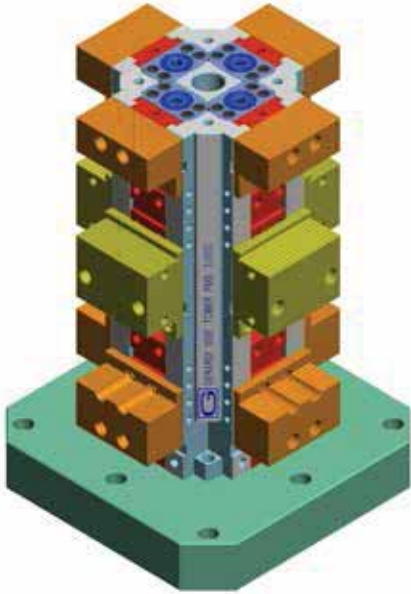
2 morsa FMS montate verticalmente dorso a dorso con ganasce prismatiche per serrare particolari tondi
2 FMS vises vertically assembled back to back with prismatic jaws for round workpiece clamping



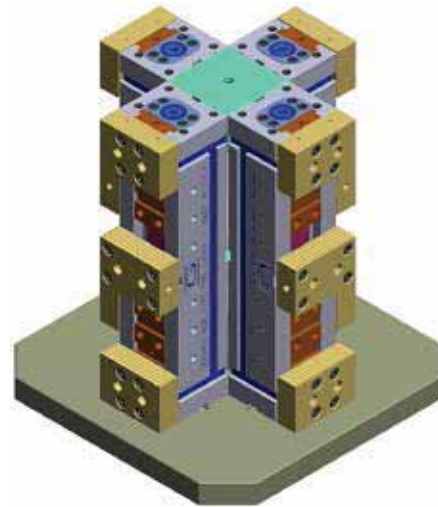
8 Morse FMS con moltiplicatore di forza (Art. 802) montate su cubo a croce (Art.57)
8 FMS vises with power multiplier (Art. 802) assembled on a cross cubetower (Art.57)



Cubo Art.53D con montate morsa FMS con ganasce personalizzate per centraggi particolari
Art. 53D tombstone with FMS vises with special jaw for workpiece centering assembled

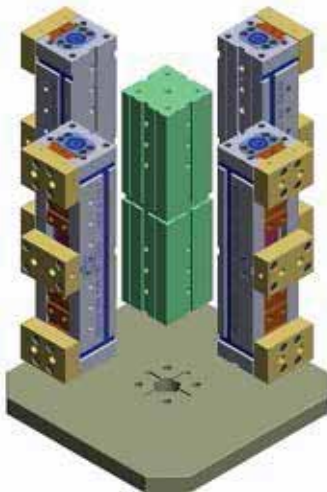


Cubomorsa FMS monoblocco per serraggio di 8 particolari contemporaneamente
 FMS vise tower for 8 workpieces clamping in one set up

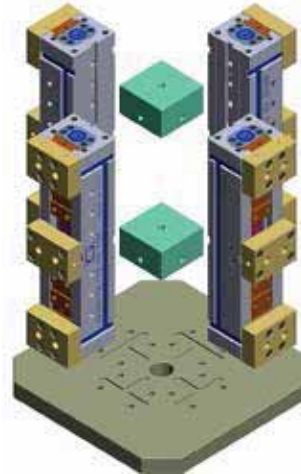


Art. 860

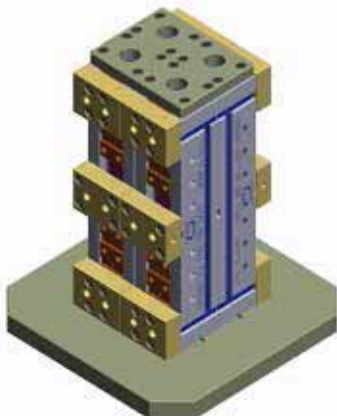
Cubo morsa FMS doppio con ganascia centrale fissa per il serraggio di 8 pezzi.
 Double FMS vise tower with fixed middle jaws for 8 clamping stations



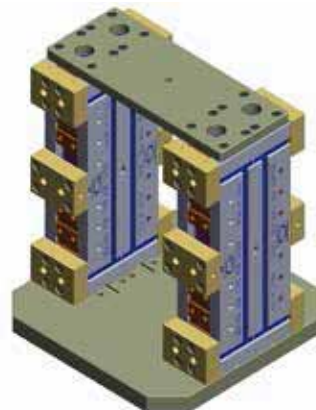
Vista esplosa N°4 morse FMS montate a croce con supporto centrale (836), e piastra base (827)
 Explosion view N°4 FMS vises cross-mounted with center support (836), and base plate (827)



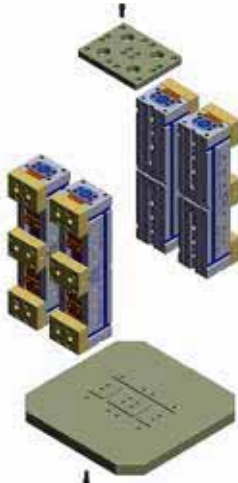
N°4 morse FMS montate a croce su piastra base (827), con distanziali (835)
 N°4 FMS vises cross-mounted on a base plate (827), with spacer (835)



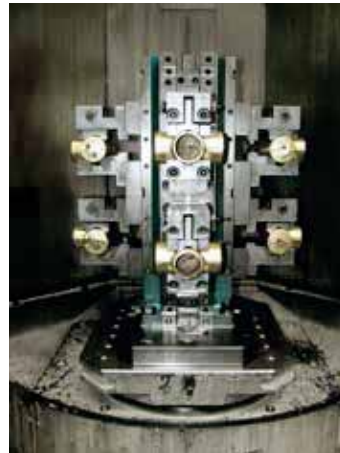
N°4 morse FMS montate dorso a dorso, fianco a fianco, su piastra base (827) con piastra di collegamento (832)
 N°4 FMS vises mounted back-to-back, side by side, on base plate (827) with connecting plate (832)



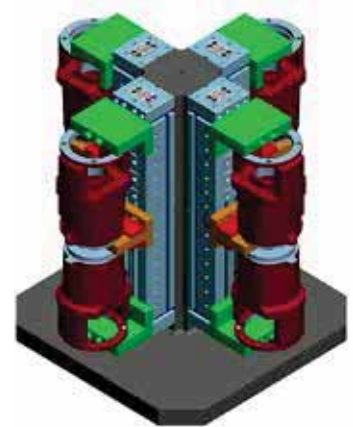
N°4 morse FMS montate dorso a dorso su piastra base (827) con piastra di collegamento (832)
 N°4 FMS mounted back-to-back, on base plate (827), with connecting plate.



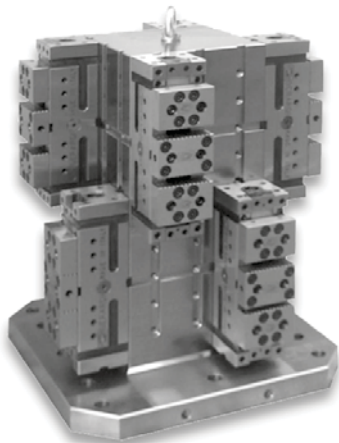
Vista esploso N°4 morse FMS montate a croce con supporto centrale (836), e piastra base (827)
Explosion view N°4 FMS vises cross-mounted with center support (836), and base plate (827)



Cubomorsa FMS doppio, per serraggio 8 pezzi. Rubinetteria FMS visetower with double station for 8 workpieces clamping. Taps



8 valvole serrate con un'unica attrezzatura tramite 4 morse FMS montate verticalmente
8 pieces valves clamped in 1 setup through 4 FMS vises vertically assembled

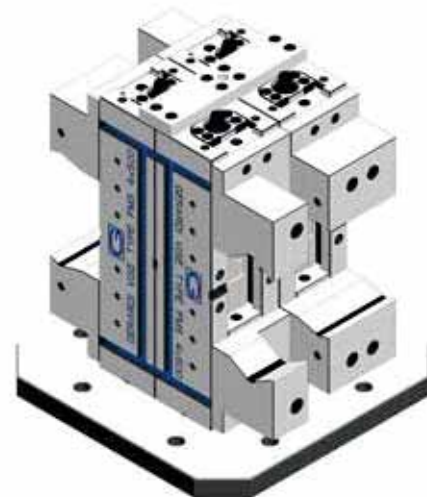
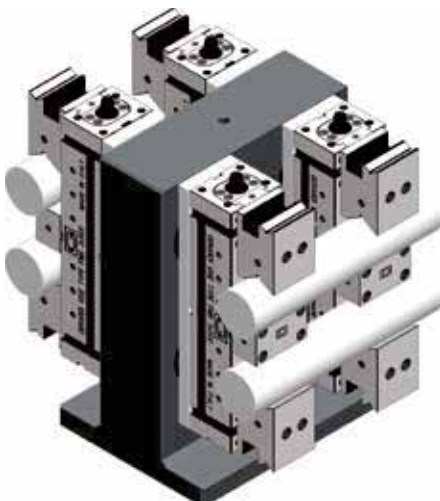


Art. 53G

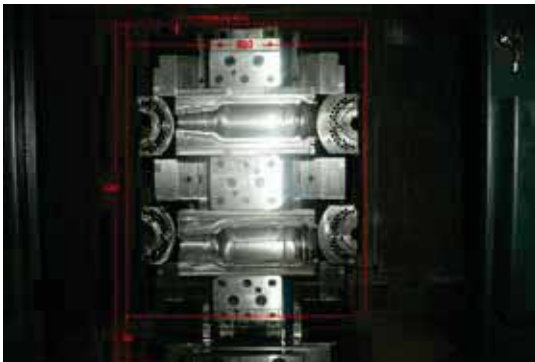
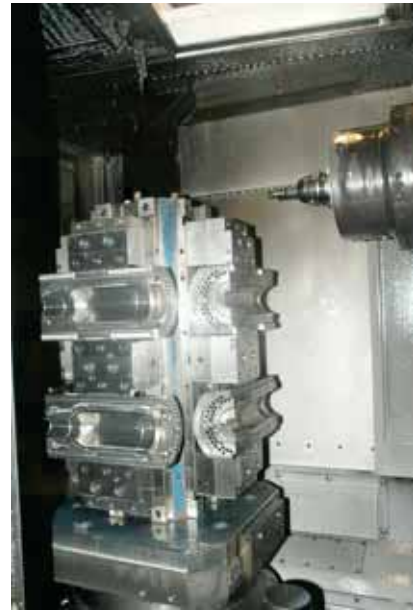
Cubo con cave, con montate n° 8 morse FMS doppie in verticale
T-slot tombstone with 8 double FMS vises vertically mounted



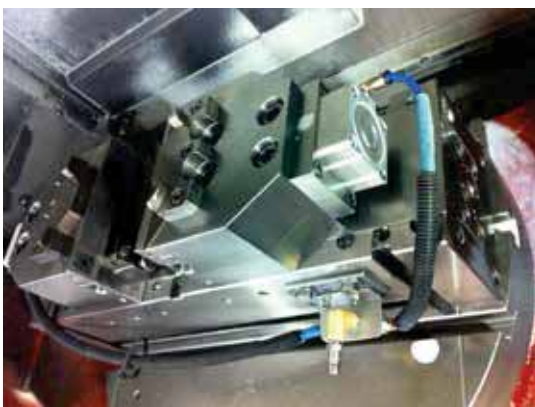
Morse FMS montate orizzontalmente
FMS vises horizontally mounted



Morse FMS montate verticalmente dorso a dorso per serrare particolari cilindrici tramite ganasce prismatiche Art.810J SPECIALI realizzate su progetto di massima del cliente
FMS vises vertically assembled back to back to clamp a cylindrical work-piece with SPECIAL design prismatic jaws Art.810J according to customer draft project



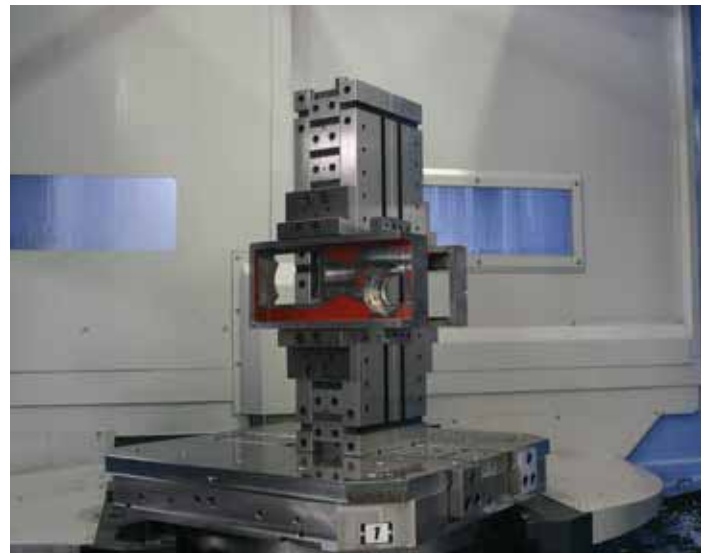
Cubomorsa FMS con ganasce speciali per presa stampi di bottiglia
FMS vise tower with special jaws to clamp bottle moulds



Morsa FMS (con ganasce oscillanti e puntalini meccanici)
per serraggio pezzi irregolari
FMS vise (with floating jaws and mechanical grip points)
for irregular workpieces clamping



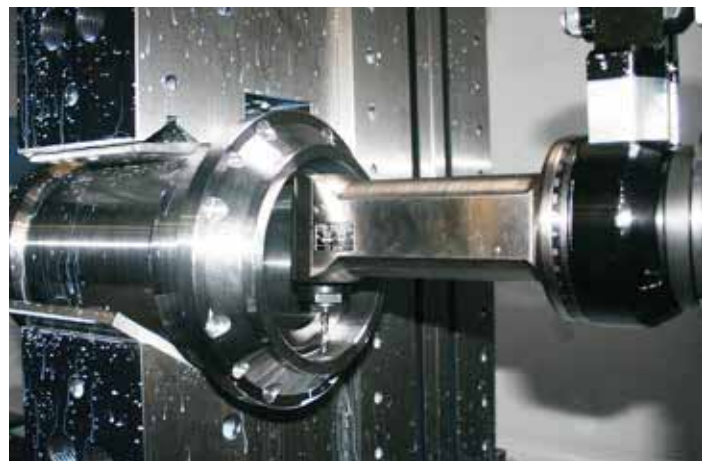
Cubo di morse autocentranti FMS montate in verticale con ganasce prismatiche per pezzi tondi
Vise tower made of 2 self-centering FMS vises vertical mounted back-to-back with prismatic jaws for round work-pieces



Cubo di morse autocentranti FMS montate in verticale con ganasce lisce a gradino per pezzi quadrati
Vise tower made of 2 self-centering FMS vises, vertical mounted back-to-back with smooth step jaws for square work-pieces



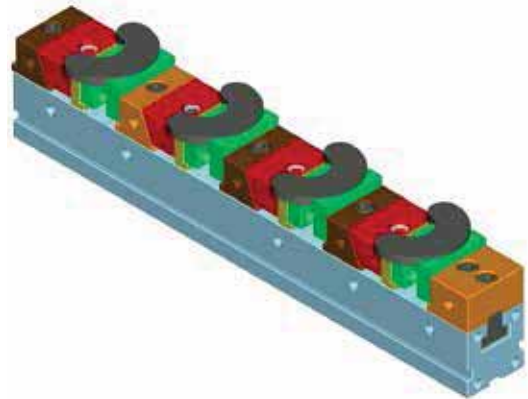
Esempio di massima capacità di presa pezzo delle morse FMS per un miglior utilizzo delle corse del centro di lavoro orizzontale
Example of FMS vises maximum clamping capacity for a better exploit of the machining center runs



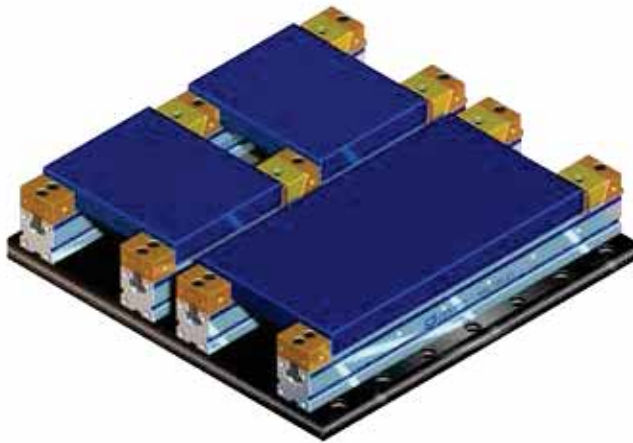
Foratura interna tramite testa angolare Gerardi Evolution Line serie ATC (da cambio utensile automatico)
Internal drilling by Gerardi angle heads Evolution line - ATC series (Automatic tool change)



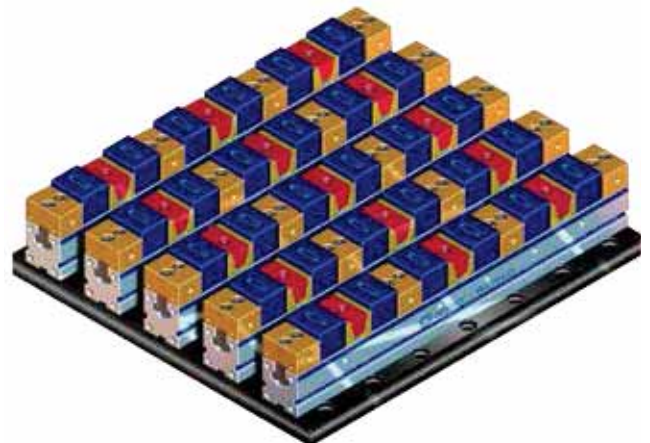
Morsa MULTIFLEX predisposta per il serraggio di 5 pezzi di diverse dimensioni con ganasce speciali più larghe della base
 MULTIFLEX vise setup for 5 different workpieces with special wider jaws



Morse MULTIFLEX con ganasce dolci personalizzate per serraggio pezzi di forma particolare
 MULTIFLEX vise with tailor made soft steel jaws for special shaped workpieces



Esempio di applicazione di 4 morse MULTIFLEX su sovravola per diversi tipi di serraggio e lavorazione
 4 MULTIFLEX vises assembled on head plate for different workpieces clamping and machining



Esempio di applicazione di 5 morse MULTIFLEX su sovravola per serraggio di 30 pezzi
 5 MULTIFLEX vises on head plate for 30 workpieces clamping



Art. 605
 Ganasca mobile e fissa liscia
 Fixed and movable smooth jaws



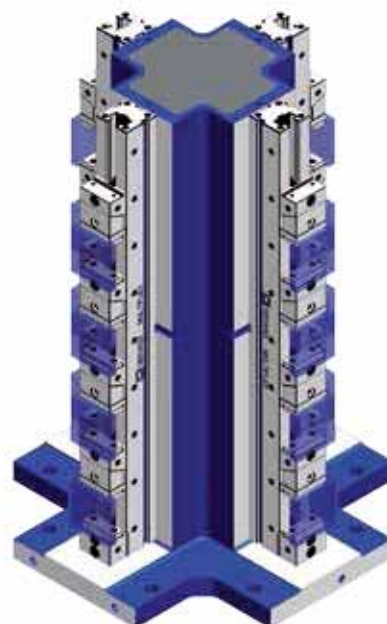
Art. 615
 Ganasca con cuneo di posizionamento maggiorato
 Jaw with bigger positioning wedge
 (increased with respect to standard dimension)



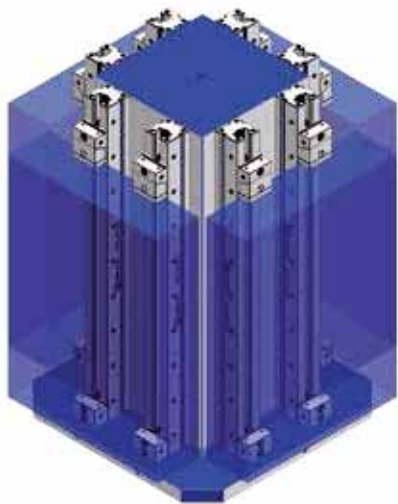
Art. 609
 Ganasca mobile e fissa con gradino
 Fixed and moving jaw with step



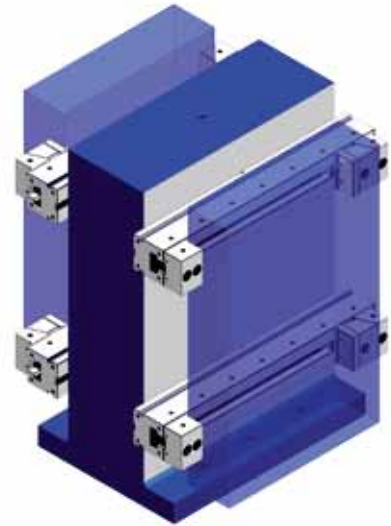
Art. 613
 Ganasca mobile di spinta doppia
 Double clamping movable jaws



Cubo a croce con N° 4 morse MULTIFLEX per il serraggio di 16 pezzi.
 Crosscube with N°4 MULTIFLEX vises mounted for N°16 workpieces clamping



Cubo a croce con N° 2 morse **MULTIFLEX** per lato, montate verticalmente per il serraggio di pezzi di grandi dimensioni.
 N°2 **MULTIFLEX** vises vertically assembled on cast iron tombstone for huge workpieces clamping



Spalla in ghisa con morse **MULTIFLEX** montate orizzontalmente per il serraggio di pezzi di grandi dimensioni
 2 side tombstones with **MULTIFLEX** vises horizontal mounted for huge workpieces clamping



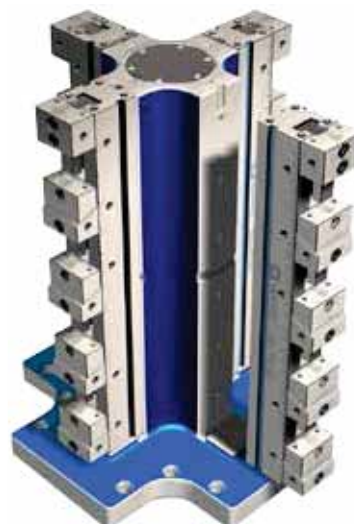
Cubo morsa **MULTIFLEX** integrale monoblocco
 Solid and compact
MULTIFLEX vise tower



Cubo morsa **MULTIFLEX** integrale monoblocco
 Solid and compact
MULTIFLEX vise tower



Corpo base cubo morsa **MULTIFLEX** a croce
 Solid crosstype **MULTIFLEX** vise tower body



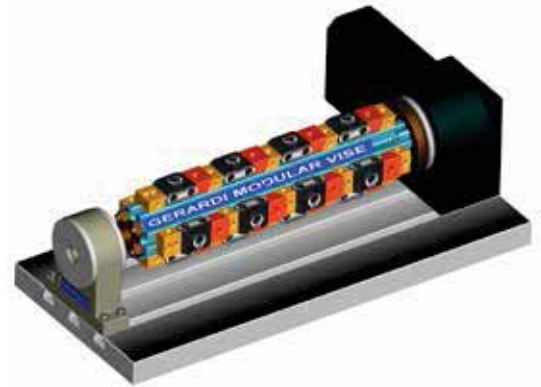
Cubo a croce in ghisa per applicazione **MULTIFLEX** e/o **FMS** in verticale
 Cast iron crosstype tower for **MULTIFLEX** or **FMS** vises vertical assembling



Morse MULTIFLEX montate verticalmente
 su cubi portapezzi in ghisa
 MULTIFLEX vises vertically assembled on
 cast iron tombstone



Morse MULTIFLEX montate verticalmente
 su cubi portapezzi in ghisa
 MULTIFLEX vises vertically assembled
 on cast iron tombstone

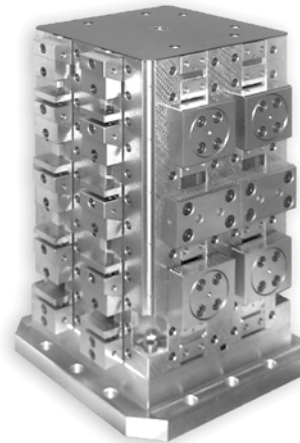


Cubo morsa MULTIFLEX montato su divisore in orizzontale per
 applicazione su centri di lavoro verticali
 MULTIFLEX vise tower assembled on a horizontal dividing head
 for application on vertical machining centre



Art. 53D

Cubo per piastre riportate con montate
 piastre e morse MULTIFLEX in verticale
 Tombstone with modular plates and
 MULTIFLEX vises vertically assembled



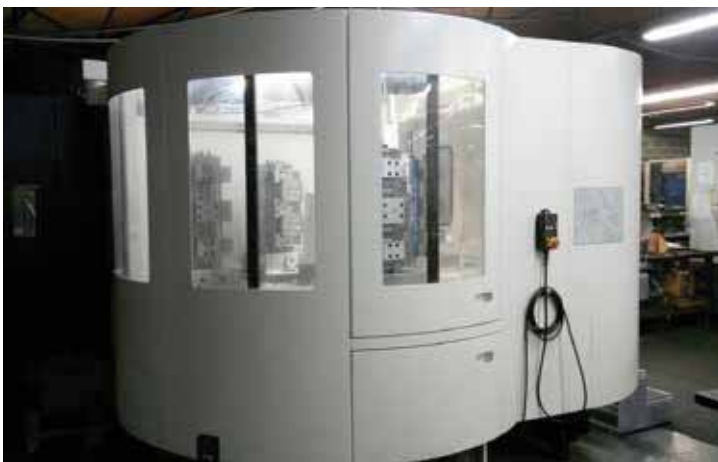
Sistema modulare multiplo: un lato morse
 FMS, un lato morse MULTIFLEX
 Multi-modular System: one side with FMS
 vises and one side with MULTIFLEX vises



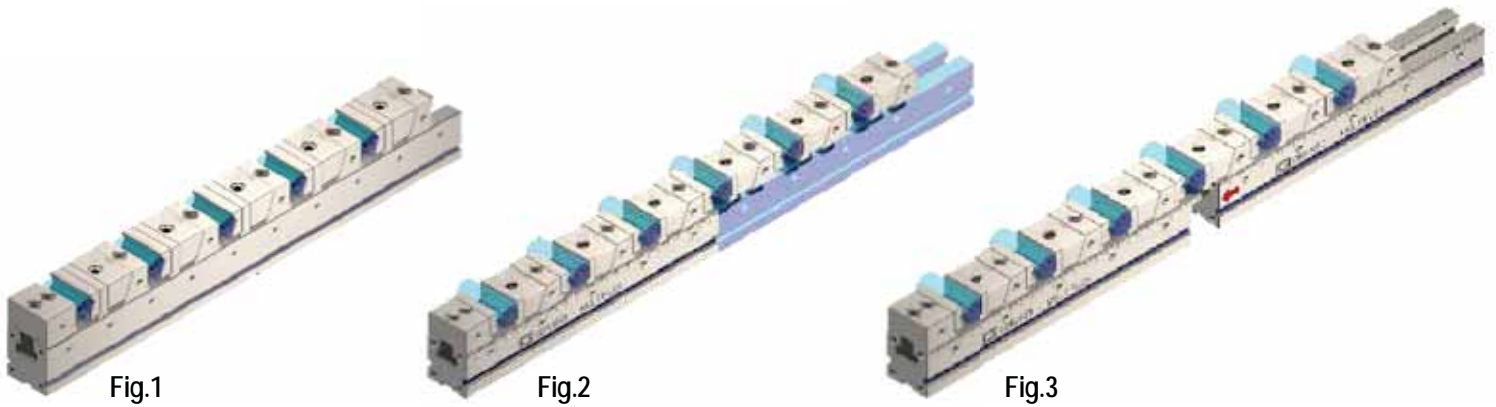
Morse Multiflex Art.611 Tipo 1x700 mm con ganasce doppie montata su
 centro di lavoro Haas VF-2 longitudinalmente rispetto alla tavola.
 Multiflex vises Art.611 Type 1 x 700 mm with double jaws shown
 on a Haas VF-2 machining centre along the X travel



Particolari fuori dimensione ma lavorati su cubo Multiflex Art.607 tipo 2 - Rather big work-pieces machined on a Multiflex vise tower Art.607 Type 2_pic2

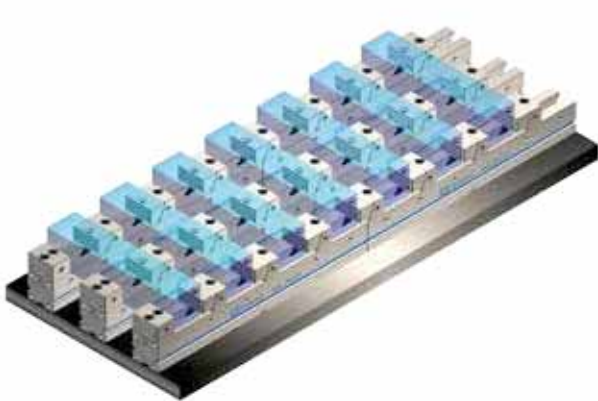


Cubimorsa FMS su centro di lavoro orizzontale
FMS Visecubes on horizontal machining centre



Possibilità di serrare più pezzi su una morsa **MULTIFLEX** (Fig.1), oppure di utilizzare 2 morse **MULTIFLEX** in linea (Fig.2) o eventualmente in linea e distanziale centrale (Fig.3)
 Possibilità di serrare più pezzi su una morsa **MULTIFLEX** (Fig.1), oppure di utilizzare 2 morse **MULTIFLEX** in linea (Fig.2) o eventualmente in linea e distanziale centrale (Fig.3)

MORSE MULTIFLEX SU CENTRO DI LAVORO VERTICALE CON TAVOLA 500x1200
MORSE MULTIFLEX SU CENTRO DI LAVORO VERTICALE CON TAVOLA 500x1200



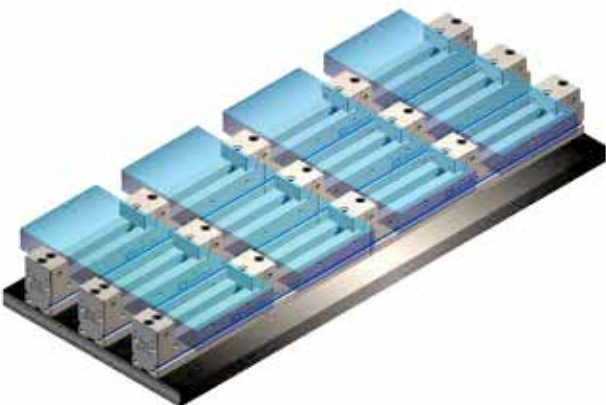
IN LINEA - IN LINEA

n.6 Morse **MULTIFLEX** Art.600 tipo 2x600,
 per il serraggio di 7 pezzi di dimensioni 80x360



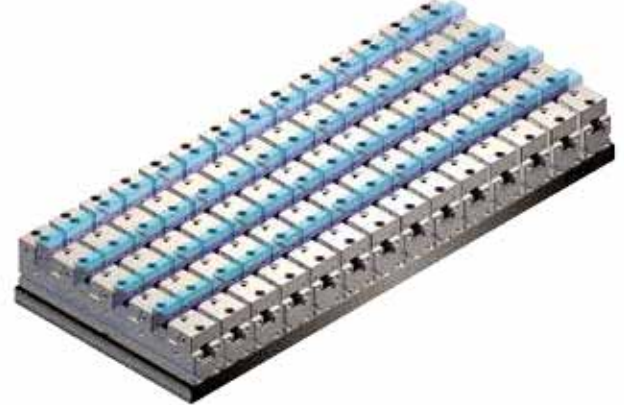
IN PARALLELO - IN PARALLELO

n.14 Morse **MULTIFLEX** Art.600 tipo 2x500,
 per il serraggio di 14 pezzi di dimensioni 80x360



IN LINEA - IN LINEA

n.6 Morse **MULTIFLEX** Art.600 tipo 2x600,
 per il serraggio di 4 pezzi di dimension 250x500



IN PARALLELO - IN PARALLELO

n.14 Morse **MULTIFLEX** Art.600 tipo 2x500,
 per il serraggio di 28 pezzi di dimensioni 160x40



Type 1&2

Art. 640

Type 3x166 - 3x266

Morsa autocentrante eccentrica
 Self-centering for eccentric vise



Art.640 Montata direttamente su mandrino tornio per il serraggio di pezzi prismatici
 Art.640 Assembled directly on a lathe chuck for prismatic workpieces clamping



Art.640 Montata su una tavola girevole tramite piastra di collegamento per lavorare su 5 lati del particolare
 Art.640 Assembled on a rotary table through connecting plate in order to be able to machine 5 workpieces sides



Art.640 tipo 1

Esecuzione di ganasce speciali ALTE con presa solo su determinati punti "su richiesta del cliente"
 Special HIGH jaws with specific clamping area "on customer request"



Art. 63

Distanziale Zero Point Singolo
 Spacer for Single Zero Point



Art. 64

Distanziale Zero Point Doppio
 Spacer for Double zero point



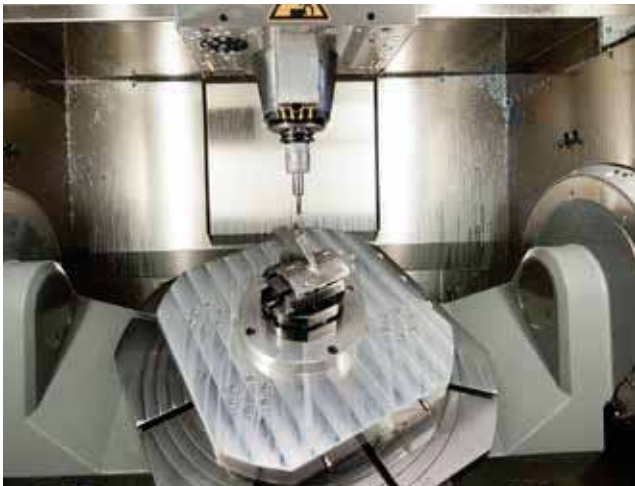
Art. 641H

Distanziale semplice per Art. 640 Tipo 1&2
 Simple spacer for Art.640 type 1&2

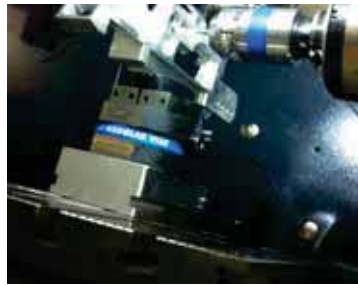


Art. 641H

Distanziale semplice per Art. 640 Tipo 3x166 / 3x266
 Simple spacer for Art.640 type 3x166 / 3x266



Applicazione aeronautica,
 morsa Art.640 tipo 2 montata su macchina a 5 assi
 Typical Multitasking vise Art.640 type 2 application
 on a 5 axis machine for aerospace workpiece



Applicazione per aeronautica Morsa Multitasking e Zero point montati su macchina DMG modello DMU 50 Ecoline
 Aerospace application for Multitasking Vise and Zero Point on DMG machine DMU 50 Ecoline Model



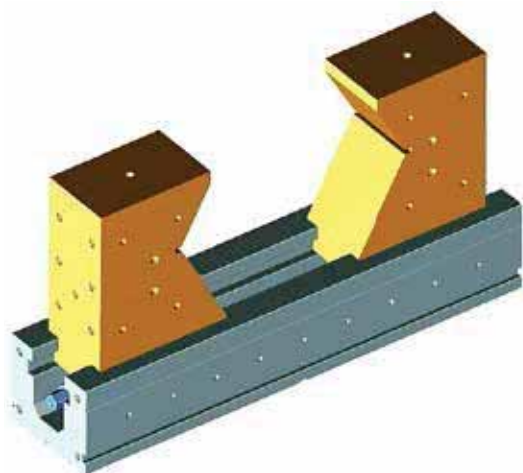
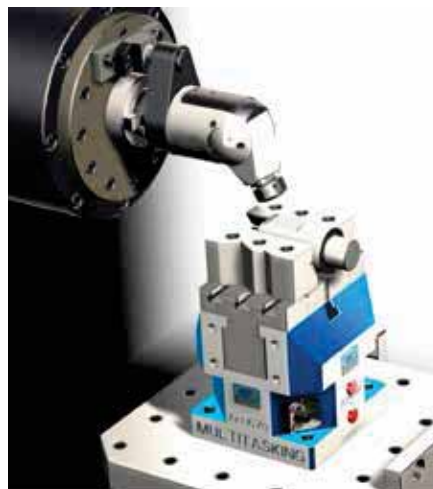
Morsa MULTITASKING con ganasce a coda di rondine per serraggi a 5 lati liberi
 MULTITASKING vise with dovetail jaws in order
 to be able to machine the 5 workpieces sides



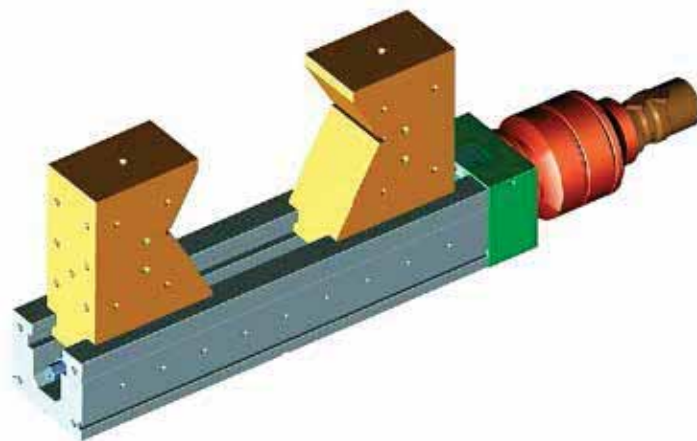
Art. 670
 Morsa MULTITASKING manuale,
 idraulica o pneumatica.
 Manual, hydraulic or pneumatic.
 MULTITASKING vise



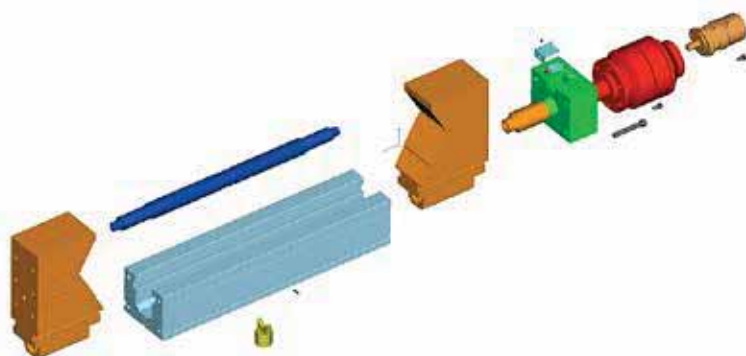
Art. 670
 Morsa MULTITASKING con
 ganasce prismatiche
 MULTITASKING vise with
 prismatic jaws



Morse speciali per serraggio di grossi tondi
 Special vises for huge round workpieces



Morse speciali per serraggio di pezzi tondi tramite motore idraulico
 Special vises for huge round workpieces through hydraulic motor



Art. 871
 Vista esploso
 Explosion view



Sistema di staffaggio automatico personalizzato
 Sistema di staffaggio automatico personalizzato



Art. 53A
 Sgrossato di fresa - Rough Milled



Art. 53C
 Finito - Completely machined



Art. 53E
 Cubo a reticolo con fori calibrati e filetti integrali
 Grid cube with calibrated holes and solid threads



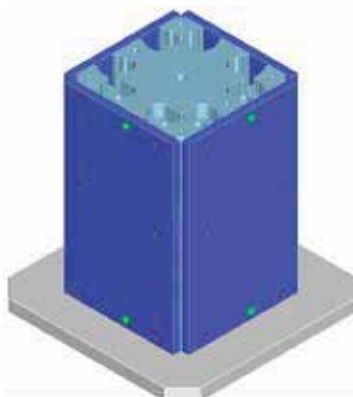
Art. 53F
 Cubo a reticolo con bussole temprate
 e filetti riportati in acciaio inox.
 Grid cube with hardened bushings and
 stainless steels helicoils



Art 53 Speciale con aperture
 su ogni lato per renderlo più leggero
Special Art.53 with windows
 to lower the weight



Cubo con una lato a reticolo e un lato
 con montati Zero Point pneumatici
 Tombstone half Grid and half assembled
 with Pneumatic Zero Point



Cubo con piastre riportate
 Cube with modular plates



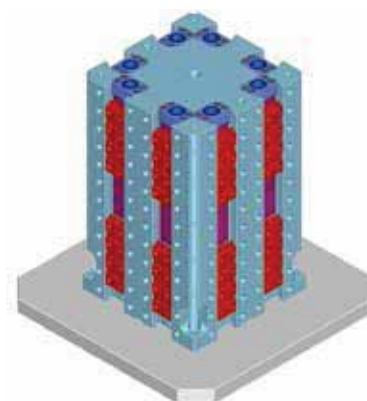
Piastra modulare con reticolo (Acciaio)
 Grid modular plate (Steel Metal)



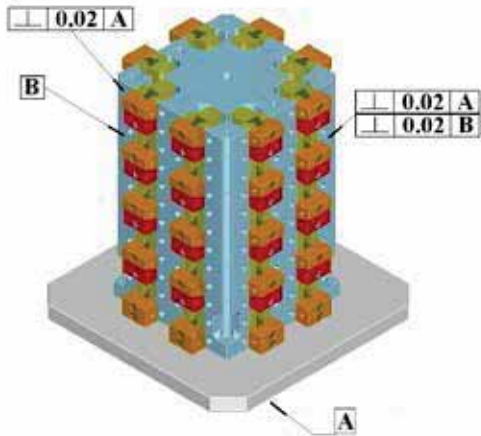
Art. 55F
 Spalla con montate due morse (MULTIFLEX Art. 600)
 Spalla con montate due morse (MULTIFLEX Art. 600)



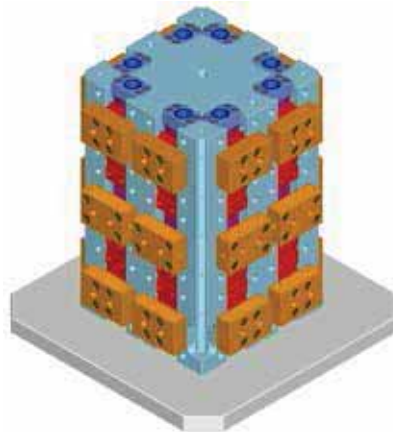
Cubo a reticolo (corpo base)
 Grid cube (base body)



Cubo con morse FMS senza ganasce
 Cube with FMS vises without jaws



Cubo con morse FMS senza ganasce
 Cube with FMS vises without jaws



Cubo con morse FMS con ganasce (per 16 pezzi)
 Cube with FMS vises with jaws (clamping 16 pcs)



Art. 53D

Cubo per piastre riportate con montate piastre e morse MULTIFLEX in verticale
 Tombstone with modular plates and MULTIFLEX vises vertically assembled

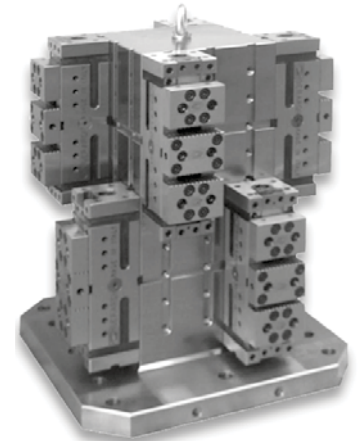


Art. 53D

Cubo per piastre riportate con montate piastre ed elementi modulari con sovraganasce
 Tombstone with modular plates, fixed and movable vise sections and stack type jaws assembled



Morse XL doppie montate su spalla in orizzontal
 XL double vises horizontally assembled on a 2 sides tombstone



Art. 53G

Cubo con cave, con montate n° 8 doppie FMS in verticale
 T-slot tombstone with 8 double FMS vises vertically mounted



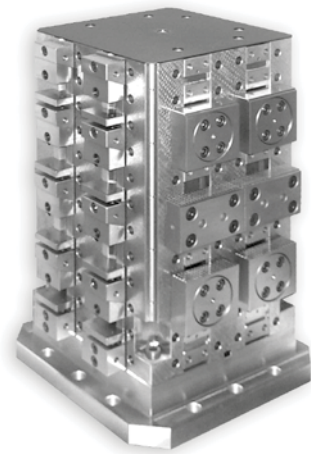
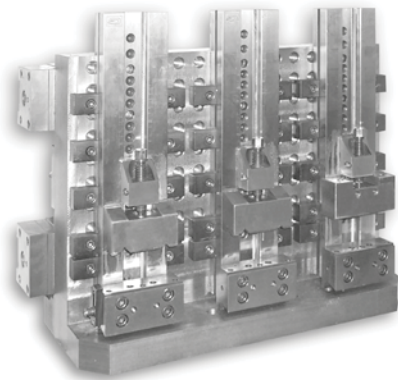
Cubo con montate morse Multiflex
 Tombstone with Multiflex vises assembled



Cubo + Zero Point + Morsa Std Art 1
 Tombstone + Zero Point + Art 1 Std Vise



Morse STD montate verticalmente
 STD vises vertically assembled



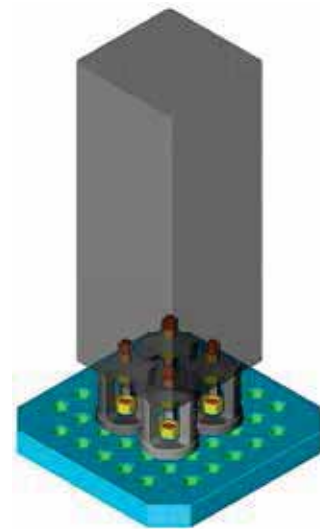
Morse FMS montate orizzontalmente
 FMS vises horizontally mounted

Sistema modulare multipla
 Multi-modular System

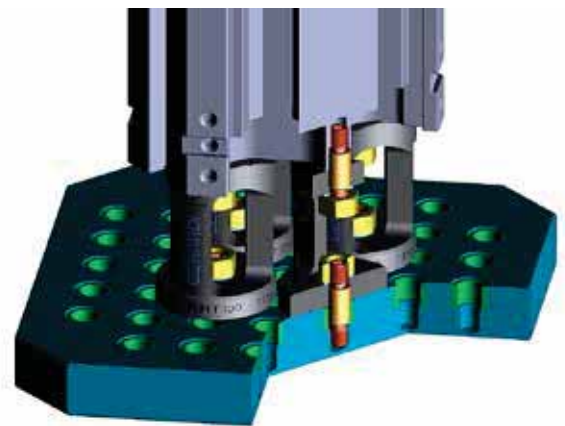
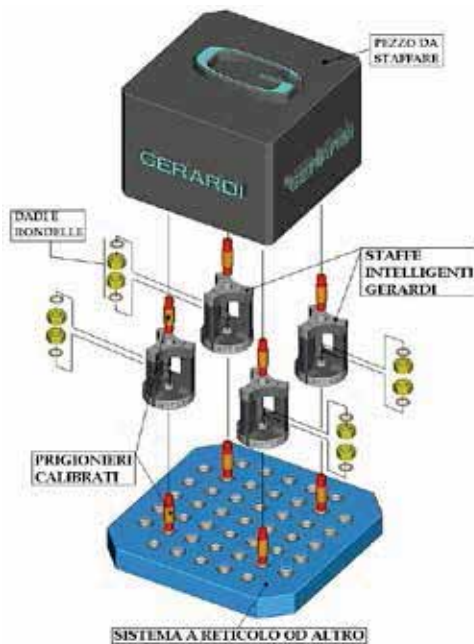


Art. 55

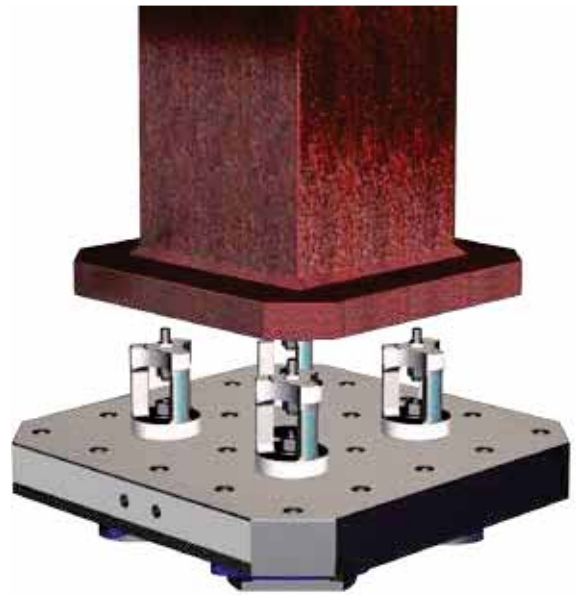
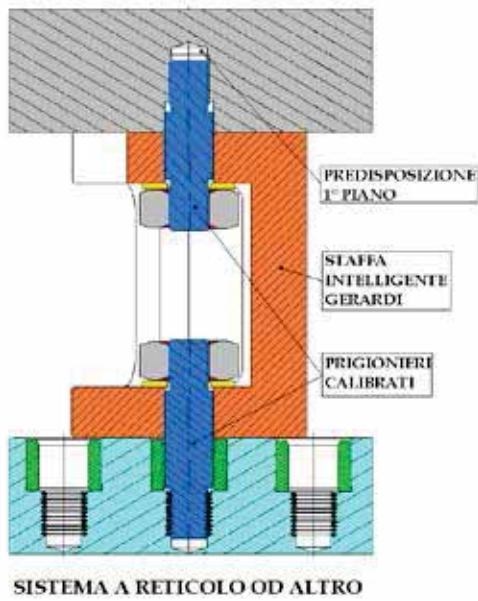
Staffa intelligente - Intelligent clamp



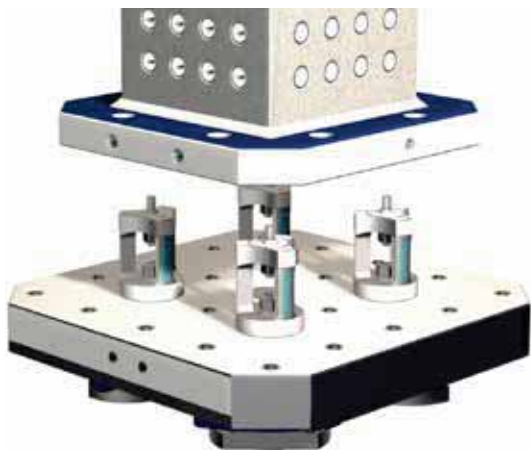
Esempio di lavorazione con staffe intelligenti
 Application example with intelligent clamps



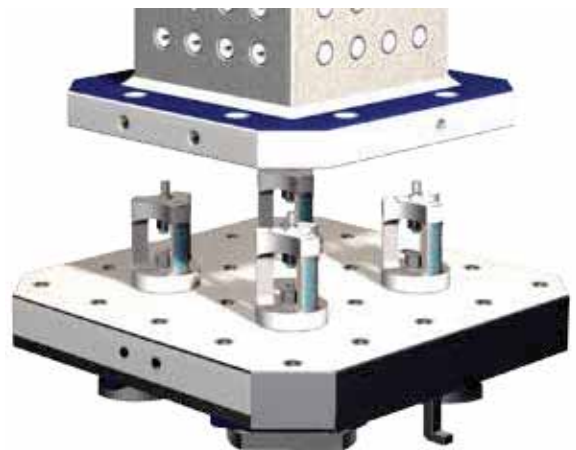
Sezione staffa intelligente
 Intelligent clamp section



Fusione cubo montata su staffe intelligenti
 Cast iron cast cube mounted on intelligent clamps



Cubo a reticolo montato su staffe intelligenti
 Grid cube mounted on intelligent clamps



Cubo a reticolo montato su staffe intelligenti
 Grid cube mounted on intelligent clamps



Morsa STD montata su Double zero point system
 STD vise mounted on Double zero point system



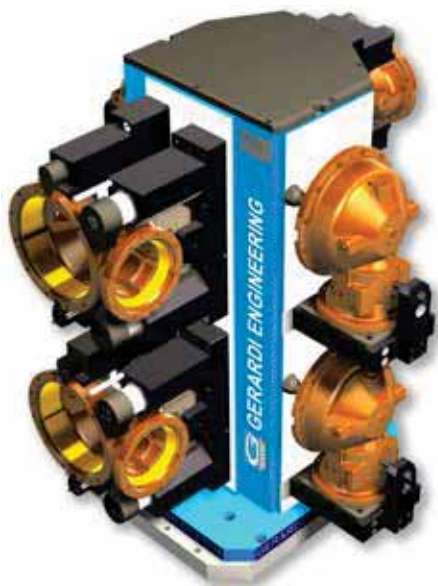
Cubo a reticolo montato su Double zero point system
 Grid cube on Double zero point system



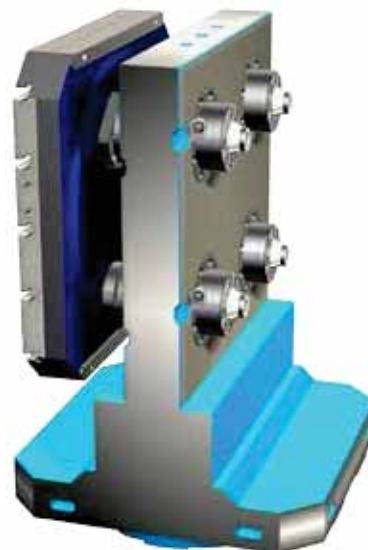
Cubo con mandrini Double Zero Point System integrati
Tombstone with double zero point system integrated



Spalla monoblocco con pallet macchina
Solid 2 sides tombstone with machine pallet



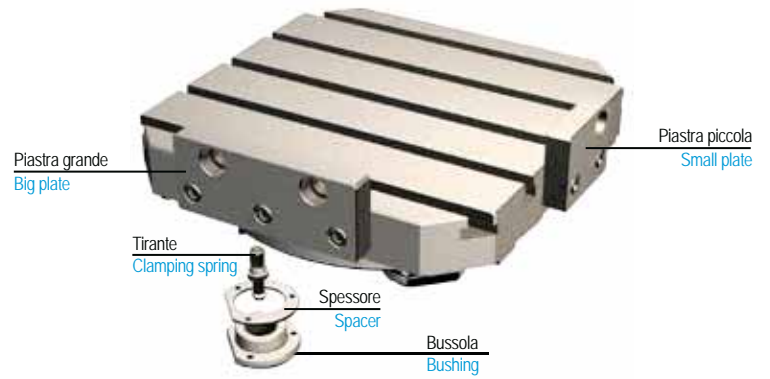
Sistema di staffaggio automatico personalizzato
Taylor made automatic clamping system



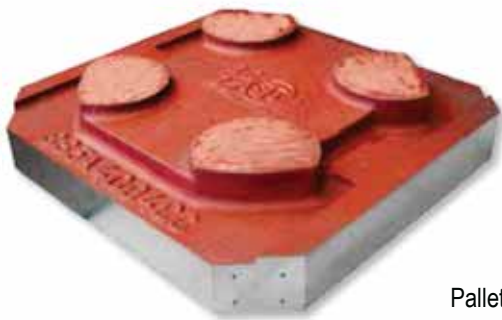
Attrezzatura speciale integrale con pallet macchina
per lavorazione in un'unica ripresa di pallets
Special tombstone integral with machine pallet for
machining plates in one set up only



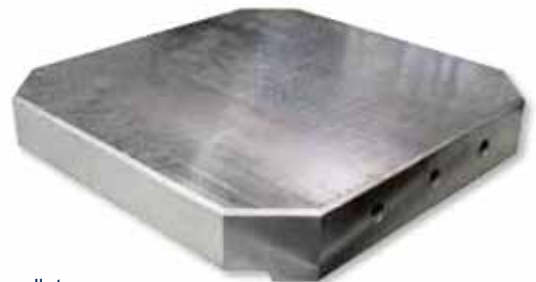
Pallet a reticolo con fori integrali M16
 Grid pallet type with the solid threads M16



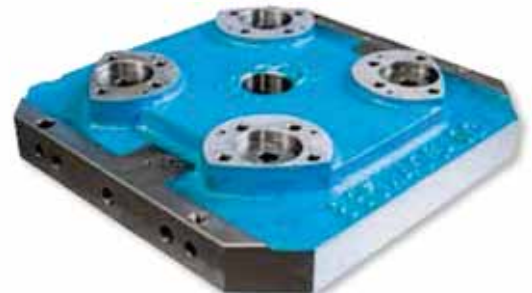
Art. 86
 Pallet con cave a "T" H7
 Pallet with "T" H7 slot



■ Fase 1 / Step 1
 Pallet semi lavorato - Semifinished machine pallet

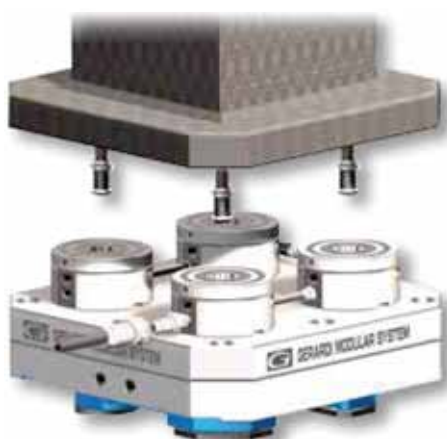


■ Fase 2 / Step 2
 Pallet finito completamente lavorato
 Machine pallet finished completely machined



■ Fase 3 / Step 3
 Pallet finito completo di tiranti, bussole e distanziali
 Finished pallet complete with pull studs, bushings and spacers





Esempio di applicazione
 Example application



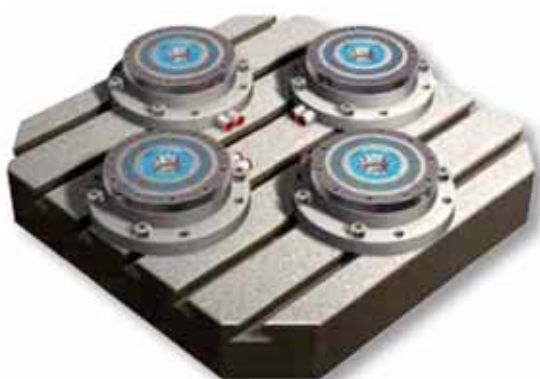
Art. 662
 Montaggio indipendente
 Independent mounting



Esempio di applicazione
 Example application



Art. 663
 Montaggio incassato
 Built-in mounting



Esempio di applicazione
 Example application



Art. 664
 Montaggio con flangia
 Mounting with flange



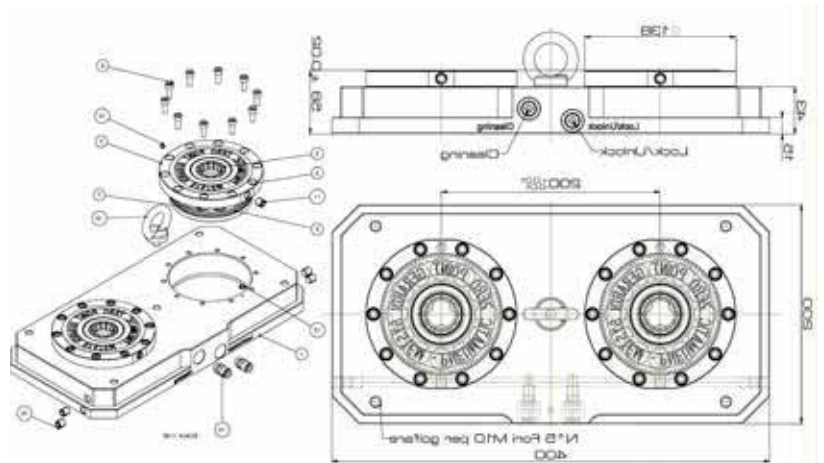
Esempio di applicazione
 Example application



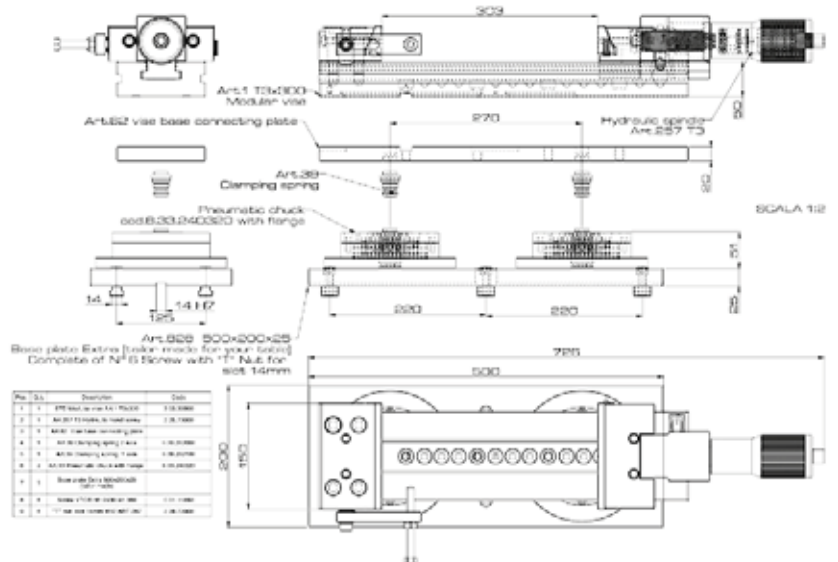
Art. 665
 Montaggio incassato
 Built-in mounting



Esempio di applicazione
Example application



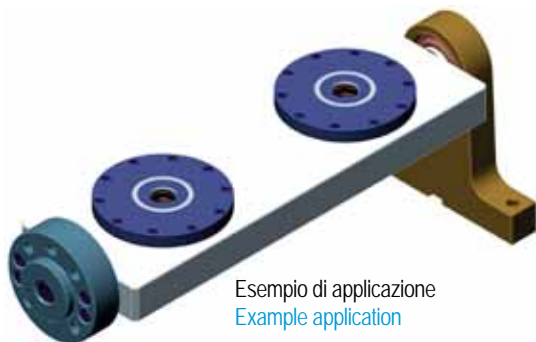
Esempio di applicazione
Example application



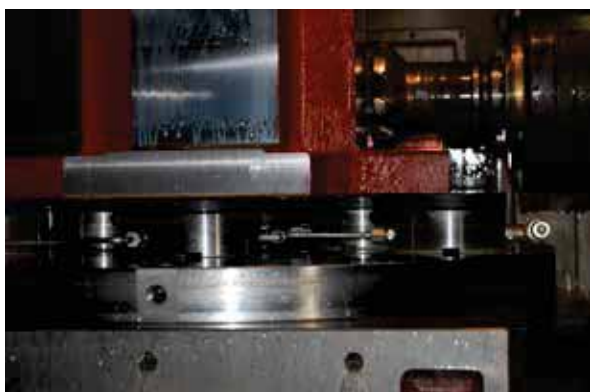
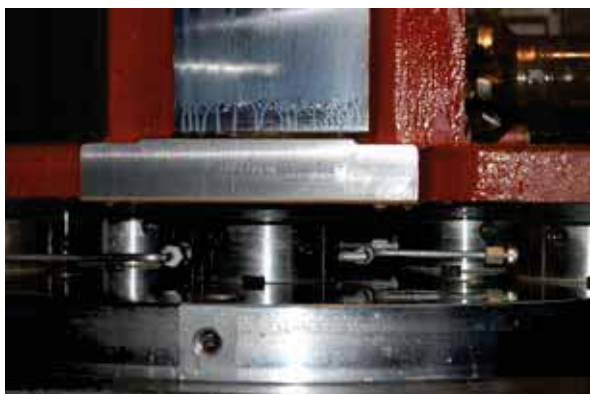
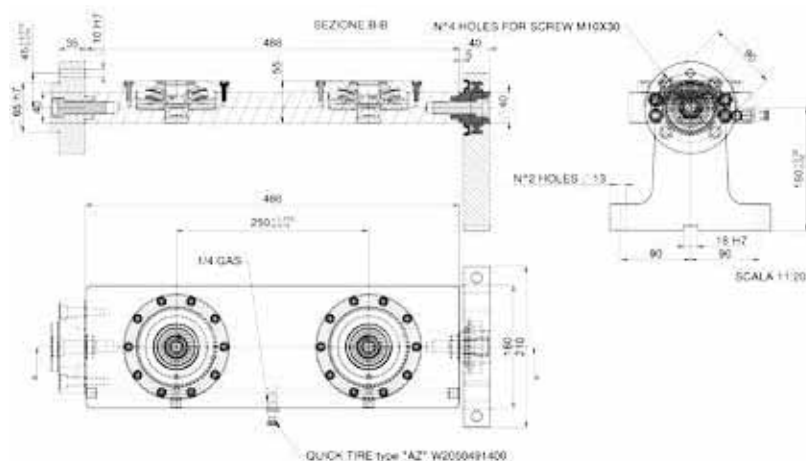
Esempio di applicazione
Example application



Cubo reticolo con sistema Zero point
Grid Tombstone with Zero point plate

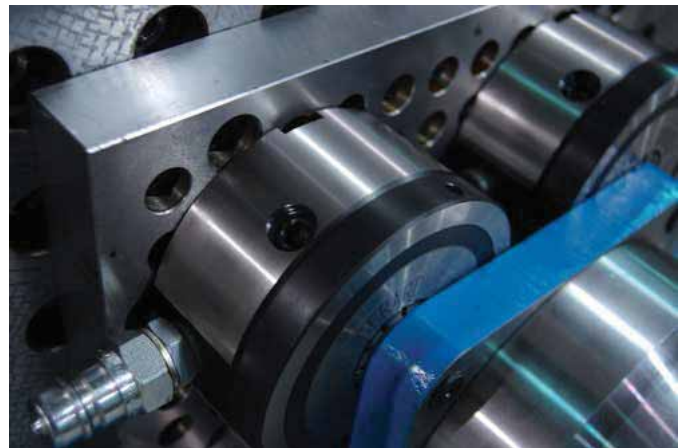


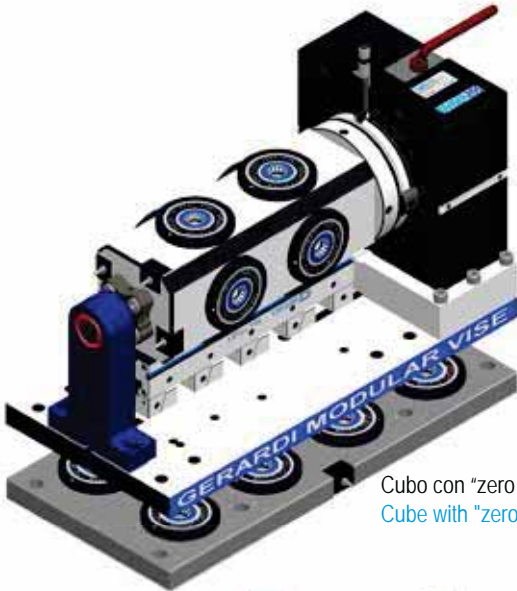
Esempio di applicazione
 Example application





Special aluminum zero point fixture on Haas machine and rotary table
Attrezzatura speciale con zero point applicata su tavola girevole e macchina Haas

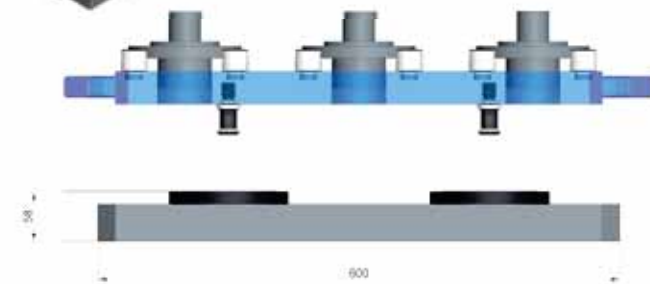




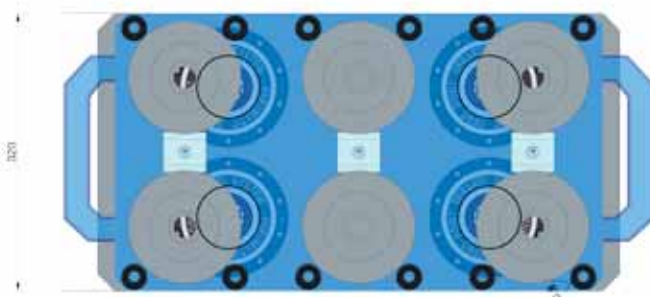
Cubo con "zero point" su diverger
 Cube with "zero point" on diverger



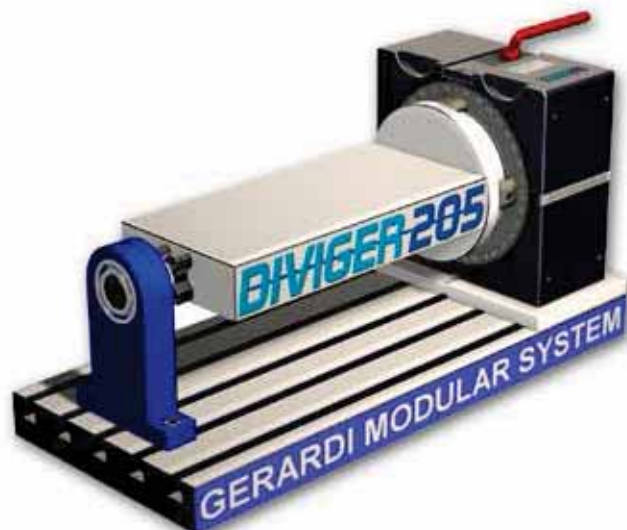
Morse multiplex su piastre "zero point"
 Multiflex vises on "zero point" plate



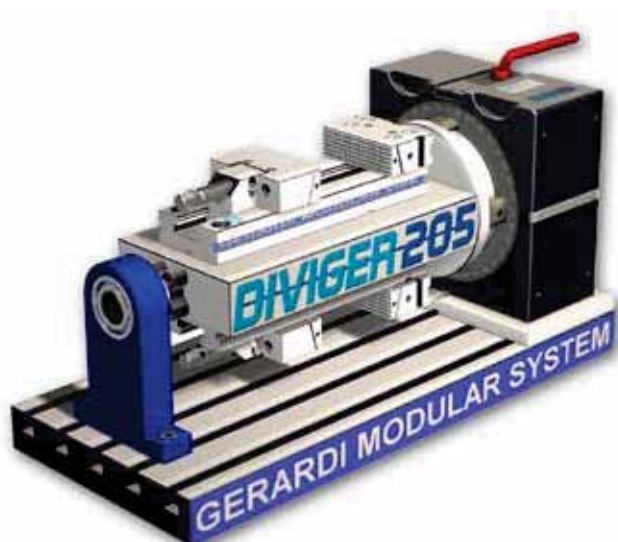
SCALA 2.5



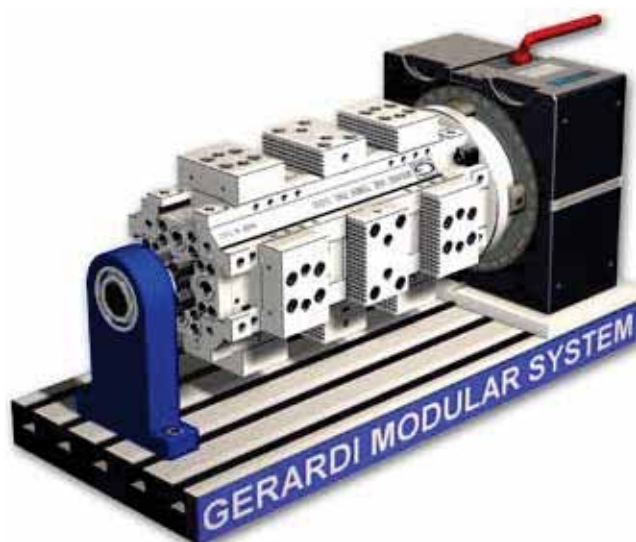
SCALA 7.20



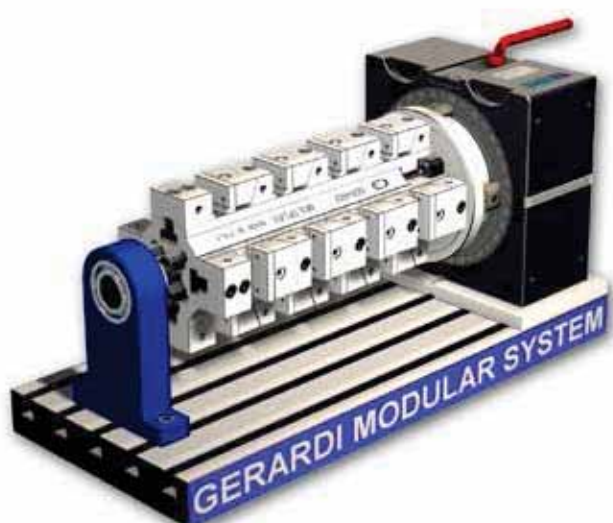
Con piastra base
With base plate



Con morse StandardFLEX
With StandardFLEX vises



Con cubo integrale FMS
With solid FMS vise cube



Con cubo integrale MULTIFLEX
With solid MULTIFLEX vise cube



Art 640
Montata su una tavola girevole tramite piastra di collegamento per lavorare su 5 lati del particolare
With self-centering eccentric vise in order to machine 5 workpiece sides



Serie G90 - G90 series

Ideali per Fresatura, Foratura, Maschiatura a ± 90
Ideal for milling, drilling, tapping at ± 90



Serie G90L - G90L series

Serie lunga per lavorazioni in profondità
Long series for machining at deep positions



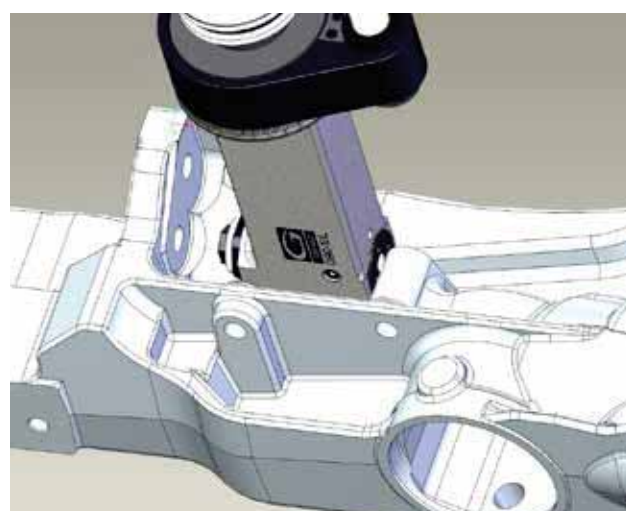
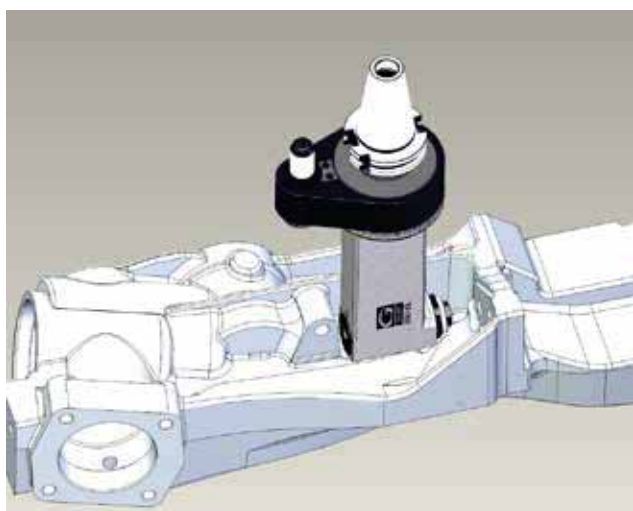
Serie G90-B - G90-B series

Con passaggio refrigerante dal perno, uscita utensile 10BAR
With coolant input from positioning Pin and output through the tool



Serie GMU - GMU series

Uscita utensile ad angolo variabile $\pm 90^\circ$ per forature,
maschiature e fresature inclinate
Adjustable output at $\pm 90^\circ$ for tilt drilling, milling and tapping



G90-10L Studio lavorazione all'interno di una tasca
G90-10L - Work study inside a cove.



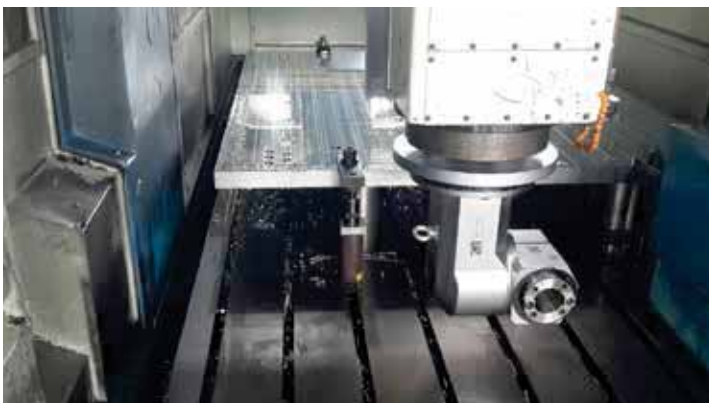
ATC - G90-16

ATC - G90-20

ATC - GMU-20



Testa Angolare G90-S40B con uscita HSK40 e passaggio refrigerante interno a 40bar
 Angle Head G90-S40B with HSK40 output and 40bar internal coolant through the tool



GMU S50 su Fresatrice a Portale - GMU S50 on gantry milling machine.



G90-20 - TRIBLOCK



Stop Block Haas con predisposizione per il passaggio refrigerante
 Haas Stop Block with internal coolant set-up



Testa Angolare G90-S40 XL 700
 Angle Head G90-S40 XL 700



Serie G90 - G90 series

Ideali per Fresatura, Foratura, Maschiatura a $\pm 90^\circ$
 Ideal for milling, drilling, tapping at $\pm 90^\circ$



Serie G90L - G90L series

Serie lunga per lavorazioni in profondità
 Long series for machining at deep positions



Serie GMU - GMU series

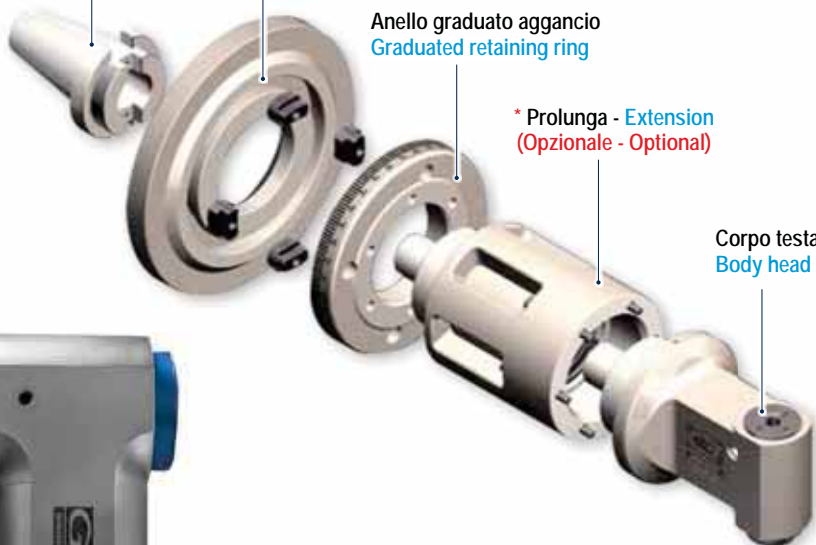
Albero con cono
 Shaft and shank

Flangia universale
 Universal Flange

Anello graduato aggancio
 Graduated retaining ring

* Prolunga - Extension
 (Opzionale - Optional)

Corpo testa
 Body head



Testa Angolare G90-S40XL con passaggio refrigerante interno
 Angle Head G90-S40XL with internal coolant



MTC - G90-S40XL_700



Serie SLIM - SLIM series

Ideali per Microlavorazioni in spazi ristretti.
 Ideal for Micromachining in narrow spaces



Serie F90 - F90 series

Ideali per Fresatura, Foratura, Maschiatura a ± 90
 Ideal for milling, drilling, tapping at ± 90



Serie F90L - F90L series

Serie lunga per lavorazioni in profondità
 Long series for machining at deep positions



Serie F90 10BAR - F90 10BAR series

Con passaggio refrigerante dal perno, uscita utensile 10BAR
 With coolant input from positioning Pin and output through the tool



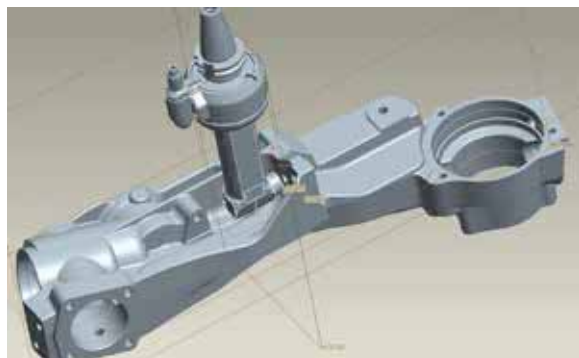
Serie FR90 - FR90 series

Testa angolare disassata per lavorazioni in spazi ristretti con passaggio refrigerante dal cono, uscita utensile 70BAR
 Offset series for machining in narrow spaces with coolant input directly from machine spindle and output through the tool at 70BAR



Serie FMU - Serie FMU

Uscita utensile ad angolo variabile $\pm 90^\circ$ per forature, maschiature e fresature inclinate
 Adjustable output at $\pm 90^\circ$ for tilt drilling, milling and tapping



Verifiche utilizzo teste angolari effettuate con sistema cad cam
 Checks of the application of the angular heads made with cad cam system



Doppia uscita - Double output



Testa ad angolo speciale per lavorazione corpo motore idraulico
Special angle head suitable for boring internal part of hydraulic



FS90-03 - TRIBLOCK - Teste con attacco per macchine CHIRON fz22l and fz18k
Angle head for CHIRON fz22l and fz18k



Testa angolare con sistema antirotante TRIBLOCK
Angle head with TRIBLOCK antirotation system



Testa Angolare F90-S40 70-bar con gruppo antirotante speciale per OKUMA 800VH
Angle Head F90-S40 70-bar with special anti rotation group for OKUMA 800VH



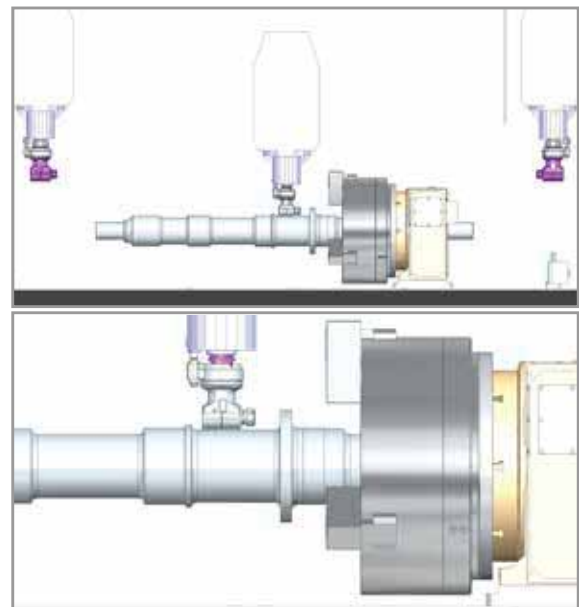
F90-10L uscita Weldon 10 su centro di lav. OKK
 F90-10L Weldon 10 exit on a OKK machine tool



Stop block fissato sul madrino grazie ad uno SPECIALE
 Distanziale tra mandrino macchina e stop block
 Stop block fixed on the machine spindle thank to a SPECIAL
 Spacer between the machine spindle and the stop block



Testa orientabile montata su macchina Haas
 Haas machine center with universal angle head



Testa angolare per applicazioni su macchine Daiichi
 Angle head for application on Daiichi-machine



Stop Block Haas con predisposizione
 per il passaggio refrigerante
 Haas Stop Block with internal coolant set-up



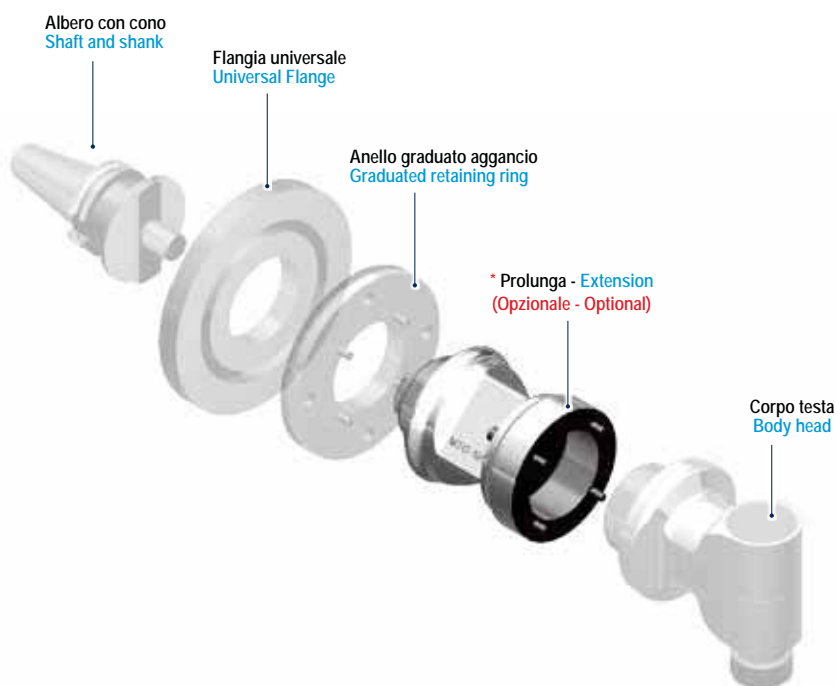
Serie F90 - F90 series

Ideali per Fresatura, Foratura, Maschiatura a $\pm 90^\circ$
 Ideal for milling, drilling, tapping at $\pm 90^\circ$



Serie F90L - F90L series

Serie lunga per lavorazioni in profondità
 Long series for machining at deep positions



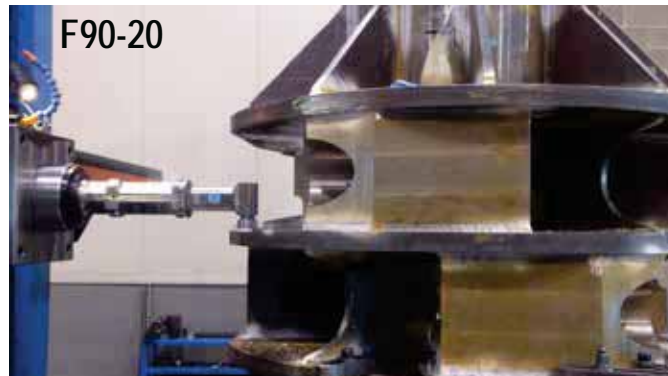
F90-S40 MTC



F90-20 MTC

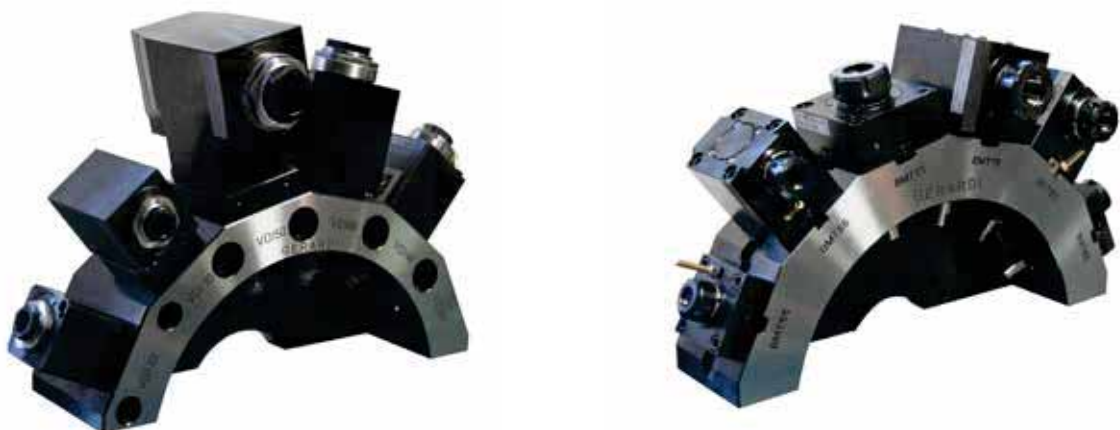


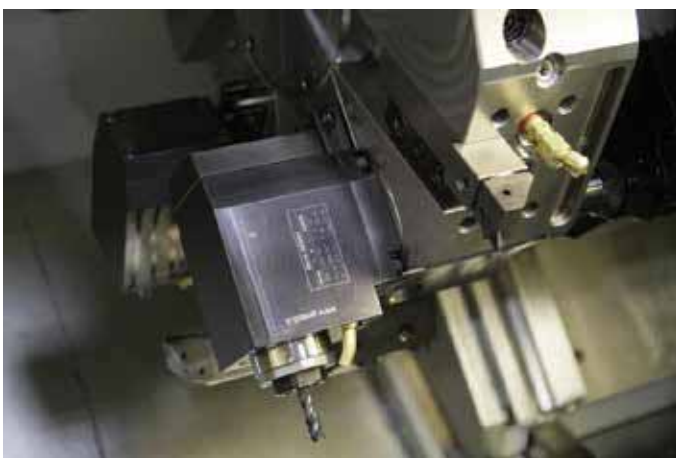
F90-16



F90-20

Applicazione di testa angolare Evolution MTC F90-16 / F90-20 con 2 prolunghe su centro orizzontale
 Application of Evolution Angle heads F90-16 / F90-20 MTC with Extensions on horizontal machining center.





*Macchina Haas ST20Y equipaggiata con motorizzati Gerardi
Haas ST20Y machine with Gerardi driven tools equipment*



**SERRAGGIO
WORKHOLDING**

2
**DIFFERENT
CATALOGUES**



**PORTAUTENSILI
TOOLING**