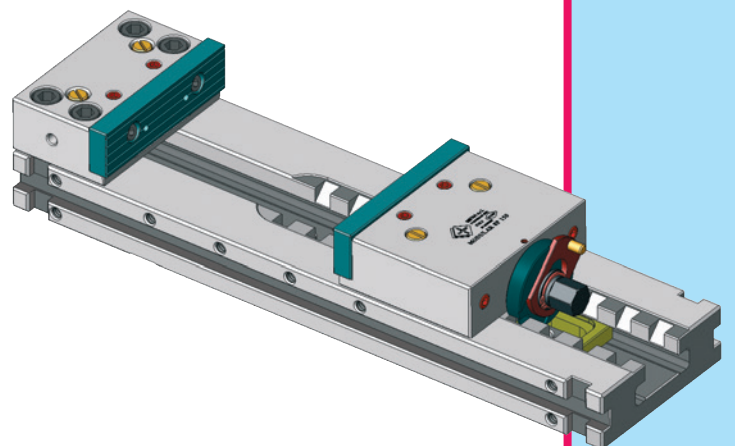
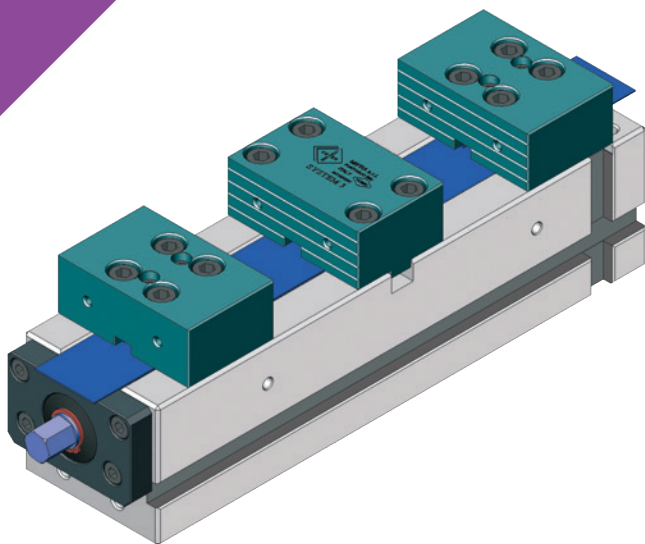
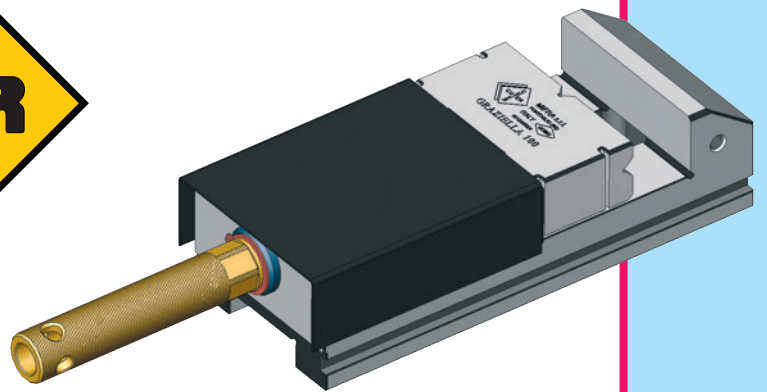
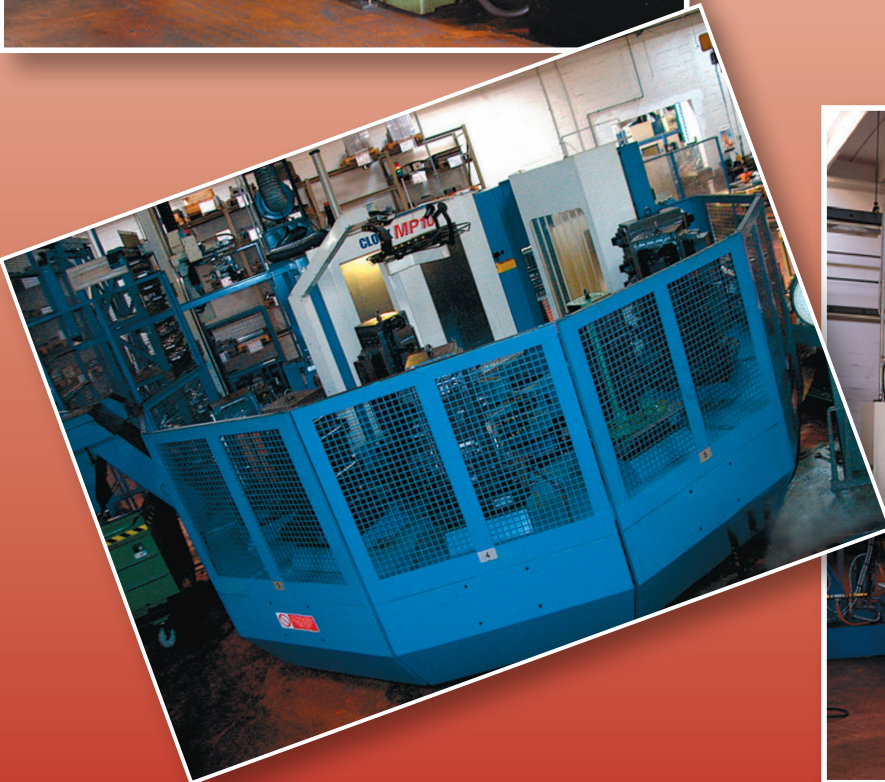
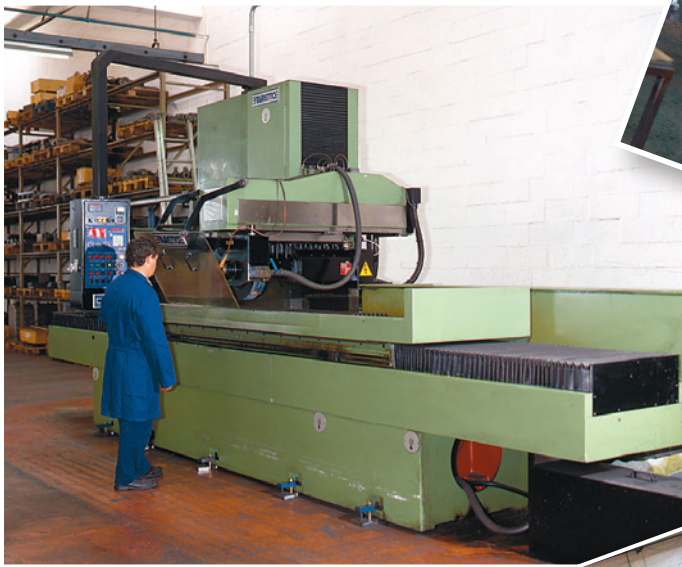
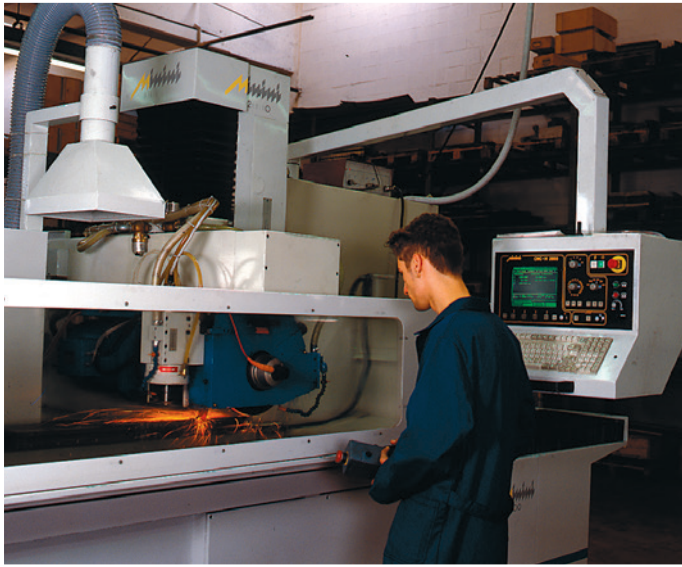




CATALOGO 2012



**BLOCCAGGIO SICURO E PRECISO
NELLA TOLLERANZA DA 0,015 mm A 0,003 mm**





LAT N° 067

CENTRO DI TARATURA ACCREDIA (già SIT)

Le Officine meccaniche **LTF SpA** operano da anni nel settore della fabbricazione, verifica e messa a punto di strumentazione, apparecchiature e macchine per le lavorazioni meccaniche di precisione. Ha il suo insediamento principale su un'area di **55.000** mq con più di **20.000** mq coperti. Dopo aver iniziato l'attività nel **1965** con la produzione e commercializzazione di utensileria e apparecchiature magnetiche speciali, l'azienda ha incrementato di pari passo la propria azione commerciale e tecnico-produttiva, ottenendo la certificazione **ISO 9001/2008**, ed inserendosi con ruolo sempre più importante, in attività di alto contenuto tecnologico, nel campo della **Metrologia di misura e di controllo**, senza abbandonare i propri settori produttivi più tradizionali. Assume così progressivamente nel tempo, le attività:

- **BORLETTI - Strumenti di misura e controllo**
- **MICROTECNICA - Proiettori di profili**
- **GALILEO - Durometria**

ed assieme a quella relativa al Centro di Taratura **ACCREDIA (già SIT) LAT n° 067**, realizzato nel 1993 e costituito da 2 sale Metrologiche accreditate per Certificazioni **ACCREDIA**, le raggruppa nella **Divisione METROLOGIA**, con tecnici di esperienza nel settore, che supportano costantemente una qualificata ed ampia rete di vendita nazionale ed internazionale protesa ad offrire alla clientela un servizio completo ed aggiornato. Rappresenta in esclusiva per l'Italia importanti case tedesche di utensili ed elettro utensili, collabora con qualificati partners internazionali nello sviluppo e ricerca di nuovi prodotti e tecnologie.

LTF SpA boast a long years' experience in the field of manufacturing, testing and setting-up of measuring instruments, equipment and machine tools for high precision machining. LTF main Factory covers a surface of **55.000** square meters, **20.000** m² of which roofing area. The Company's activity was started successfully in **1965** with the production and sale of tooling and special magnetic equipment. Ever since the further steps taken towards constant specialisation in the technical and productive sector as well as marketing development have brought to the acquisition of **ISO 9001/2008** standards. Thanks to the progressive work done in this direction and the remarkable results achieved in the high technology production range, the Testing and **Measuring Metrology** field along with the maintenance of their more traditional lines, LTF activities now include:

- **BORLETTI - Precision instruments for measuring and testing**
- **MICROTECNICA - Profile Projectors**
- **GALILEO - Hardness and Microhardness testers**

which, together with the **ACCREDIA** Calibration Center LAT n° 067, built in 1993 and provided by two Metrological rooms and accredited by **ACCREDIA**, belong to the Company's **Metrology Division**. A team of skilled technical engineers offer their solid experience to support a wide and qualified national and international network granting a quality and constantly updated Customer service. LTF are the sole Agent for Italy of important German Companies making tools and electric tools. Besides, LTF cooperate with qualified International Partners to develop and research new Products and new Technologies.

DIVISIONI AZIENDALI:

	APPARECCHIATURE MAGNETICHE ATTREZZATURE ANTINFORTUNISTICHE STRUMENTI MECCANICI MACCHINE UTENSILI	
BORLETTI	STRUMENTI DI MISURA E CONTROLLO DI PRECISIONE	
GALILEO durometria	MISURATORI DI DUREZZA E DI MICRODUREZZA	
MICROTECNICA Proiettori di profili	PROIETTORI DI PROFILI SISTEMI OTTICI DI MISURA	
ASTURO	AEROGRAFI E SISTEMI DI VERNICIATURA - UTENSILI PNEUMATICI - RACCORDERIA	
IM	INDUSTRIE MECCANICHE TRAPANI SENSITIVI E MASCHIATRICI DI ALTA PRECISIONE	
la prora	AFFILATRICI UNIVERSALI E RETTIFICATRICI IDRAULICHE	
BREDA	TRAPANI RADIALI	
Tommasi & Bonetti ELETTROMECCANICA	ELETTROMECCANICA	
Tavolazzi UTENSILERIA ITALIANA	UTENSILERIA ITALIANA UTENSILI DA TAGLIO	
WEMEX Germany	UTENSILI DA TAGLIO STRUMENTI ATTREZZATURE ELETTROUTENSILI	
CUTER	MORSE DI PRECISIONE Made in Italy	
STORM	STRUMENTI DI MISURA E CONTROLLO	
RAPPRESENTANZE ESCLUSIVE PER L'ITALIA:		
WERKO Germany	PUNTE ELICOIDALI UTENSILI DA TAGLIO	
KOCH-BOHRER Germany	PUNTE DA MURO E LEGNO	
IORI JEB	STRUMENTI DI MISURA ATTREZZATURE PER FERRAMENTA ED EDILIZIA	
ABRATOOLS sa	ABRASIVI	
OPTIMUM MASCHINEN - GERMANY	MACCHINE UTENSILI ED ATTREZZATURE	
PRT TOOLS	MANDRINERIA PER MACCHINE CNC PER LA LAVORAZIONE DEI METALLI E DEL LEGNO	
HOLZ MANN AUSTRIA IMPORTATORE PER L'ITALIA DI:	MACCHINE PER LA LAVORAZIONE DEL LEGNO	
calibur WOODWORKING	MACCHINE ED ATTREZZATURE PER IL LEGNO	
ICP	PRODOTTI CHIMICI PER L'INDUSTRIA	
CLEVELAND	PUNTE ELICOIDALI ED UTENSILI DA TAGLIO Made in England	
FELISATTI	ELETTROUTENSILI Made in Spain	



Cosa rappresenta il marchio CUTER

What the CUTER name means

Ce que représente la marque CUTER





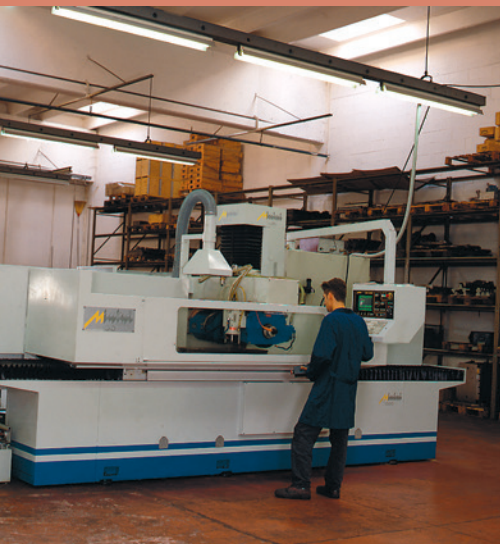
Nell'anno 2012, la **LTF**® SpA, ha acquisito la ditta **CUTER**®.
In January 2012 Co. LTF spa took over Company "CUTER".
En janvier 2012 LTF spa acquis la société Cuter.



Da oltre 50 anni il marchio Cuter, grazie all'impiego di macchinari avanzati, uniti alla professionalità del personale, garantisce in tutto il mondo la migliore affidabilità e precisione nello staffaggio dei pezzi ed attrezzature per macchine utensili.

For over 50 years, throughout the world, the use of advanced machinery and the professionalism of its staff have made the Cuter name a guarantee of outstanding reliability and high precision clamping of workpieces and equipment for machine tools.

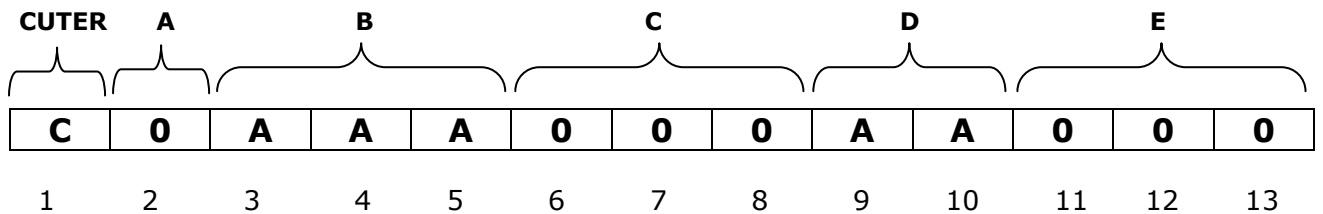
Grâce à l'utilisation de machines de pointe et à la préparation professionnelle du personnel, la marque Cuter garantit depuis plus de 50 ans et dans le monde entier le plus haut niveau de fiabilité et de précision en matière de bridage des pièces et des équipements pour machines-outils.



CODIFICA MORSE

VICE ENCODING

CODIFICATION DE L'ÉTAU



A = GRUPPO *Group* Groupe

B = ABBREVIATIVO PARTICOLARE *Part abbreviation* Détail concis

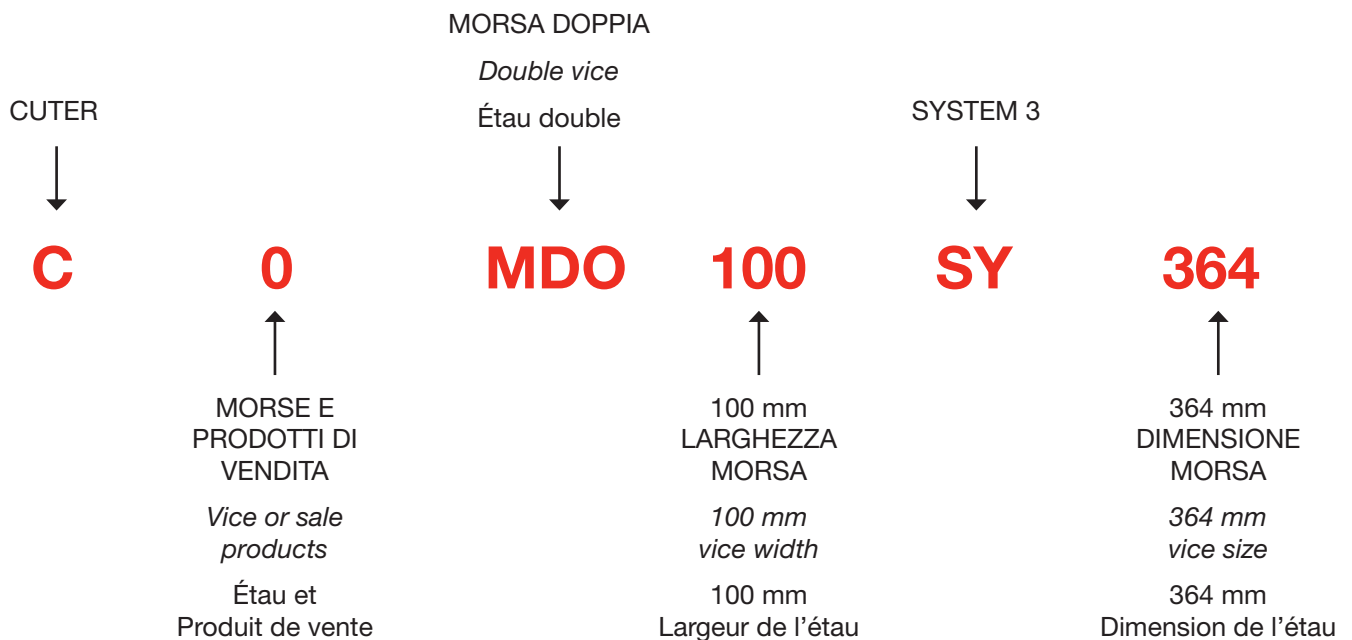
C = LARGHEZZA MORSA O DIMENSIONE PARTICOLARE *Vice width or part size* Largeur de l'étau

D = IDENTIFICATIVO TIPO MORSA *Part identification code* Repérage de l'étau

E = NUMERO PROGRESSIVO PER TIPO DI PARTICOLARE O APERTURA MORSA MODULARE
Sequential nr. for part type or module vice jaw opening
 Progression numérique selon le détail ou selon ouverture de l'étau

ESEMPIO EXAMPLE EXEMPLE

ART. C0MDO100SY364



Le MORSE MODULARI sono corredate di tassello, chiave a pipa e fermo.

Le MORSE SYSTEM sono corredate di tassello e chiave a pipa.

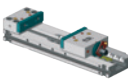
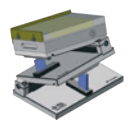

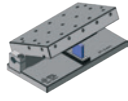

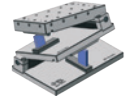
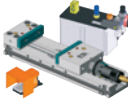
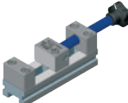
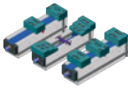



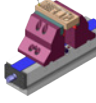



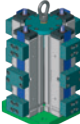
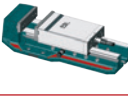
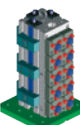



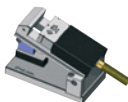

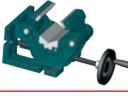
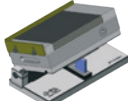
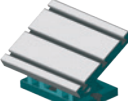
Module vices are fitted with T-Bolt, hex curved key and locking.

System vices are fitted with T-Bolt, and hex curved key.

Étau Modulaire est équipée du tiroir et clé à pipe.

Étau System est équipée du tiroir et clé à pipe.

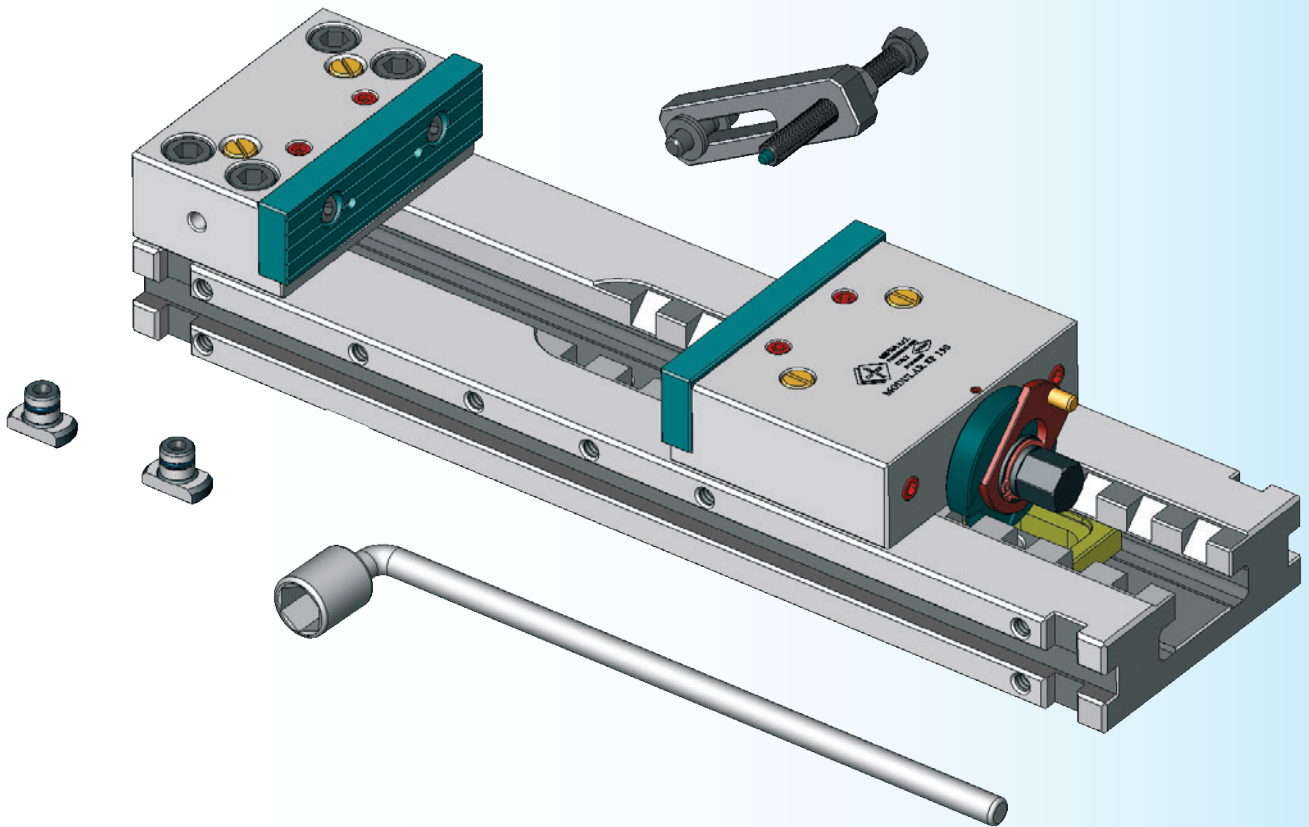
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Modulare

Modular

Modulaire



Morsa completamente in acciaio Ni-CrMo rettificato, durezza HRC 60÷62 tolleranza 0.015.

CARATTERISTICHE:

- Struttura dello slittone più largo della ganaschia (escluso mod.200÷250) con possibilità di staffare indifferentemente su piastre a reticoli di fori o su cave a T;
- Carro mobile con guide e lardone estremamente lunghi evitano l'innalzamento e sbandamento laterale del carro;
- Vite e chiocciola protette nel carro evitano urti o usure;
- Sistema di avvicinamento rapido del carro al pezzo senza impiego di chiave;

Versione "MP" con ganasce discendenti.

Versione "SP" con ganasce fisse.

Versione "MS" con ganaschia fissa su porta ganasce e ganaschia mobile sul carro.

Vice completely made in steel NiCrMo with surface hardness of 60÷62 tolerance 0.015.

CHARACTERISTICS:

- Structure wider than jaws (except for models 200÷250) with possibility of anchorage on holes grids plate with constant centre or on T cave.
- Ram especially long guides preventing the ram from lifting and swerving;
- Lead nut protected into the ram prevents all impacts and wears;
- Fast traverse system to the ram without use of keys;

Model "MP" with descending jaws

Model "SP" with fixed jaws

Model "MS" jaw-holder with SP fixed jaw and slide with MP descending jaw.

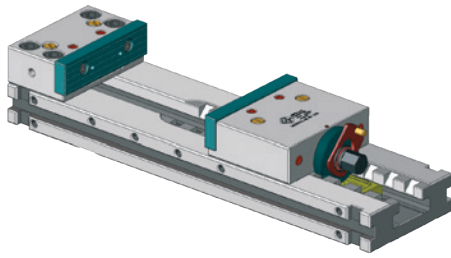
Etau realise completamente en acier NiCrMo trempe et cemente a 60÷62 tolerance 0.015.

CARACTERISTIQUES:

- Structure du coulisseau plus large que la griffe (sauf pour modele 200÷250) avec possibilité de moulage indifferemment sur la plaque a reseau ou sur les rainures a T;
- Chariot mobile avec glissieres a lardou extremement longues pour eviter le relevement et l'inclinaison laterale du chariot;
- Vis creuse protegee dans le chariot pour eviter les chocs ou les deteriorations;
- Systeme d'approche rapide aux pieces dans le chariot sans emploi de cle;

Modele "MP" avec griffes descendants. Modele "SP" avec griffes fixes.

Modele "MS" porte-mâchoires avec mâchoire fixe SP et chariot mobile avec mâchoire descendante.

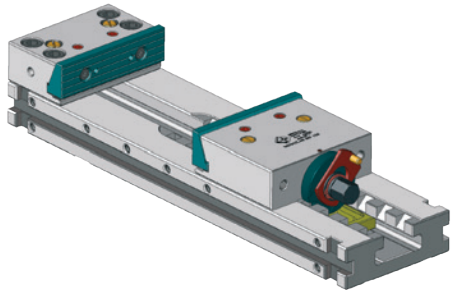


MODULARE SP

Modulare SP con ganasce fisse

Modular SP with fixed jaws

Modulaires SP à mâchoires fixes

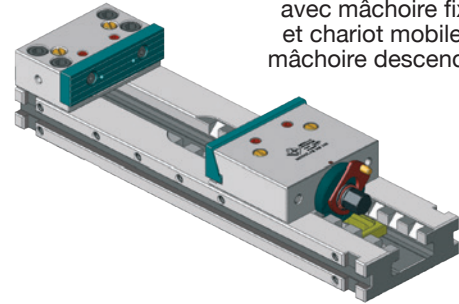


MODULARE MP

Modulare MP con ganasce discendenti

Modular MP with descending jaws

Modulaires MP à mâchoires descendantes



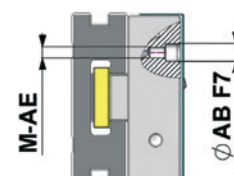
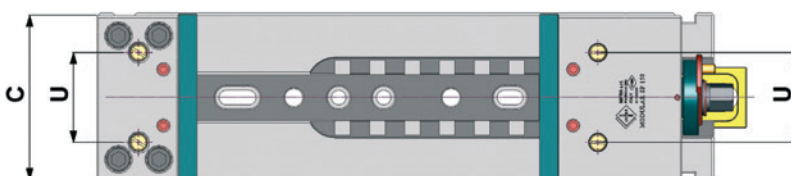
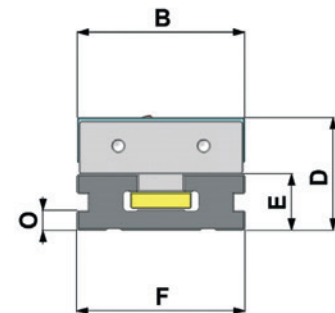
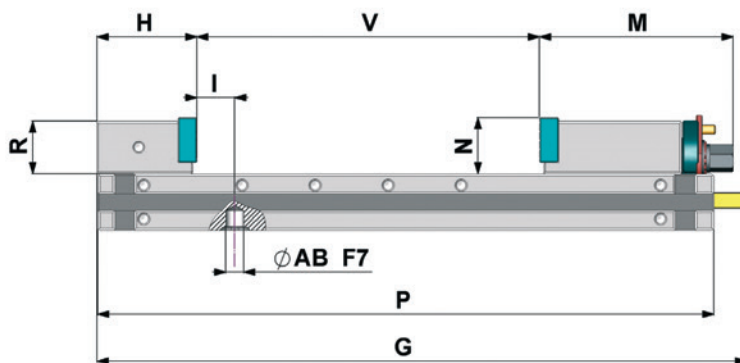
MODULARE MS

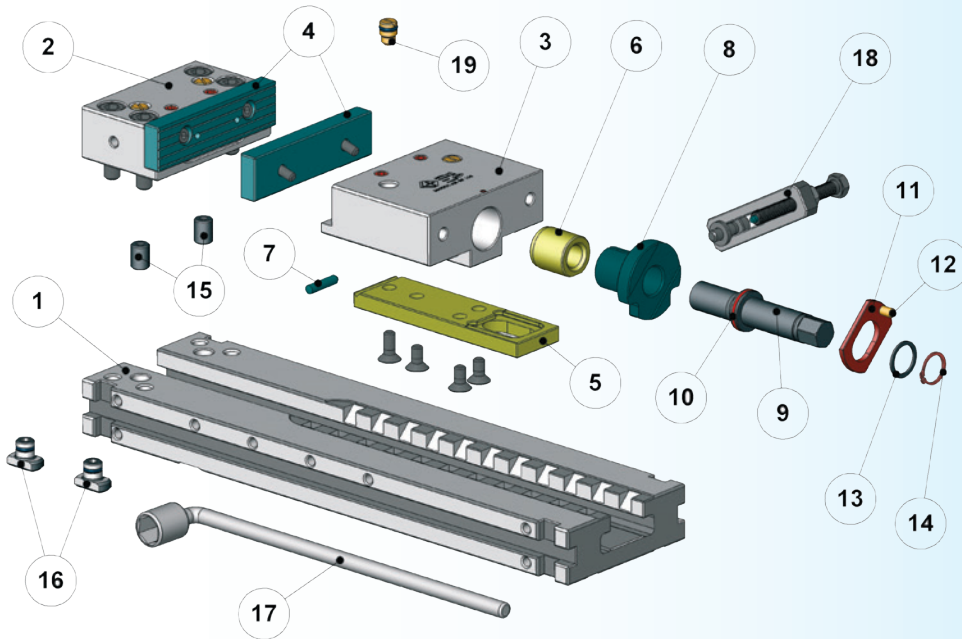
Nuova morsa Modulare MS composta da portaganasce con ganasce fissa SP e carro con ganasce discendente MP.

New Modular MS vice consisting of jaw-holder with SP fixed jaw and slide with MP descending jaw.

Nouvel étau Modulaire MS composé par porte-mâchoires avec mâchoire fixe SP et chariot mobile avec mâchoire descendante.

TIPO TYPE	B	C	D	E -0.005 -0.020	F	G	H	I 0 -0.020	M	N	O	P	R	U	V	AB	M-AE	Kg
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
125x150	124	121	80	40	125	417	80.4	33.60	164	40	15	390	38	64	155	16	12	21.5
125x250	124	121	80	40	125	517	80.4	33.60	164	40	15	490	38	64	255	16	12	25.6
150x200	149	146	100	50	150	480	89	33.60	171	50	17.5	449	47	80	205	16	12	34.0
150x250	149	146	100	50	150	530	89	33.60	171	50	17.5	499	47	80	255	16	12	37.0
150x300	149	146	100	50	150	580	89	33.60	171	50	17.5	549	47	80	305	16	12	38.6
150x400	149	146	100	50	150	680	89	33.60	171	50	17.5	649	47	80	405	16	12	45.0
150x500	149	146	100	50	150	780	89	33.60	171	50	17.5	749	47	80	505	16	12	51.5
175x300	174	173	118	58	175	636	106	33.60	207	60	20	603	57	100	305	16	12	58.5
175x400	174	173	118	58	175	736	106	33.60	207	60	20	703	57	100	405	16	12	65.0
175x500	174	173	118	58	175	836	106	33.60	207	60	20	803	57	100	505	16	12	70.5
200x300	200	193	118	58	175	636	106	33.60	207	60	20	603	57	100	305	16	12	61.5
200x400	200	193	118	58	175	736	106	33.60	207	60	20	703	57	100	405	16	12	69.0
200x500	200	193	118	58	175	836	106	33.60	207	60	20	803	57	100	505	16	12	75.0
250x400	250	245	138	68	195	749	135	4.60	207	70	20	738	67	100	407	16	12	106





1	Slittone di base	Base saddle	Coulisseau de base
2	Porta ganasce	Fixed jaws	Mâchoires fixes
3	Carro mobile	Slide mobil	Chariot mobile
4	Ganasce	Jaws	Mâchoires
5	Lardone	Gib	Lardon
6	Chiocciola	Lead screw	Filière
7	Spina	Pin	Epine
8	Contrasto	Contrast	Contraste
9	Vite comando	Command screw	Vis de commande
10	Guarnizione	Packing	Garniture

11	Corsoio	Running Knot	Coulisse
12	Perno corsoio	Pivot running knot	Axe coulisse
13	Anello frizione	Ring clutch	Anneau friction
14	Anello seeger	Ring seeger	Anneau seeger
15	Spine fisse	Hinge fixed	Axe fixes
16	Tasselli cava	Pegs	Chevilles
17	Chiave a pipa	Wrench	Clef
18	Fermo laterale	Workpiece stop	Butée d'arrêt
19	Tappo fori	Stopper hole	Je bouche trou

MODULAR 125	
NR	CODICE - CODE
1	C0SLI125MD150
1-A	C0SLI125MD250
2	C0PGN125SP010
2-A	C0PGN125MP010
3	C0CAR125SP020
3-A	C0CAR125MP020
4	C0GAN125SP030
4-A	C0GAN125MP030
5	C0LAR125MD070
6	C0CHI125MD020
7	C0SPINAC08X28
8	C0CON125MD030
9	C0VCM125MD010
10	C0TUR125MD315
11	C0CRS125MD040
12	C0PRC125MD050
13	C0ANF125MD060
14	C0SEEGERAL22C
15	C0SPG016MD010
16	C0TAS016MD020
17	C0CHIAVE19PIP
18	C0FER125MD080
19	C0TAP150MD250

MODULAR 150	
NR	CODICE - CODE
1	C0SLI150MD200
1-A	C0SLI150MD250
1-B	C0SLI150MD300
1-C	C0SLI150MD400
1-D	C0SLI150MD500
2	C0PGN150SP010
2-A	C0PGN150MP010
3	C0CAR150SP020
3-A	C0CAR150MP020
4	C0GAN150SP030
4-A	C0GAN150MP030
5	C0LAR150MD070
6	C0CHI150MD020
7	C0SPINAC08X35
8	C0CON150MD030
9	C0VCM150MD010
10	C0TUR150MD315
11	C0CRS150MD040
12	C0PRC150MD050
13	C0ANF150MD060
14	C0SEEGERAL25C
15	C0SPG016MD010
16	C0TAS016MD020
17	C0CHIAVE22PIP
18	C0FER150MD080
19	C0TAP150MD250

MODULAR 175	
NR	CODICE - CODE
1	C0SLI175MD300
1-A	C0SLI175MD400
1-B	C0SLI175MD500
2	C0PGN175SP010
2-A	C0PGN175MP010
3	C0CAR175SP020
3-A	C0CAR175MP020
4	C0GAN175SP030
4-A	C0GAN175MP030
5	C0LAR175MD070
6	C0CHI175MD020
7	C0SPINAC08X45
8	C0CON175MD030
9	C0VCM175MD010
10	C0TUR175MD315
11	C0CRS175MD040
12	C0PRC150MD050
13	C0ANF175MD060
14	C0SEEGERAL32C
15	C0SPG016MD010
16	C0TAS016MD020
17	C0CHIAVE27PIP
18	C0FER150MD080
19	C0TAP150MD250

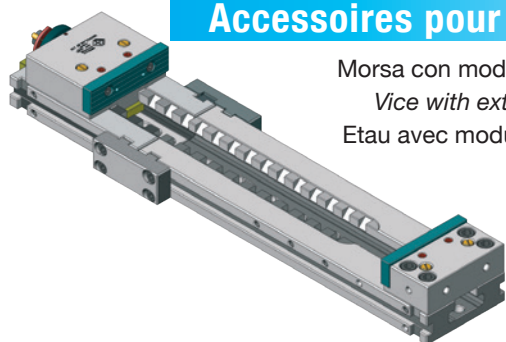
MODULAR 200	
NR	CODICE - CODE
1	C0SLI175MD300
1-A	C0SLI175MD400
1-B	C0SLI175MD500
2	C0PGN200SP010
2-A	C0PGN200MP010
3	C0CAR200SP020
3-A	C0CAR200MP020
4	C0GAN200SP030
4-A	C0GAN200MP030
5	C0LAR175MD070
6	C0CHI175MD020
7	C0SPINAC08X45
8	C0CON175MD030
9	C0VCM175MD010
10	C0TUR175MD315
11	C0CRS175MD040
12	C0PRC150MD050
13	C0ANF175MD060
14	C0SEEGERAL32C
15	C0SPG016MD010
16	C0TAS016MD020
17	C0CHIAVE27PIP
18	C0FER150MD080
19	C0TAP150MD250

MODULAR 250	
NR	CODICE - CODE
1	C0SLI195MD400
2	C0PGN250SP010
2-A	C0PGN250MP010
3	C0CAR250SP020
3-A	C0CAR250MP020
4	C0GAN250SP030
4-A	C0GAN250MP030
5	C0LAR250MD070
6	C0CHI175MD020
7	C0SPINAC08X45
8	C0CON250MD030
9	C0VCM175MD010
10	C0TUR175MD315
11	C0CRS250MD040
12	C0PRC150MD050
13	C0ANF175MD060
14	C0SEEGERAL32C
15	C0SPG016MD010
16	C0TAS016MD020
17	C0CHIAVE27PIP
18	C0FER150MD080
19	C0TAP150MD250

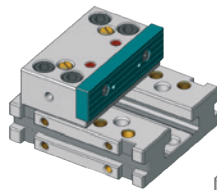
Accessori per Modulari

Accessories for Modular Units

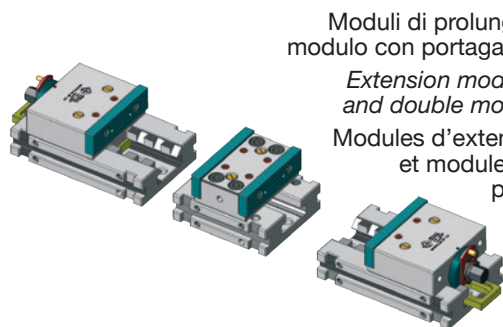
Accessoires pour Modulaires



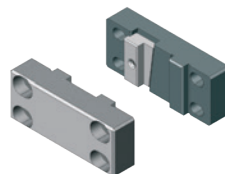
Morsa con modulo di prolunga
Vice with extension module
Etau avec module d'extension



Modulo di prolunga con carro e
modulo con portaganascia
Extension module with slide
and module with jaws
Module d'extension à
chariot et module
avec porte-mâchoire



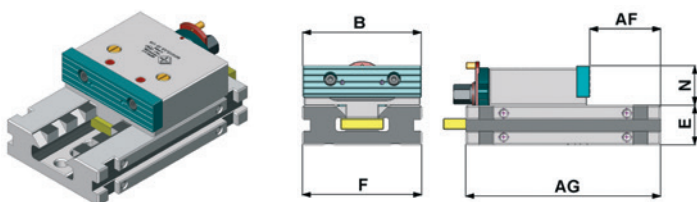
Moduli di prolunga con carro e
modulo con portaganascia doppio
Extension modules with slide
and double module with jaws
Modules d'extension à chariot
et modules avec double
porte-mâchoire



Agganci di giunzione
morse e morse con moduli
Vice-vice and vice-module couplings
Crochets de jonction des étaux
et des étaux à modules

CODICE - CODE	TIPO - TYPE
C0AGG125MD010	125
C0AGG150MD011	150
C0AGG175MD012	175-200
C0AGG250MD013	250

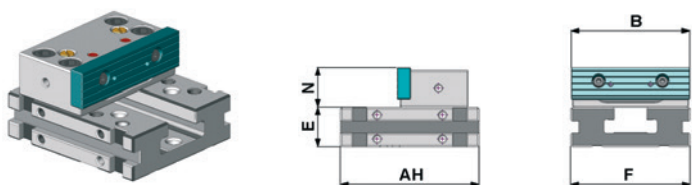
MODULO DI PROLUNGA CON CARRO - EXTENSION MODULE WITH SLIDE - MODULE D'EXTENSION À CHARIOT



Sono fornibili moduli di prolunga portacarro pag. 4 del listino.
Extension modules for slide mobil are available on page 4 of the pricelist.
Modules d'extension pour chariot mobile sont disponibles sur la page 4 de la liste des prix.

CODICE CODE	TIPO TYPE	B	E	F	N	AF	AG	Kg
		mm	-0.005 -0.020	mm	mm	mm		
C0MPC125SP010	SP 125	124	40	125	40	55	210	11.0
C0MPC125MP010	MP 125							
C0MPC150SP010	SP 150	149	50	150	50	65	245	18.6
C0MPC150MP010	MP 150							
C0MPC175SP010	SP 175	174	58	175	60	120	312	31.5
C0MPC175MP010	MP 175							
C0MPC200SP010	SP 200	200	58	175	60	120	312	33.0
C0MPC200MP010	MP 200							

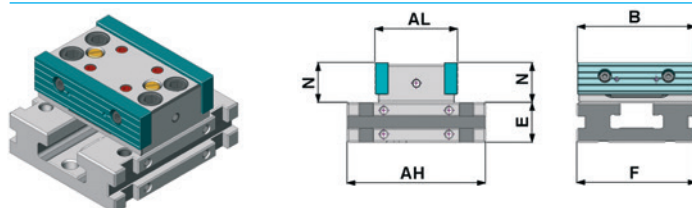
MODULO CON PORTAGANASCIA - MODULE WITH JAWS - MODULE AVEC PORTE MÂCHOIRE



Sono fornibili moduli di prolunga portaganascia singolo/doppio pag. 4 del listino.
Extension modules for single/double fixed jaw are available on page 4 of the pricelist.
Modules d'extension pour porte mâchoire simple/double sont disponibles sur la page 4 de la liste des prix.

CODICE CODE	TIPO TYPE	B	E	F	N	AH	Kg
		mm	-0.005 -0.020	mm	mm	mm	
C0MPS125SP010	SP 125	124	40	125	40	210	8.0
C0MPS125MP010	MP 125						
C0MPS150SP010	SP 150	149	50	150	50	174	11.0
C0MPS150MP010	MP 150						
C0MPS175SP010	SP 175	174	58	175	60	198	18.0
C0MPS175MP010	MP 175						
C0MPS200SP010	SP 200	200	58	175	60	198	19.0
C0MPS200MP010	MP 200						

MODULO CON PORTAGANASCIA DOPPIO - MODULE WITH DOUBLE JAWS - MODULE AVEC DOUBLE PORTE-MÂCHOIRE



Sono fornibili portaganasce doppio SP pag. 4 del listino.
Double fixed jaws SP are available on page 4 of the pricelist.
Mâchoires fixes doubles SP sont disponibles sur la page 4 de la liste des prix.

Sono fornibili portaganasce doppio MP pag. 4 del listino.
Double fixed jaws MP are available on page 4 of the pricelist.
Mâchoires fixes doubles MP sont disponibles sur la page 4 de la liste des prix.

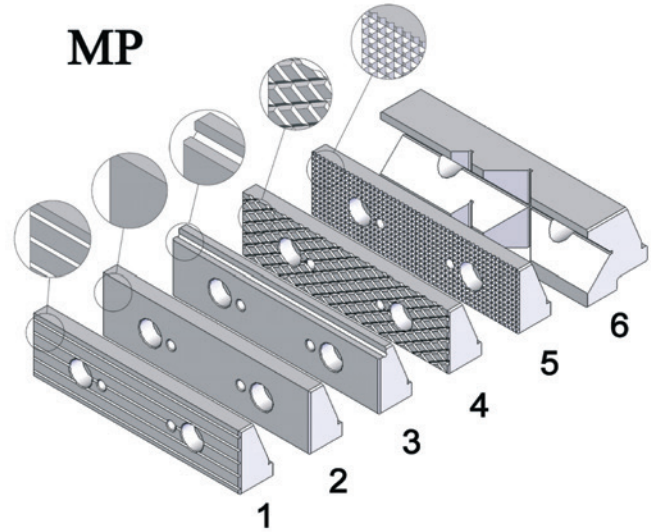
CODICE CODE	TIPO TYPE	B	E	F	N	AF	AH	AL	Kg
		mm	-0.005 -0.020	mm	mm	mm	mm	mm	
C0MPD125SP010	SP 125	124	40	125	40	55	210	93	9.0
C0MPD125MP010	MP 125								
C0MPD150SP010	SP 150	149	50	150	50	65	174	104	12
C0MPD150MP010	MP 150								
C0MPD175SP010	SP 175	174	58	175	60	120	198	125	19.0
C0MPD175MP010	MP 175								
C0MPD200SP010	SP 200	200	58	175	60	120	198	125	20.0
C0MPD200MP010	MP 200								

GANASCE MP - MP JAWS - MÂCHOIRES MP

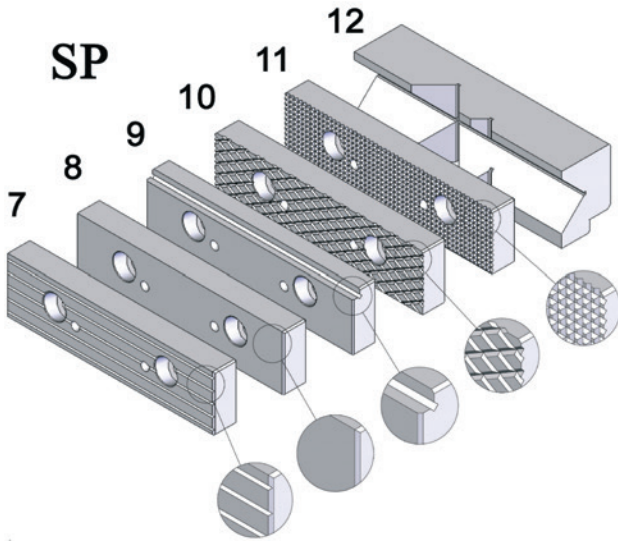
- 1) Ganaschia normale rigata MP
- 2) Ganaschia liscia MP
- 3) Ganaschia a labbro abbassato MP
- 4) Ganaschia zigrinata MP
- 5) Ganaschia con dentini MP
- 6) Ganaschia a V per corpi cilindrici MP

- 1) *MP Normal grooved jaw*
- 2) *MP Smooth jaw*
- 3) *MP Jaw with lowered lip*
- 4) *MP Knurled jaw*
- 5) *MP Jaw for raw pieces*
- 6) *MP 'V' shaped jaw for cylindrical workpieces*

- 1) Mâchoire normale rainurée MP
- 2) Mâchoire lisse MP
- 3) Mâchoire à lèvres abaissées MP
- 4) Mâchoire crénelée MP
- 5) Mâchoire dentée MP
- 6) Mâchoire en V pour corps cylindriques MP



GANASCE SP - SP JAWS - MACHOIRES SP

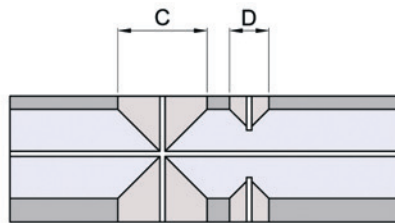


- 7) Ganaschia normale rigata SP
- 8) Ganaschia liscia SP
- 9) Ganaschia a labbro abbassato SP
- 10) Ganaschia zigrinata SP
- 11) Ganaschia con dentini SP
- 12) Ganaschia a V per corpi cilindrici SP

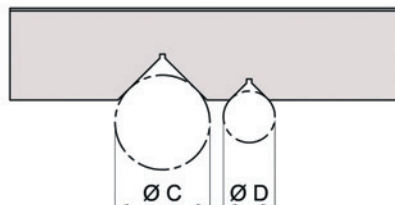
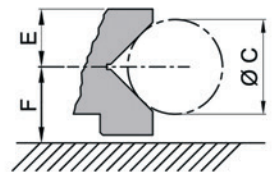
- 7) *SP Normal grooved jaw*
- 8) *SP Smooth jaw*
- 9) *SP Jaw with lowered lip*
- 10) *SP Knurled jaw*
- 11) *SP Jaw for raw pieces*
- 12) *SP 'V' shaped jaw for cylindrical workpieces*

- 7) Mâchoire normale rainurée SP
- 8) Mâchoire lisse SP
- 9) Mâchoire à lèvres abaissées SP
- 10) Mâchoire crénelée SP
- 11) Mâchoire dentée SP
- 12) Mâchoire en V pour corps cylindriques SP

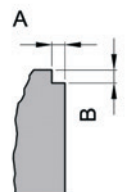
TIPO TYPE	A	B	C	D	Ø C min	Ø C max	Ø D min	Ø D max	E	F
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
125	4	4	30	15	13	43	6.5	20	18	22
150	5	5	34	15	15	46	6.5	20	22	28
175	5	5	45	25	19	62	11	35	27	33
200	5	5	45	25	19	62	11	35	27	33



TYPE 6 - 12



TYPE 3 - 9



Accessori per Modulari - Accessories for Modular Units - Accessoires pour Modulaires

PARALLELE "IR" AD INNESTO RAPIDO BREVETTATE PER MORSE MODULARI MP - SP PATENTED QUICK-POSITIONING PARALLELS "IR" FOR MODULAR VICES MP - SP PARALLELES "IR" A' ENLENCHEMENT RAPIDE BREVETE POUR ETAUX MODULAIRES MP - SP

Nuovo sistema brevettato di parallele temprate ad aggancio rapido. Con un sistema semplice si ha la possibilità di agganciare le parallele alle ganasce in modo preciso e sicuro, di sostituirle rapidamente con altre.

New patented system of quick-positioning hardened parallels. With a very simple system there is the possibility of coupling the parallels to the jaws in a precise and safe way and changing them rapidly with some others.

Nouveau système breveté de parallèles trempées à enclenchement rapide. Avec un système très simple il y a la possibilité d'enclencher les parallèles aux mâchoires d'une façon précise et sûre et de les remplacer rapidement avec des autres.



**MATERIAL UNI X210Cr13KU
 HARDNESS HRC 60-62**

**DISPONIBILI ANCHE TENERE
 ALSO SOFT AVAILABLE
 DISPONIBLES AUSSI TENDRES**

**Misure di parallele standard, a richiesta si eseguono qualsiasi tipo di parallele.
 Standard parallel's measures in stock; execution of every kind of special parallels on request.
 Mesures standard des parallèles en stock, on fait tout type des exécutions spéciales sur demande.**

PARALLEL BLOCKS FOR MOD.125				
COCAS125MD005	SET 2 pcs			
TYPE SP.5	A	B	L	
COPAR125MD345	34	5	123	
COPAR125MD295	29	5	123	
COCAS125MD008	SET 3 pcs.			
TYPE SP.8	A	B	L	
COPAR125MD348	34	8	123	
COPAR125MD298	29	8	123	
COPAR125MD248	24	8	123	

PARALLEL BLOCKS FOR MOD.125				
COCAS125MD305	SET 3 pcs			
TYPE SP.5	A	B	L	
COPAR125MD345	34	5	123	
COPAR125MD295	29	5	123	
COPAR125MD245	24	5	123	

PARALLEL BLOCKS FOR MOD.150				
COCAS150MD005	SET 4 pcs			
TYPE SP.5	A	B	L	
COPAR150MD445	44	5	148	
COPAR150MD395	39	5	148	
COPAR150MD345	34	5	148	
COPAR150MD295	29	5	148	

PARALLEL BLOCKS FOR MOD.150				
COCAS150MD008	SET 5 pcs.			
TYPE SP.8	A	B	L	
COPAR150MD448	44	8	148	
COPAR150MD398	39	8	148	
COPAR150MD348	34	8	148	
COPAR150MD298	29	8	148	
COPAR150MD248	24	8	148	

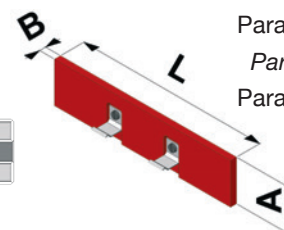
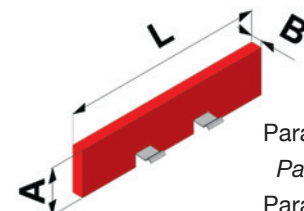
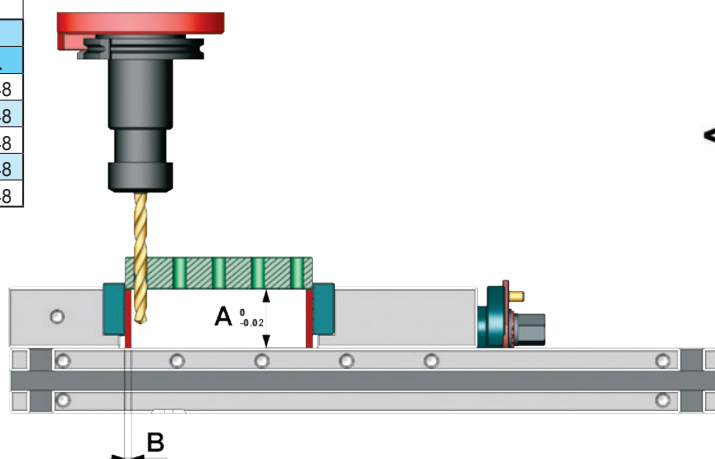
PARALLEL BLOCKS FOR MOD.175				
COCAS175MD005	SET 6 pcs.			
TYPE SP.5	A	B	L	
COPAR175MD545	54	5	173	
COPAR175MD495	49	5	173	
COPAR175MD445	44	5	173	
COPAR175MD395	39	5	173	
COPAR175MD345	34	5	173	
COPAR175MD295	29	5	173	

PARALLEL BLOCKS FOR MOD.175				
COCAS175MD008	SET 7 pcs.			
TYPE SP.8	A	B	L	
COPAR175MD548	54	8	173	
COPAR175MD498	49	8	173	
COPAR175MD448	44	8	173	
COPAR175MD398	39	8	173	
COPAR175MD348	34	8	173	
COPAR175MD298	29	8	173	
COPAR175MD248	24	8	173	

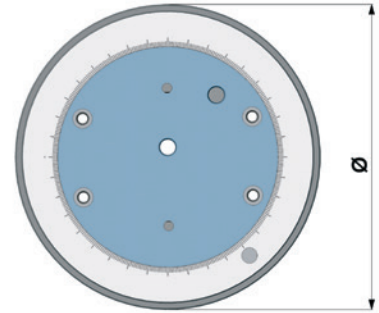
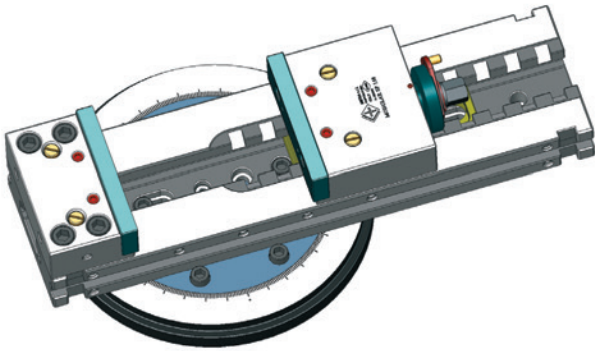
PARALLEL BLOCKS FOR MOD.200				
COCAS200MD005	SET 6 pcs.			
TYPE SP.5	A	B	L	
COPAR200MD545	54	5	198	
COPAR200MD495	49	5	198	
COPAR200MD445	44	5	198	
COPAR200MD395	39	5	198	
COPAR200MD345	34	5	198	
COPAR200MD295	29	5	198	

PARALLEL BLOCKS FOR MOD.200				
COCAS200MD008	SET 7 pcs.			
TYPE SP.8	A	B	L	
COPAR200MD548	54	8	198	
COPAR200MD498	49	8	198	
COPAR200MD448	44	8	198	
COPAR200MD398	39	8	198	
COPAR200MD348	34	8	198	
COPAR200MD298	29	8	198	
COPAR200MD248	24	8	198	

PARALLEL BLOCKS FOR MOD.250			
TYPE SP.8	A	B	L
COPAR250MD648	64	8	248
COPAR250MD598	59	8	248
COPAR250MD548	54	8	248
COPAR250MD498	49	8	248
COPAR250MD448	44	8	248
COPAR250MD398	39	8	248
COPAR250MD348	34	8	248
COPAR250MD298	29	8	248
COPAR250MD248	24	8	248



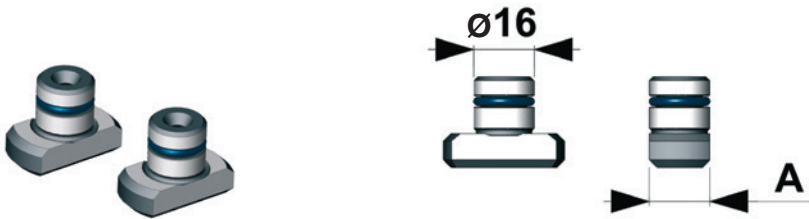
BASE GIREVOLE - REVOLVING BASE - BASE TOURNANTE



Modulare con base girevole
Modular unit with revolving base
Étau avec base tournante

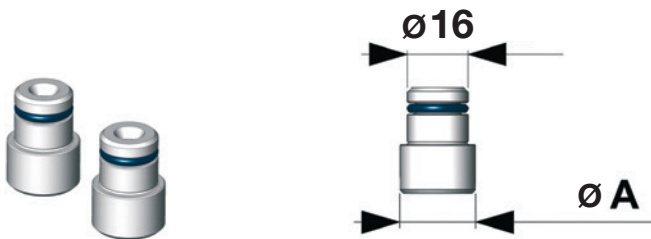
CODICE - CODE	TIPO - TYPE	Ø	S	T	Kg
C0BAS125MD010	125	310	30	15	19.1
C0BAS150MD010	150	310	29	17.5	18.6
C0BAS175MD010	175-200	356	33	20	25.4

TASSELLI CAVA - SPLINE PEGS - TASSEaux CREUX



CODICE - CODE	A
C0TAS012MD020	12
C0TAS014MD020	14
C0TAS016MD020	16
C0TAS018MD020	18
C0TAS020MD020	20
C0TAS022MD020	22

TASSELLI CILINDRICI - CYLINDRICAL PEGS - TASSEaux CYLINDRIQUES



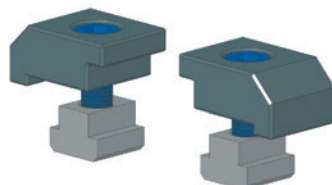
CODICE - CODE	Ø A
C0SPB012MD030	12
C0SPB014MD030	14
C0SPB016MD030	16
C0SPB018MD030	18
C0SPB020MD030	20
C0SPB022MD030	22

STAFFE LATERALI NORMALI
STANDARD SIDE CLAMPS
BRIDES LATÉRALES NORMALES

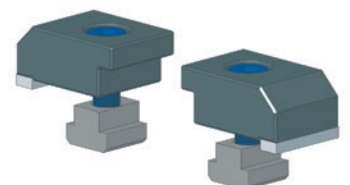
STAFFE LATERALI PER BANCHINE TENERE
SIDE CLAMPS FOR SOFT PALLET
BRIDES LATÉRALES POUR PALLET TENDRE

Specificare nelle ultime 2 cifre del codice la dimensione della cava della macchina.
Es. C0STF125MD012 corrisponde ad una staffa per Modulare 125 cava 12 mm
Specify the machine's spline size in the code's last 2 digits.
Ex. C0STF125MD012 corresponds to a side clamp for Modular Unit 125 spline 12 mm.
Spécifier dans les derniers 2 chiffres du code la dimension de la bride de la machine.
Ex. C0STF125MD012 correspond à une bride pour Modulaire 125 creux 12 mm.

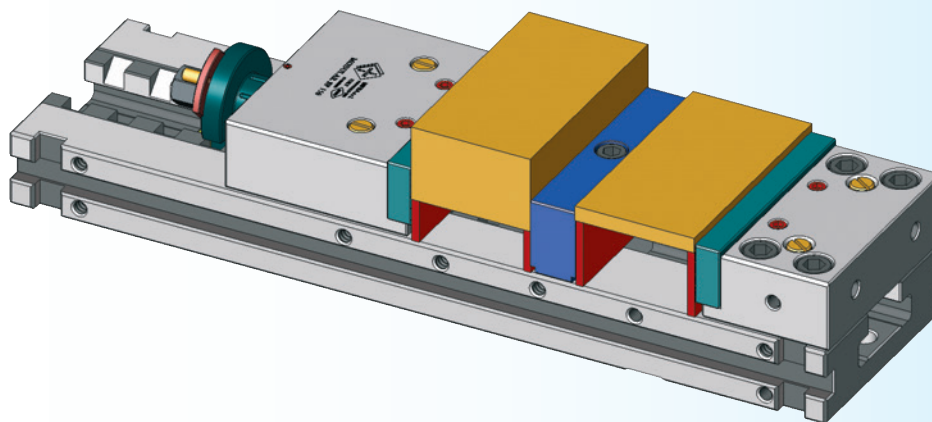
CODICE - CODE	TIPO - TYPE
C0STF125MD000	125
C0STF150MD000	150
C0STF175MD000	175-200-250



CODICE - CODE	TIPO - TYPE
C0STF125MD100	125
C0STF150MD100	150
C0STF175MD100	175-200-250



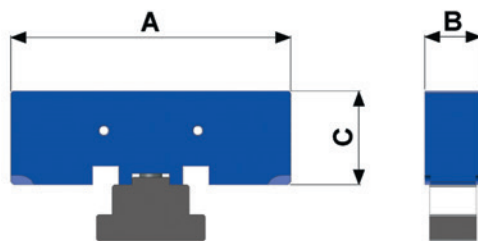
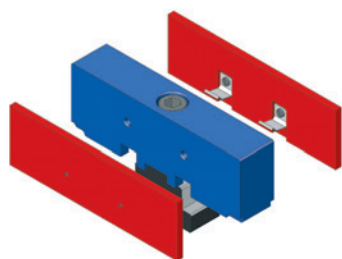
**GANASCIA MOBILE INTERMEDIA - INTERMEDIATE MOBILE JAW
MÂCHOIRE MOBILE INTERMÉDIAIRE**



Con la nuova ganascia intermedia è ora possibile utilizzare le comode PARALLELE "IR" e sfruttare la loro flessibilità, bloccando pezzi di altezze differenti.

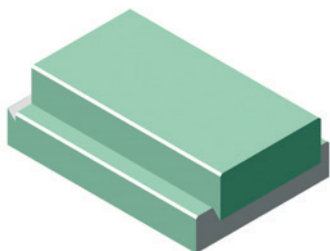
The new intermediate mobile jaw makes it possible to use comfortable PARALLELS "IR" and to take advantage of their flexibility, blocking pieces of different heights.

Avec la nouvelle mâchoire intermédiaire, on peut maintenant utiliser les pratiques PARALLÈLES "IR" et exploiter leur flexibilité en bloquant des pièces de hauteurs différentes.



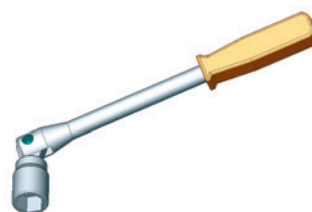
CODICE - CODE	TIPO TYPE	A	B	C
C0GIR125MD240	125	124	30	40
C0GIR150MD240	150	149	30	50
C0GIR175MD240	175	174	30	60
C0GIR200MD240	200	199	30	60
C0GIR250MD240	250	249	30	70

**PROTEZIONI DELLE GUIDE
GUIDES PROTECTION
PROTECTION DES GUIDES**



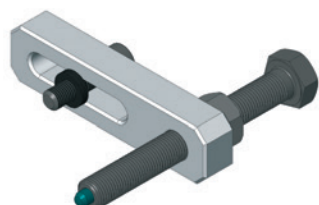
CODICE - CODE	TIPO TYPE
COPRT125MD240	125
COPRT150MD240	150
COPRT175MD240	175-200

**CHIAVE SNODATA
UNIVERSAL SOCKET WRENCH
CLÉ À PIPE ARTICULÉE**



CODICE - CODE	TIPO TYPE
C0CHIAVE19MDS	125
C0CHIAVE22MDS	150
C0CHIAVE27MDS	175-200 250

**FERMO LATERALE
WORKPIECE SIDE STOP
BUTÉE D'ARRÊT LATÉRALE**



CODICE - CODE	TIPO TYPE
C0FER125MD080	125
C0FER150MD080	150-175 200-250

**CHIAVE FISSA
FIXED WRENCH
CLÉ FIXE**



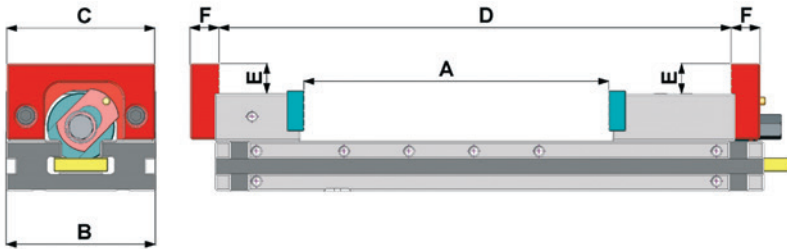
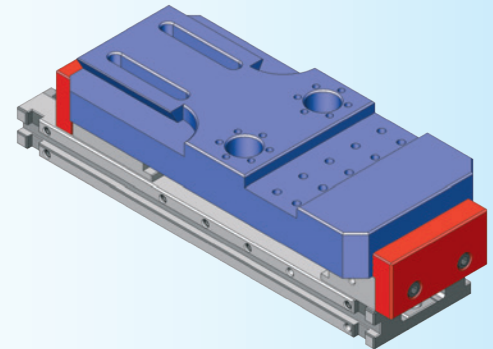
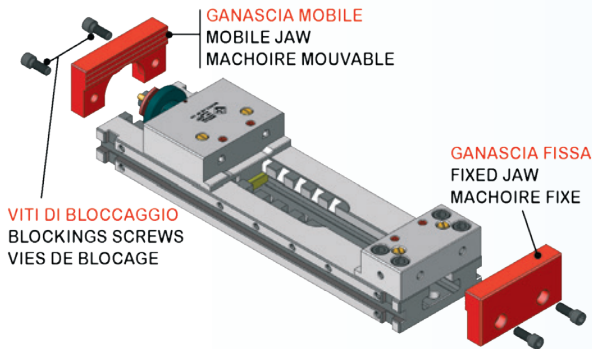
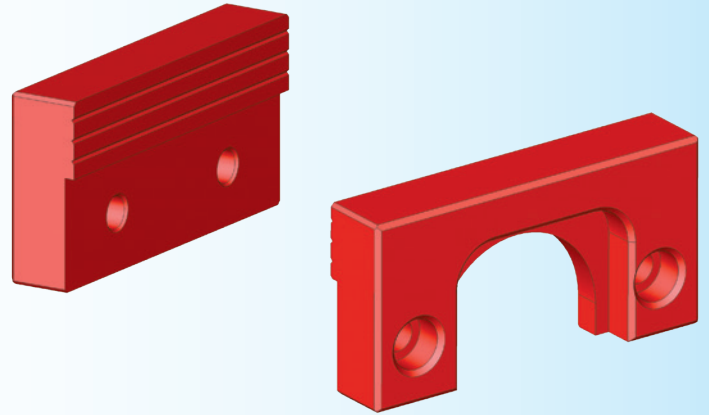
CODICE - CODE	TIPO TYPE
C0CHIAVE19PIP	125
C0CHIAVE22PIP	150
C0CHIAVE27PIP	175-200 250

**GANASCE GRANDI APERTURE - JAWS WITH WIDE OPENING
MÂCHOIRE À GRANDES OUVERTURES**

Tutte le nostre morse modulari sono predisposte per ganasce grandi aperture adatte al bloccaggio di piastre. Grazie a questo tipo di ganasce è possibile sfruttare tutta la lunghezza della morsa.

All modular vices are fitted for wide opening jaws for the blocking of plates. Thanks to these wide opening jaws it is possible to make use of the total length of the vice.

Tous nos étaux modulaires sont prédisposés pour les mâchoires à grandes ouvertures adaptées au blocage de plaques. Grâce à ce type de mâchoire, on peut exploiter toute la longueur de l'étau.



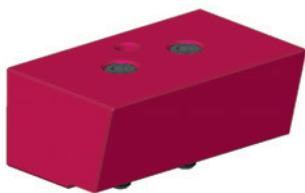
CODICE COPPIA COUPLE CODE	TIPO TYPE	A	B	C	D _{min}	D _{max}	E
C0GGA125MD200	125 x 150	155	124	123	196	349	25
	125 x 250	255	124	123	196	449	25
C0GGA150MD200	150 x 200	205	149	148	208	412	30
	150 x 250	255	149	148	208	462	30
	150 x 300	305	149	148	208	512	30
	150 x 400	405	149	148	208	612	30
C0GGA175MD200	150 x 500	505	149	148	208	712	30
	175 x 300	305	174	173	258	562	30
	175 x 400	405	174	173	258	662	30
C0GGA200MD200	175 x 500	505	174	173	258	762	30
	200 x 300	305	200	198	258	562	30
C0GGA250MD200	200 x 400	405	200	198	258	662	30
	200 x 500	505	200	198	258	762	30

SOVRAGANASCE - OVERJAWS - SURMÂCHOIRES

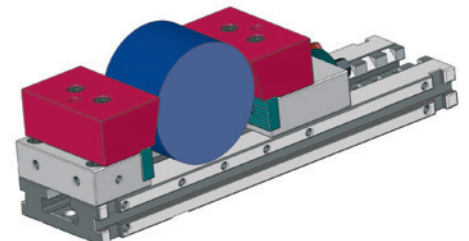
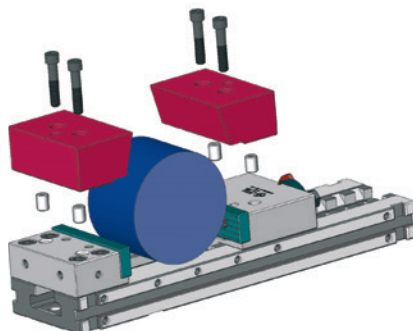
Tutte le nostre morse modulari sono predisposte per sovraganasce in grado di risolvere qualsiasi problema di bloccaggio.

All our modular vices can equip overjaws to solve any locking problem.

Tous nos étaux modulaires sont prédisposés pour les surmâchoires en mesure de résoudre tout problème de blocage.



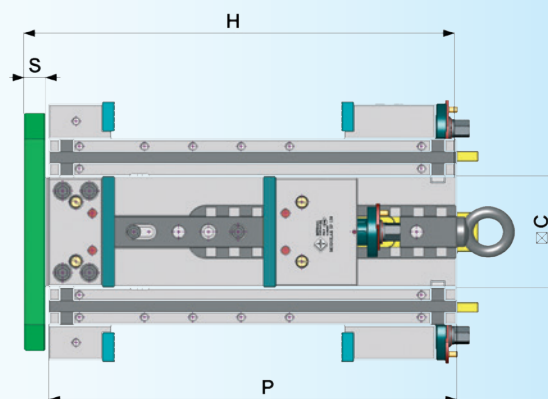
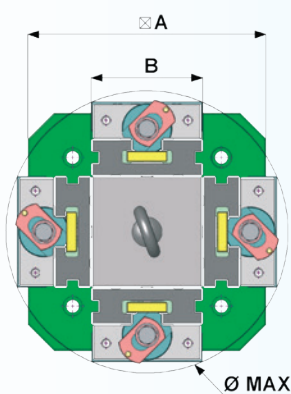
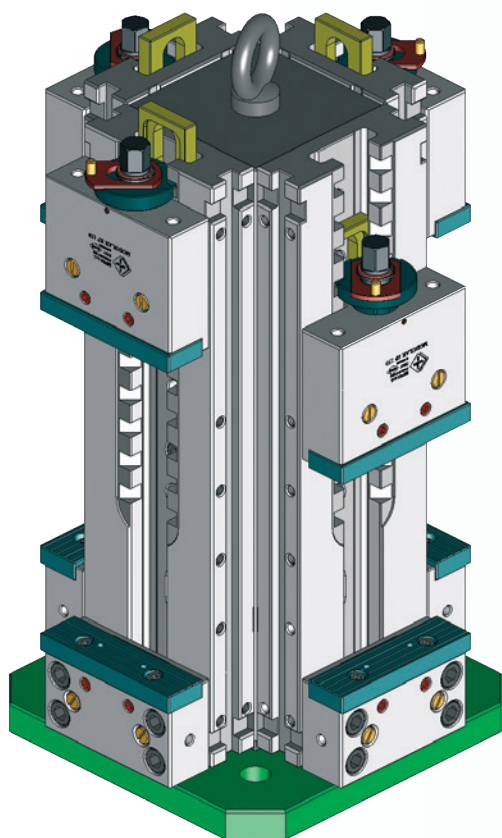
Sovraganasce di esempio
Overjaws for example
Exemple de surmâchoires



Cubi per Modulari

Modular Cubes

Cubes Modulaires



MISURE - SIZES - MISURE

TYPE	VICE	A	C	H	B	P	peso	S	peso	PC	peso	peso	PCM
		mm	mm	mm	mm	mm	cubo		mm	piastra	Kg	morsa	4 morse
CUBO 125X125	MOD.125X150	280	125	390	125	390	43	33	18.8	62	19	76	138
	MOD.125X250			490		490	54			73	22	88	161
CUBO 150X150	MOD.150X200	320	150	500	150	448.5	84.5	33	24.5	109	31	124	233
	MOD.150X250			498.5		109	33			132	241		
	MOD.150X300			548.5		118	35			140	258		
	MOD.150X400			648.5		135	40			160	295		
CUBO 175X175	MOD.175X300	400	200	600	175	603	183	38	45	228	54	216	444
	MOD.175X400			700		703	214			259	60	240	499
CUBO 200X200	MOD.200X300	400	200	600	200	603	183	38	45	228	57	228	456
	MOD.200X400			700		703	214			259	64	256	515

Le principali caratteristiche di questi cubi sono la flessibilità e la facilità di impiego, montando le morse di nostra produzione, comprese le morse System 3, si è subito in grado di lavorare. La piastra base di interfaccia sul pallet viene fornita su misura per il Cliente.

Misure standard a magazzino, le basi vengono interfacciate con il pallet, a richiesta si eseguono cubi con basi personalizzate.

The most important characteristics of these cubes are the flexibility and the simplicity in the use, you can immediately work assembling vices of our production, including the vices type System 3 we can supply cubes of different dimensions.

The base of interface on the pallet can be supplied to measure on special request of the customer.

Standard sizes in stock, bases are interfaced with the pallet, on request we produce cubes with personalized bases.

Les principales caractéristiques de ces cubes sont la flexibilité et la facilité d'usage, il est possible de travailler tout de suite en assemblant nos étaux, y compris les étaux type System 3. La base d'interface sur le palet peut être fournie sur mesure sur demande du client.

Mesures standard en stock, les bases sont interfaccées au palet, sur demande en peut réaliser cubes avec bases personnalisées.

Modulari oleopneumatiche

Hydraulic Modular

Modulaire oleopneumatique

MORSA MODULARE CON CILINDRO OLEOPNEUMATICO CORSA = 6 MM FORNITA CON CENTRALINA
MODULAR VICE WITH HYDRAULIC CYLINDER RUNNING = 6 MM SUPPLIED WITH HYDRAULIC CONTROL UNIT
ETAU MODULAIRE À CYLINDRE OLEOPNEUMATIQUE COURSE = 6 MM FOURNI AVEC CENTRALE OLEOPNEUMATIQUE

Il cilindro oleopneumatico può essere applicato alle morse modulari 150, 175, 200. Per la modulare 150 la centralina può comandare fino a 6 morse contemporaneamente o singolarmente, mentre per le versioni 175 / 200 fino a 5 morse.

The hydraulic cylinder can be assembled to the modular vices 150, 175, 200. For the modular vice 150 the hydraulic control unit can drive till 6 vices in the same time or singularly, for the 175 and 200 versions till 5 vices.

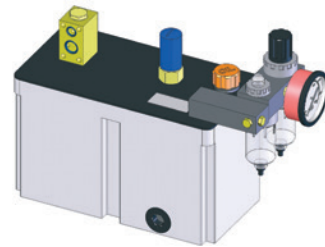
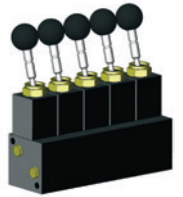
Le cylindre oléopneumatique peut être assemblé aux étaux modulaires 150, 175, 200. Pour l'étau modulaire 150 la centrale oléopneumatique peut commander jusqu'à 6 étaux en même temps ou singulièrement, pour les types 175 et 200 jusqu'à 5 étaux.

Cilindro oleopneumatico
Hydraulic cylinder
Cylindre oléopneumatique



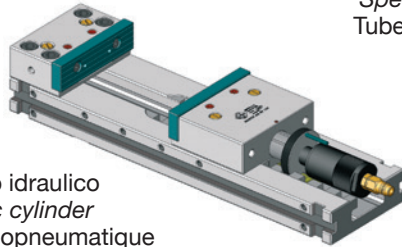
Tubo speciale alta pressione
Special high-pressure pipe
Tube spécial haute pression

Serie di leve per comandare 5 morse
Levers to drive 5 vices
Leviers pour commander 5 étaux



Centralina oleopneumatica
Hydraulic control unit
Centrale oléopneumatique

Morsa con cilindro idraulico
Vice with hydraulic cylinder
Etau à cylindre oléopneumatique

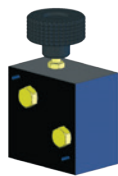


La morsa può essere comandata in vari modi:

The vice can be driven in different ways:

L'étau peut être commandé par plusieurs moyens:

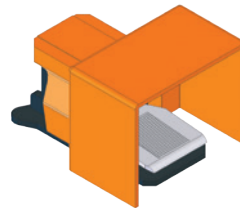
COMANDO MANUALE
HAND DRIVE
COMMANDE MANUELLE



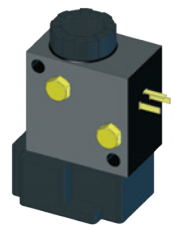
COMANDO A LEVA
LEVER DRIVE
COMMANDE A' LEVIER



COMANDO PNEUMATICO
PNEUMATIC DRIVE
COMMANDE PNEUMATIQUE



COMANDO ELETTRICO
ELECTRIC DRIVE
COMMANDE ELECTRIQUE



Viene fornita completa di centralina e tubo alta pressione (400 bar di es.) da 1.5 mt.

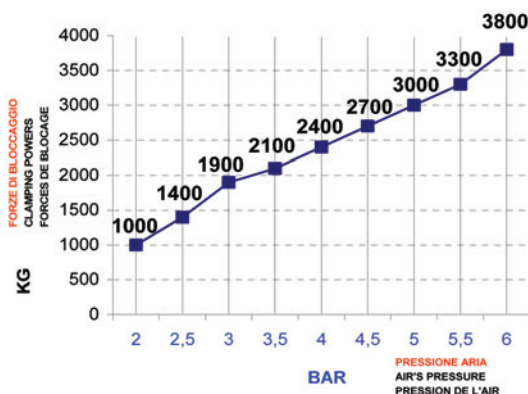
It is supplied complete with hydraulic control unit and high-pressure pipe (working pressure 400 bar) starting from 1.5 m.

Il est fourni complet de centrale oléopneumatique et tube de haute pression (pression de travaille 400 bar) à partir de 1.5 m.

TABELLE PRESSIONE ARIA E CORRISPONDENTE FORZA DI BLOCCAGGIO - TABLES OF AIR'S PRESSURES AND RELATIVE CLAMPING POWER - TABLEAUX DE PRESSIONS DE L'AIR ET RELATIVE FORCE DE BLOCCAGE

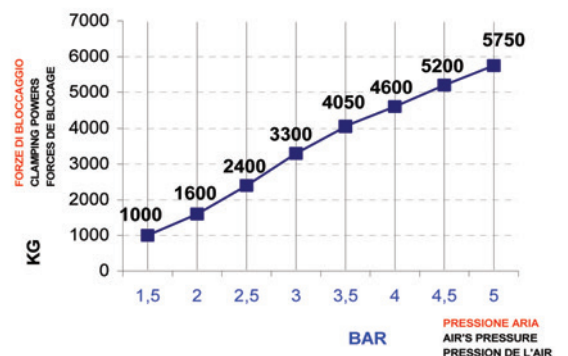
MODULARE 150

PRESSIONE MINIMA 2 BAR
MINIMUM PRESSURE 2 BAR
PRESSION MINIMUM 2 BAR



MODULARE 175/200

PRESSIONE MINIMA 1.5 BAR
MINIMUM PRESSURE 1.5 BAR
PRESSION MINIMUM 1.5 BAR

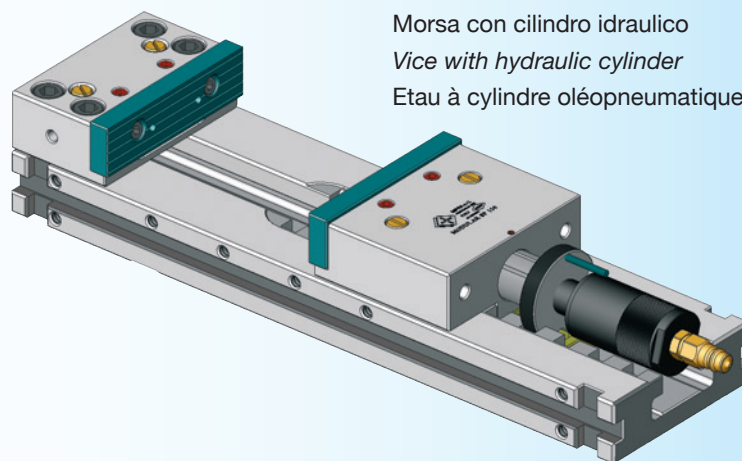


MORSA MODULARE CON CILINDRO OLEOPNEUMATICO CORSA = 6 MM SENZA CENTRALINA
MODULAR VICE WITH HYDRAULIC CYLINDER RANGE = 6 MM WITHOUT HYDRAULIC CONTROL UNIT
ETAU MODULAIRE À CYLINDRE OLEOPNEUMATIQUE COURSE = 6 MM SANS CENTRALE OLEOPNEUMATIQUE

Il cilindro oleopneumatico può essere applicato alle morse modulari 150, 175, 200.

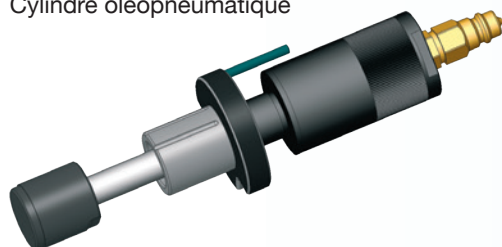
The hydraulic cylinder can be assembled to modular vices 150, 175, 200.

Le cylindre oléopneumatique peut être appliqué aux étaux modulaires 150, 175, 200.



Morsa con cilindro idraulico
 Vice with hydraulic cylinder
 Etau à cylindre oléopneumatique

Cilindro idraulico
 Hydraulic cylinder
 Cylindre oléopneumatique



La morsa per funzionare correttamente DEVE essere collegata con un tubo ad alta pressione (400 bar di esercizio) ad una centralina oleopneumatica che sia in grado di erogare olio alle pressioni indicate in tabella. Utilizzare olio idraulico 68 CSt. Si consiglia di montare gruppo filtro riduttore e lubrificatore.

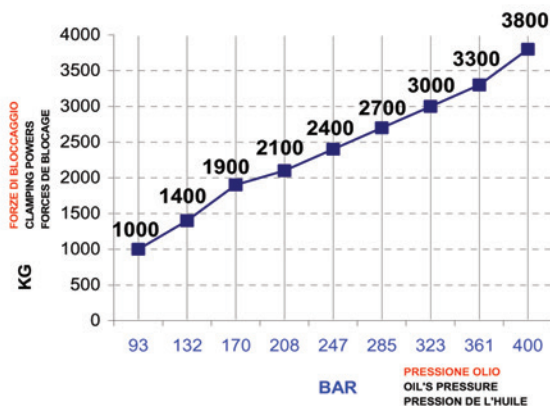
The vice, in order to run correctly, MUST be connected, with a high-pressure pipe (working pressure 400 bar), to a hydraulic control unit that must be able to deliver oil in accordance with the pressures indicated in the table. Use hydraulic oil 68 CSt. We suggest to assembly a reducing and lubricating filtering group.

L'étau, pour fonctionner correctement, DOIT être joint, avec un tube de haute pression (pression de travaille 400 bars), à une centrale oléopneumatique qui doit être en mesure de débiter huile selon les pressions indiquées dans le tableau. Utiliser huile hydraulique 68 CSt. Nous conseillons d'assembler un groupe filtrant réducteur et graisseur.

TABELLE PRESSIONE OLIO E CORRISPONDENTE FORZA DI BLOCCAGGIO - TABLES OF OIL'S PRESSURES AND RELATIVE CLAMPING POWER - TABLEAUX DE PRESSIONS DE L'HUILE ET RELATIVE FORCE DE BLOCAGE

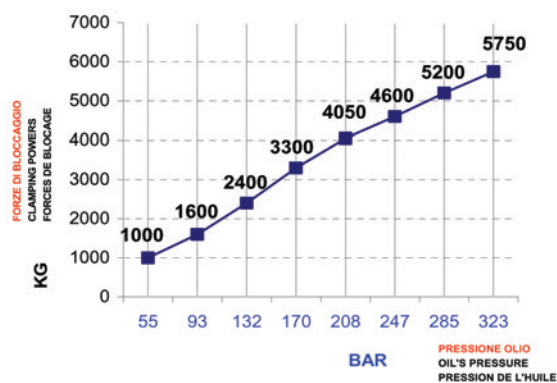
MODULARE 150

PRESSIONE MINIMA 93 BAR
 MINIMUM PRESSURE 93 BAR
 PRESSION MINIMUM 93 BAR

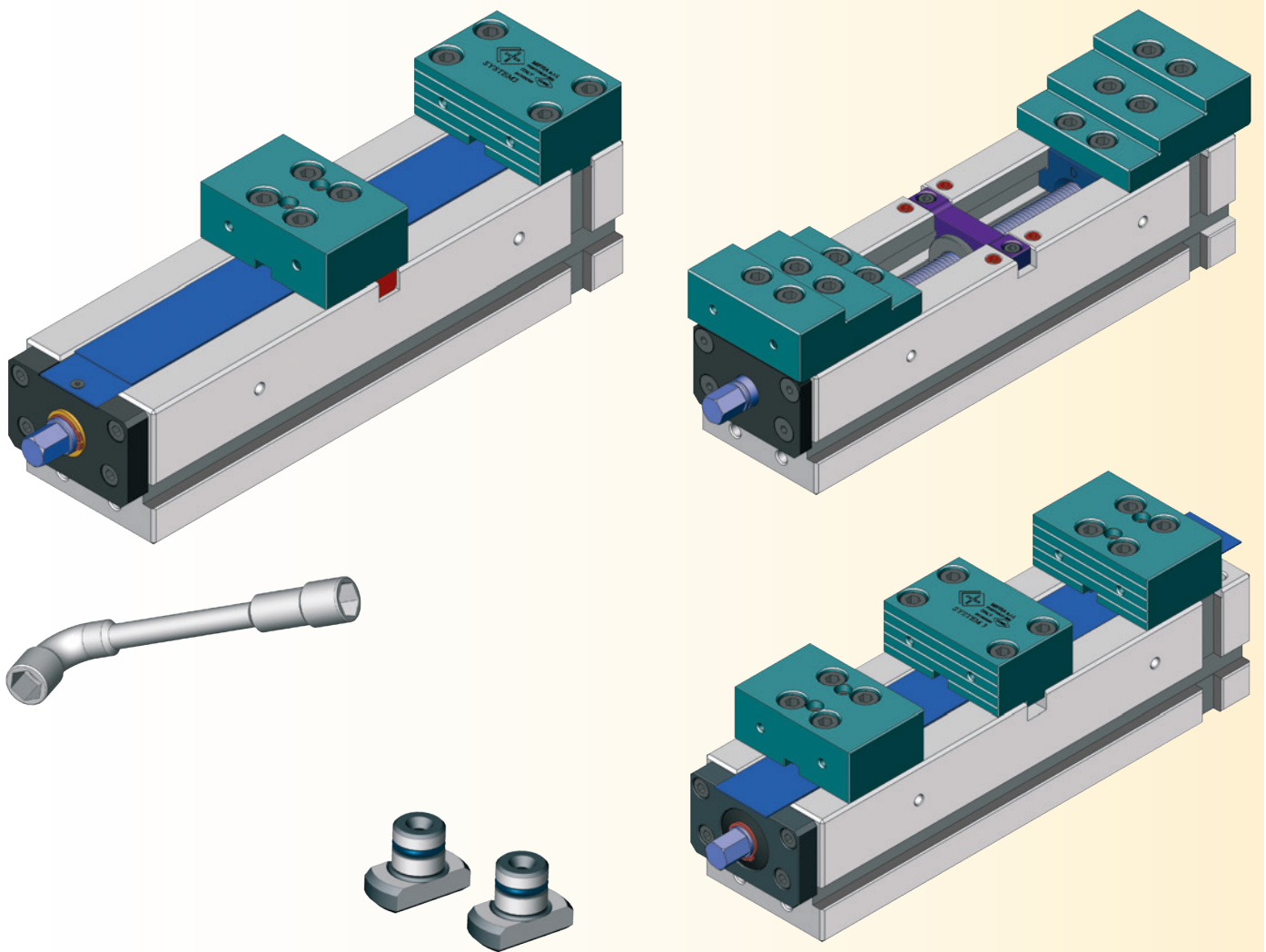


MODULARE 175/200

PRESSIONE MINIMA 55 BAR
 MINIMUM PRESSURE 55 BAR
 PRESSION MINIMUM 55 BAR



System 3



La morsa "System 3" racchiude in sé tutta la precisione e la versatilità delle morse Cuter. Costruita interamente in acciaio NiCrMo cementato e temperato, durezza HCR 60/62. Completamente rettificata, con tolleranze centesimali. Struttura alta e compatta per poter lavorare su tutti i lati, anche in verticale. Dimensioni contenute nonostante le grandi aperture.

Possibilità di comporre la morsa in varie versioni; semplice, doppia, auto-centrante, con la possibilità di bloccare il pezzo sia in chiusura che in apertura. Lo stesso slittone fa da base a tutte le varie trasformazioni possibili.

The "System 3" vice comprises all the precision and versatility of the Cuter vices. It is built entirely of NiCrMo case-hardened and tempered steel, with a hardness of HRC 60/62. Completely ground with centesimal tolerances.

High and compact structure allowing to machine the workpiece on all sides, even vertically. Limited dimensions despite the wide opening.

The vice can be arranged in different ways: single, double, self-centring with the possibility of clamping the workpiece both during closing and opening. The saddle forms the basis for all the various possible arrangements.

L'étau "System 3" réunit en lui toute la précision et la versatilité des étaux Cuter. Construit complètement en acier NiCrMo cémenté et trempé, avec une dureté HRC 60/62. Totalemt rettificé, avec des tolérances centésimales, il se caractérise par une structure haute et compacte permettant de travailler de tous les côtés, même en vertical.

Aux dimensions réduites, malgré son ample ouverture.

L'étau pourra être transformé selon plusieurs versions: simple, double et à centrage automatique avec la possibilité de bloquer la pièce aussi bien en fermeture qu'en ouverture. Le coulisseau sert de base pour toutes les combinaisons possibles.

Versione doppia

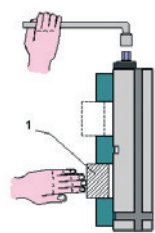
Double version

Version double

La "Novità", consiste nel montare il primo pezzo contro il fermo e bloccarlo parzialmente, successivamente ripetere la stessa operazione con il secondo, bloccando definitivamente i due pezzi allo stesso tempo. Durante queste operazioni è sufficiente l'intervento di un solo operatore.

The "New" consists in setting up the first piece against the work piece side stop and block it partially; then repeat the same operation with the second piece blocking definitively the two pieces at the same time. During these operations only one worker only is required.

La "Nouveauté" consiste à monter la première pièce contre l'arrêt et la bloquer partiellement, dans la suite répéter la même opération avec la deuxième pièce en bloquant définitivement les deux pièces en même temps. Pour faire ces opérations c'est suffisant l'intervention d'un seul opérateur.

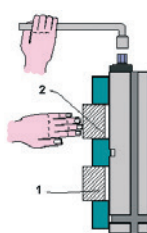


Fase 1 • Phase 1 • Phase 1

Montare il pezzo 1 tenendolo fermo, avvitare la vite fino a prebloccare il pezzo in modo che non si muova.

Set up the piece no. 1 keeping it blocked. Screw till the pre-clamping of the piece. It must not move.

Monter la pièce 1 en la tenant bloquées, serrer la vis jusqu'à pré-blocage de la piece. Elle ne doit pas se mouvoir.



Fase 2 • Phase 2 • Phase 2

Montare il pezzo 2 tenendolo fermo, avvitare la vite fino a bloccare saldamente i due pezzi.

Set up the piece 2 keeping it blocked. Screw in order to clamp firmly the two pieces.

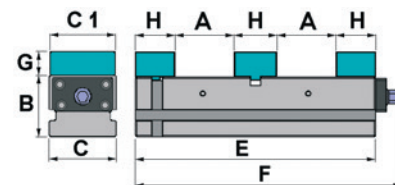
Monter la pièce 2 en la tenant bloquées, serrer la vis jusqu'à bloquer solidement les deux pièces.

System doppia con ganasce lisce e rigate. È possibile utilizzare le due facce delle ganasce mobili, il lato con la rigatura è adatto per i pezzi grezzi, il lato liscio per i pezzi finiti.

System double with smooth and grooved jaws. It is possible to use both faces of movable jaws, the grooved face is suitable for raw work-pieces, the smooth face for finished work-pieces.

System double avec mâchoires lisses et rainurées. Il est possible d'utiliser les deux faces des mâchoires mobiles, la face rainurée est apte pour corps bruts, la face lisse pour corps finis.

* Versione con ganasca centrale liscia
* Type with central smooth jaw
* Modèle avec mâchoire centrale lisse

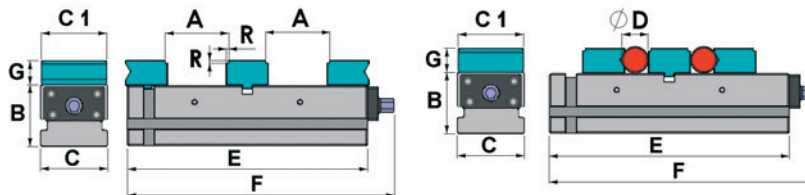


CODICE CODE	TIPO TYPE	A	B	C	C1	E	F	G	H	Kg
		mm	mm	mm	mm	mm	mm	mm	mm	
C0MDO100SY364	DOP. 364	89	90	100	98	364	407	38	64	29.0
* C0MDO100SY365	DOP. 365	89	90	100	98	364	407	38	64	29.0
C0MDO100SY464	DOP. 464	139	90	100	98	464	507	38	64	35.0
* C0MDO100SY465	DOP. 465	139	90	100	98	464	507	38	64	35.0
C0MDO100SY564	DOP. 564	189	90	100	98	564	607	38	64	41.0

System doppia con ganasce a V e ribasso. È possibile utilizzare le due facce delle ganasce mobili, il lato con il ribasso ed il lato opposto con la V orizzontale e verticale per i pezzi tondi.

System double with 'V' shaped jaws and lowered lip. It is possible to use both faces of movable jaws, the face with lowered lip and the opposite face with the horizontal and vertical 'V' for round work-pieces.

System double avec mâchoires en 'V' et lèvres abaissées. Il est possible d'utiliser les deux faces des mâchoires mobiles, la face avec la lèvre abaissée et la face opposée avec la 'V' horizontale et verticale pour les corps ronds.

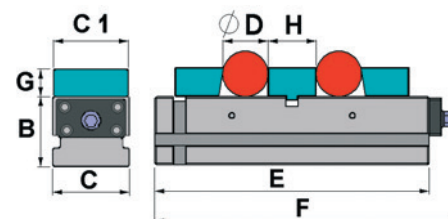


CODICE CODE	TIPO TYPE	A	B	C	C1	D min	D max	E	F	G	R	Kg
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
C0MDO100SY366	DOP. 366	97	90	100	98	10	40	364	407	38	4	29.0
C0MDO100SY466	DOP. 466	147	90	100	98	10	40	464	507	38	4	35.0
C0MDO100SY566	DOP. 566	197	90	100	98	10	40	564	607	38	4	41.0

System doppia con ganasce inclinata e liscia. È possibile utilizzare le due facce delle ganasce mobili, il lato inclinato per i pezzi tondi ed il lato opposto per i pezzi lisci.

System double with inclined and smooth jaws. It is possible to use both faces of movable jaws, the inclined face for round work-pieces and the opposite face for smooth work-pieces.

System double avec mâchoires inclinées et lisses. Il est possible d'utiliser les deux faces des mâchoires mobiles, la face inclinée pour corps ronds et la face opposée pour corps lisses.



CODICE CODE	TIPO TYPE	A	B	C	D min	D max	E	F	G	H	Kg
		mm	mm	mm	mm	mm	mm	mm	mm	mm	
C0MDO100SY368	DOP. 368	89	90	100	10	60	364	407	38	64	29.0
C0MDO100SY468	DOP. 468	139	90	100	10	60	464	507	38	64	35.0
C0MDO100SY568	DOP. 568	189	90	100	10	60	564	607	38	64	41.0

Versione semplice

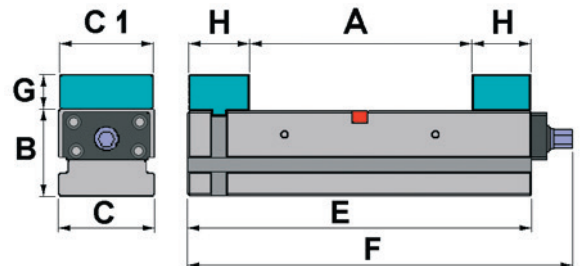
Simple version

Version simple

System semplice con ganasce lisce e rigate. È possibile utilizzare le due facce della ganascia mobile, il lato con la rigatura è adatto per i pezzi grezzi, il lato liscio per i pezzi finiti.

System simple with smooth and grooved jaws. It is possible to use both faces of the movable jaw, the grooved face is suitable for raw work-pieces, the smooth face for finished work-pieces.

System simple avec mâchoires lisses et rainurées. Il est possible d'utiliser les deux faces de la mâchoire mobile, la face rainurée est apte pour corps bruts, la face lisse pour corps finis.



CODICE CODE	TIPO TYPE	A	B	C	C1	E	F	G	H	Kg
		mm	mm	mm	mm	mm	mm	mm	mm	
C0MSE100SY254	SEM. 254	138	90	100	98	264	307	38	64	20.0
C0MSE100SY364	SEM. 364	238	90	100	98	364	407	38	64	26.0
C0MSE100SY464	SEM. 464	338	90	100	98	464	507	38	64	32.0
C0MSE100SY564	SEM. 564	438	90	100	98	564	607	38	64	38.0

System semplice con ganasce a V e ribasso. È possibile utilizzare le due facce della ganascia mobile, il lato con il ribasso ed il lato opposto con la V orizzontale e verticale per i pezzi tonde.

System simple with 'V' shaped jaws and lowered lip. It is possible to use both faces of the movable jaw, the face with lowered lip and the opposite face with the horizontal and vertical 'V' for round work-pieces.

System simple avec mâchoires en 'V' et lèvres abaissées. Il est possible d'utiliser les deux faces de la mâchoire mobile, la face avec la lèvre abaissée et la face opposée avec la 'V' horizontale et verticale pour les corps ronds.

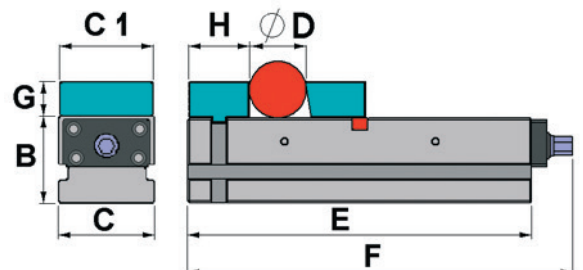


CODICE CODE	TIPO TYPE	A	B	C	C1	D min	D max	E	F	G	R	Kg
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
C0MSE100SY256	SEM. 256	146	90	100	98	10	40	264	307	38	4	20.0
C0MSE100SY366	SEM. 366	246	90	100	98	10	40	364	407	38	4	26.0
C0MSE100SY466	SEM. 466	346	90	100	98	10	40	464	507	38	4	32.0
C0MSE100SY566	SEM. 566	446	90	100	98	10	40	564	607	38	4	38.0

System semplice con ganasce inclinate e lisce. È possibile utilizzare le due facce della ganascia mobile, il lato inclinato per i pezzi tonde ed il lato opposto per i pezzi lisci.

System simple with inclined and smooth jaws. It is possible to use both faces of the movable jaw, the inclined face for round work-pieces and the opposite face for smooth work-pieces.

System simple avec mâchoires inclinées et lisses. Il est possible d'utiliser les deux faces de la mâchoire mobile, la face inclinée pour corps ronds et la face opposée pour corps lisses.



CODICE CODE	TIPO TYPE	A	B	C	C1	D min	D max	E	F	G	H	Kg
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
C0MSE100SY258	SEM. 258	138	90	100	98	10	60	264	307	38	64	20.0
C0MSE100SY368	SEM. 368	238	90	100	98	10	60	364	407	38	64	26.0
C0MSE100SY468	SEM. 468	338	90	100	98	10	60	464	507	38	64	32.0
C0MSE100SY568	SEM. 568	438	90	100	98	10	60	564	607	38	64	38.0

Autocentrante

Self-centering

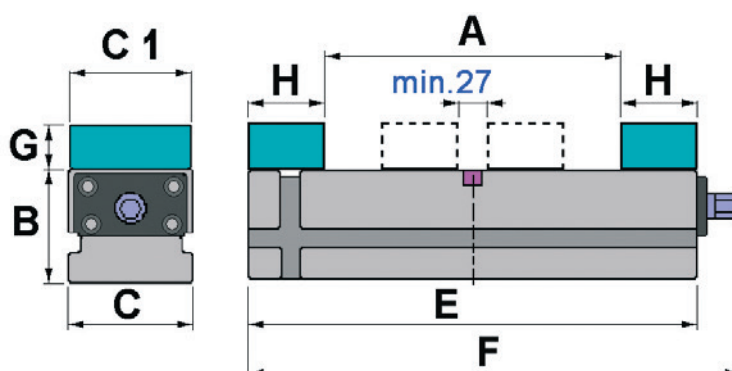
Centrage automatique

SYSTEM 3 VERSIONE AUTOCENTRANTE - SYSTEM 3 SELF-CENTRING TYPE SYSTEM 3 MODELE À CENTRAGE AUTOMATIQUE

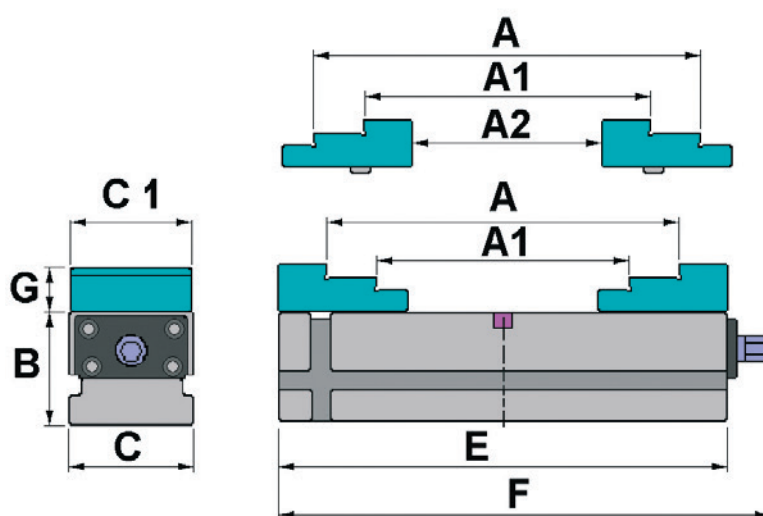
System autocentrante con ganasce mobili che posizionano il pezzo centralmente alla morsa senza nessun riferimento esterno. E' possibile utilizzare le ganasce anche dal lato opposto.

System self-centering with movable jaws that position the part at the centre of the vice without any external reference. It is possible to use the jaws also on the opposite side.

System à centrage automatique avec mâchoires mobiles pour positionner la pièce au milieu de l'étau sans aucun point de référence extérieur. Il est possible d'utiliser les mâchoires aussi du côté opposé.



CODICE CODE	TIPO TYPE	A	B	C	C1	E	F	G	H	Kg
		mm	mm	mm	mm	mm	mm	mm	mm	
C0MAU100SY255	AUT. 255	138	90	100	98	264	307	38	64	22.0
C0MAU100SY365	AUT. 365	238	90	100	98	364	407	38	64	28.0
C0MAU100SY465	AUT. 465	338	90	100	98	464	507	38	64	34.0
C0MAU100SY565	AUT. 565	438	90	100	98	564	607	38	64	40.0



CODICE CODE	TIPO TYPE	A	A1	A2	B	C	C1	E	F	G	Kg
		mm	mm	mm	mm	mm	mm	mm	mm	mm	
C0MAU100SY364	AUT. 364	312	232	152	90	100	98	364	407	38	29.0
C0MAU100SY464	AUT. 464	412	332	252	90	100	98	464	507	38	35.0
C0MAU100SY564	AUT. 564	512	432	352	90	100	98	564	607	38	41.0

Istruzioni ripari e parallele IR System 3

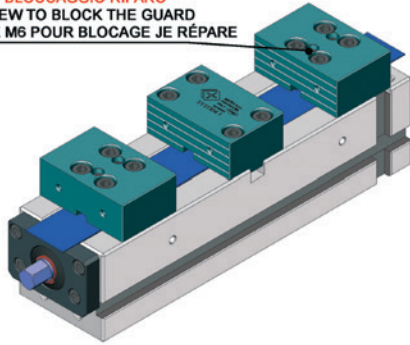
Instructions for use of the guards and parallels "IR" System 3

Instructions pour les protections au parallèles "IR" System 3

VERSIONE DOPPIA - DOUBLE TYPE - VERSION DOUBLE

VERSIONE SEMPLICE - SIMPLE TYPE - VERSION SIMPLE

VITE M6 BLOCCAGGIO RIPARO
M6 SCREW TO BLOCK THE GUARD
VIES DE M6 POUR BLOCCAGE JE RÉPARE

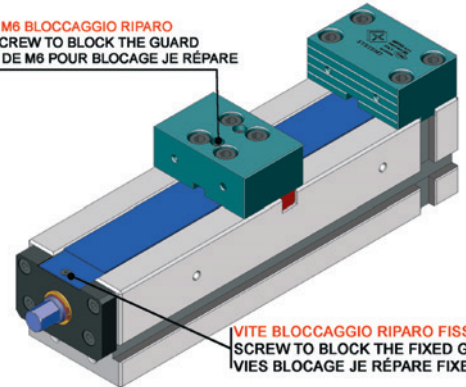


RIPARO - GUARD
PROTECTION



RIPARO FISSO
FIXED GUARD
PROTECTION FIXE

VITE M6 BLOCCAGGIO RIPARO
M6 SCREW TO BLOCK THE GUARD
VIES DE M6 POUR BLOCCAGE JE RÉPARE



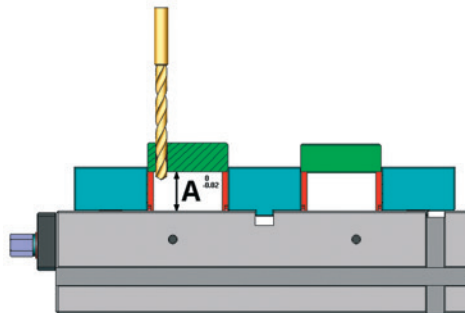
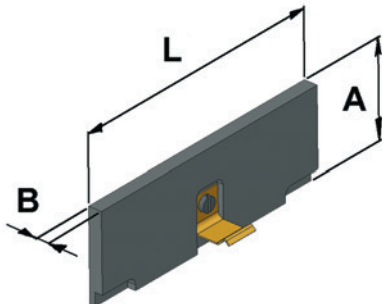
VITE BLOCCAGGIO RIPARO FISSO
SCREW TO BLOCK THE FIXED GUARD
VIES BLOCCAGE JE RÉPARE FIXE

La sostituzione dei ripari per la morsa SYSTEM 3 è semplicissima: basta allentare la vite da M6 e sfilare il riparo.

The replacement of the guards on SYSTEM 3 vice is very easy: unscrew M6 screw and pull out the guard.

Remplacer les protections pour l'étau SYSTEM 3 est très facile: il suffit de desserrer la vis de M6 et de dégager la protection.

PARALLELE "IR" AD INNESTO RAPIDO BREVETTATE PER MORSE SYSTEM 3 PATENTED QUICK-POSITIONING PARALLELS "IR" FOR SYSTEM 3 VICES PARALLÈLES "IR" À ENCLÈNCHÉMENT RAPIDE BREVÉTÉ POUR ÉTAUX SYSTEM 3



PARALLELE PER SYSTEM3 100			
TYPE SP.5	A	B	L
COCAS100SY005 SET 3 pcs.			
PAR100SY345	34	5	98
PAR100SY295	29	5	98
PAR100SY245	24	5	98

Misure parallele standard, a richiesta si esegue qualsiasi tipo di parallele.

Standard parallels measures in stock; custom-sized parallels are built on request.

Mesures standard des parallèles en stock; tout type de parallèles sur demande.

MATERIAL UNI X210Cr13KU
HARDNESS HRC 60-62

DISPONIBILI ANCHE TENERE
ALSO SOFT AVAILABLE
TENDRES AUSSI DISPONIBLES

ISTRUZIONI DI UTILIZZO PARALLELE AD INNESTO RAPIDO - INSTRUCTIONS FOR USE OF QUICK POSITIONING PARALLELES INSTRUCTIONS D'EMPLOI DES PARALLÈLES À ENCLÈNCHÉMENT RAPIDE

AGGANCIAMENTO - ASSEMBLY - ACCROCHEMENT	
FASE 1 - STEP 1 - PHASE 1	FASE 2 - STEP 2 - PHASE 2
<p>INCLINARE LEGGERMENTE LA PARALLELA E ACCOSTARLA ALLA GANASCIA SLIGHTLY RAKE THE PARALLEL AND PLACE IT BESIDE THE JAW INCLINER LÉGÈREMENT LA PARALLÈLE ET L'APPROCHER À LA MÂCHOIRE</p>	<p>PREMERE PER AGGANCIARE LA PARALLELA PUSH THE PARALLEL IN ORDER TO COUPLE IT APPUYER POUR ACCROCHER LA PARALLÈLE</p>

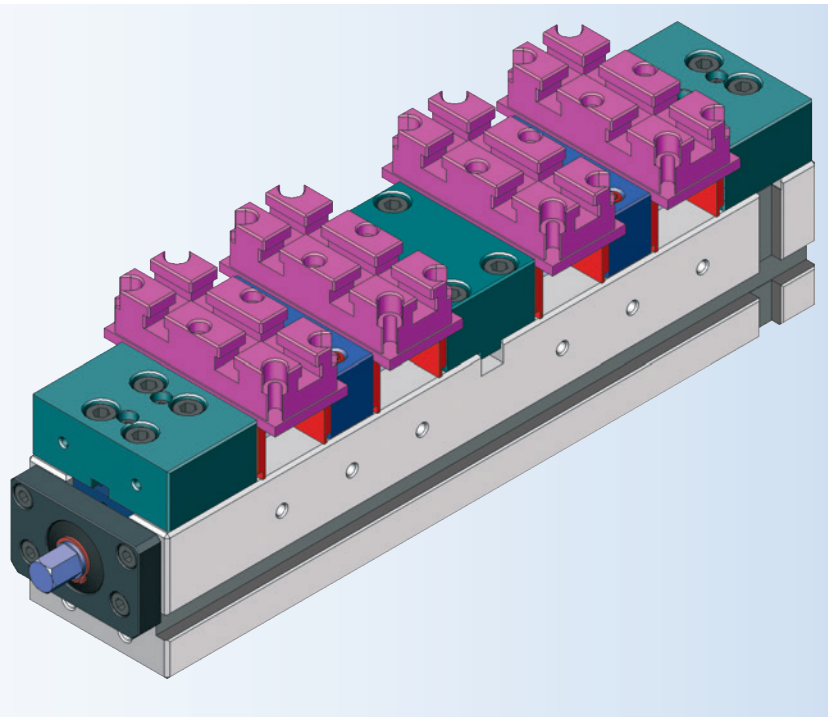
SGANCIAMENTO - DISASSEMBLY - JE DÉCROCHE	
FASE 1 - STEP 1 - PHASE 1	FASE 2 - STEP 2 - PHASE 2
<p>INSERIRE IL CACCIAVITE NEL PUNTO INDICATO FIT THE SCREWDRIVER IN THE INDICATED PLACE INSÉRER LE TOURNEVIS SUR LE POINT INDICÉ</p>	<p>TIRARE NEL VERSO INDICATO PER SGANCIARE LA PARALLELA PULL IN THE INDICATED DIRECTION IN ORDER TO TAKE AWAY THE PARALLEL TIRER DANS LE SENS INDICÉ POUR DÉCROCHER LA PARALLÈLE</p>

System 4

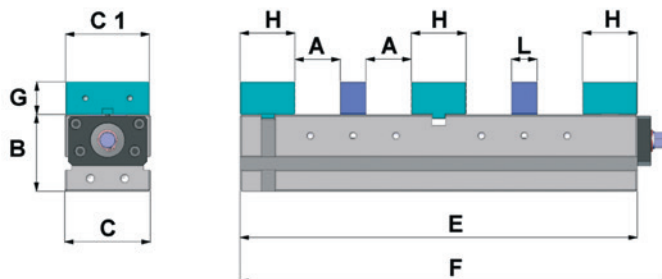
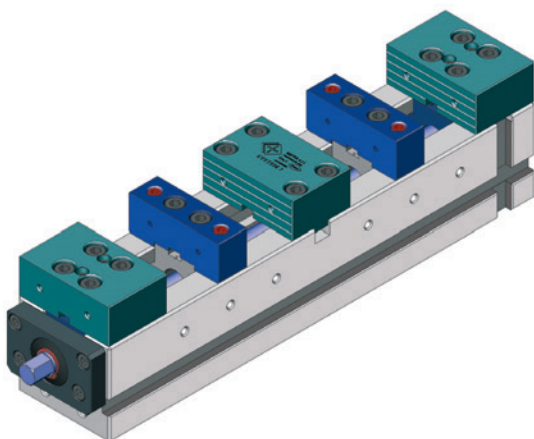
In un momento in cui la flessibilità è la parola d'ordine nelle lavorazioni meccaniche, la Mifra S.r.l., propone una morsa versatile ed innovativa. La System 4 è in grado di bloccare 4 pezzi agendo sulla sola vite di chiusura e può montare anche le comodissime e collaudate parallele ad innesto rapido che consentono di variare in altezza la posizione dei pezzi.

Today the key word in machining manufacture is flexibility. Mifra S.r.l., presents the new System4 that can block up to 4 pieces using only one closing screw. System 4 can also equip the useful and well-tested quick positioning parallels, which permit to change the height of the pieces' position.

Considééré qu'aujourd'hui la flexibilité est le mot d'ordre pour les travaux mécaniques, la Mifra S.r.l., propose un étau éclectique et innovant. Le System4 est en mesure de bloquer 4 pièces grâce à sa vis de serrage et on peut même y monter les pratiques parallèles à enclenchement rapide qui permettent de varier la position des pièces en hauteur.

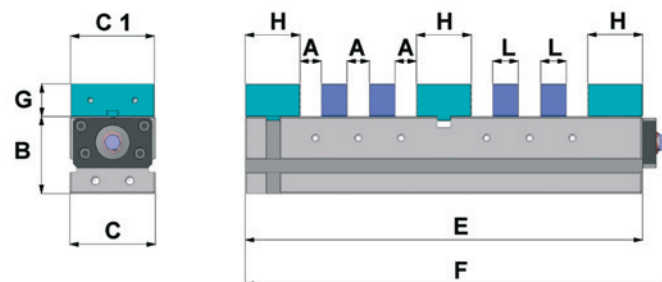
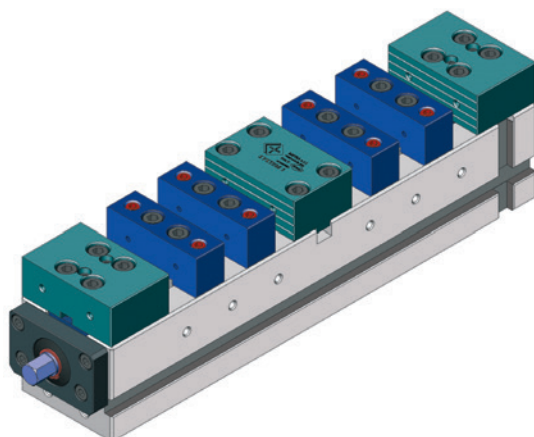


VERSIONE 4 PEZZI - 4 PIECES TYPE - VERSION 4 PIÈCES



CODICE CODE	TIPO TYPE	A	B	C	C1	E	F	G	H	L	Kg
		mm	mm	mm	mm	mm	mm	mm	mm	mm	
C0MDO100SY371	S4. 371	28	90	100	98	364	407	38	64	30	31.2
C0MDO100SY471	S4. 471	53	90	100	98	464	507	38	64	30	37.2
C0MDO100SY571	S4.571	78	90	100	98	564	607	38	64	30	43.0

VERSIONE 6 PEZZI - 6 PIECES TYPE - VERSION 6 PIÈCES



CODICE CODE	TIPO TYPE	A	B	C	C1	E	F	G	H	L	Kg
		mm	mm	mm	mm	mm	mm	mm	mm	mm	
C0MDO100SY472	S4. 472	25	90	100	98	464	507	38	64	30	39.4
C0MDO100SY572	S4.572	42	90	100	98	564	607	38	64	30	45.4

System 3 - 150

Nuova morsa System3 con ganasce da 150, che grazie alla guida esterna garantiscono un'ottima precisione di bloccaggio.

Disponibile nelle versioni:

Doppia per bloccare 2 pezzi.

Semplice per bloccare un solo pezzo.

Autocentrante per bloccare il pezzo in centro alla morsa senza nessun riferimento esterno.

Con questa morsa è possibile utilizzare la serie di parallele IR della morsa modulare da 150.

New System3 vice with 150 mm jaws, that guarantee an excellent blocking precision thanks to the external guide.

Available in the following models:

Double to block 2 pieces.

Simple to block a single piece.

Self-centring to block the piece in center to the vice without any external reference.

With this vice it is possible to use the IR quick positioning parallels of the 150 modular vice set.

Nouvel étau System3 avec mâchoires de 150, qui garantissent une excellente précision de blocage grâce au guide externe.

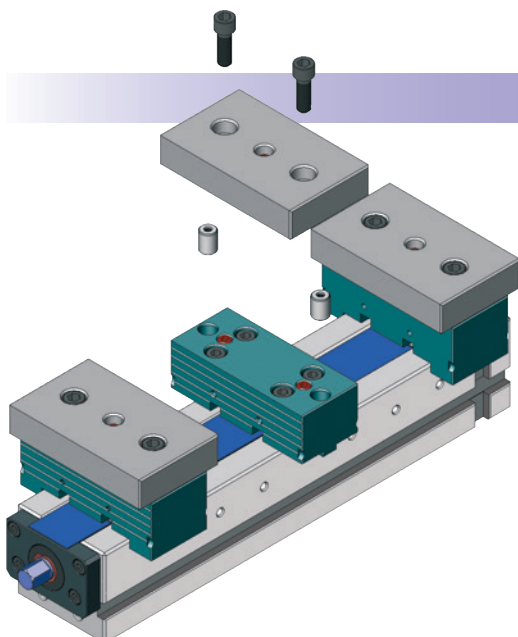
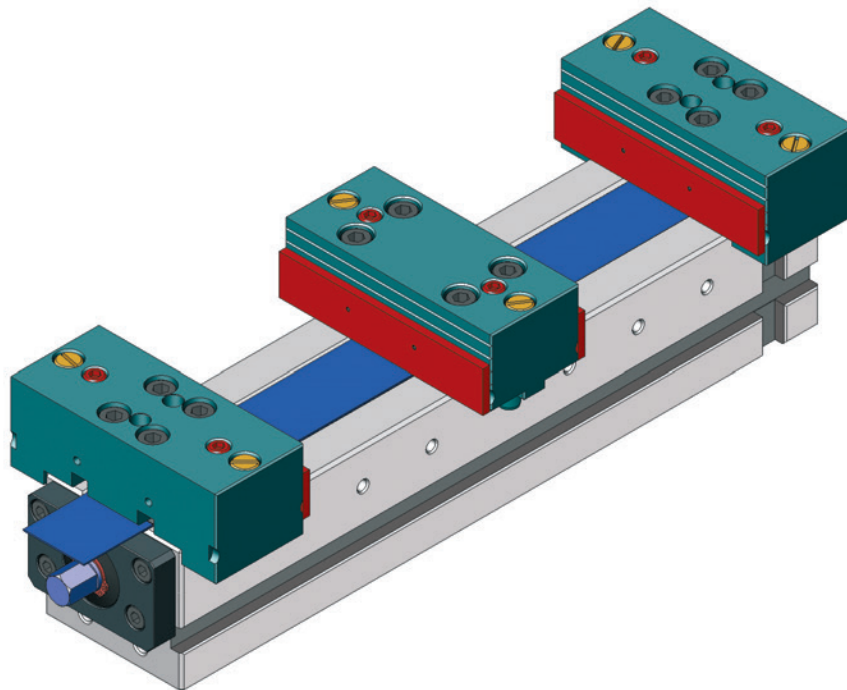
Disponibile dans les versions:

Double pour bloquer 2 pièces.

Simple pour bloquer une seule pièce.

À centrage automatique pour bloquer la pièce au centre de l'étau sans aucune référence externe.

Avec cet étau, on peut utiliser la série de parallèles IR de l'étau modulaire de 150.



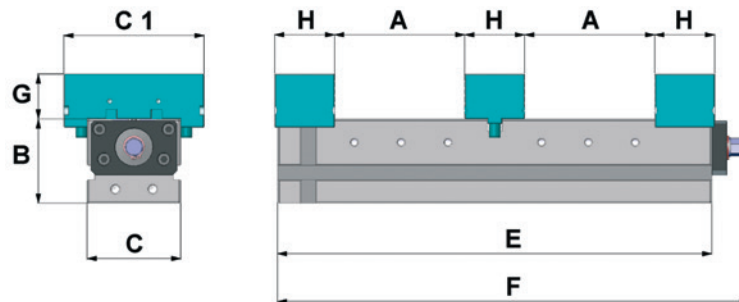
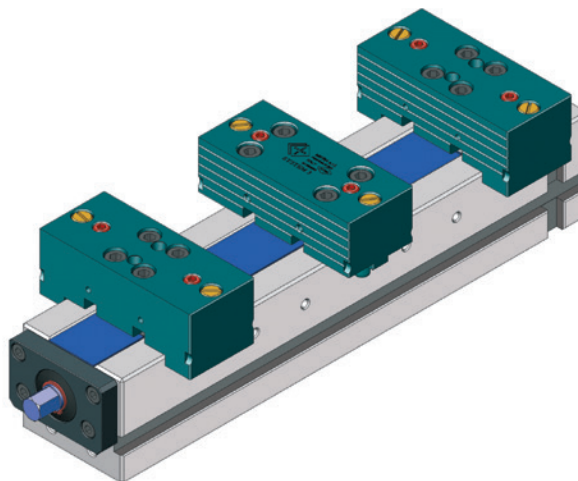
Flessibilità - Flexibility - Flexibilité

Applicando lo stesso concetto delle morse modulari abbiamo reso ancora più flessibile le ganasce da 150 introducendo la predisposizione per il montaggio delle sovraganasce tenere personalizzabili dal cliente.

Using the same concept of the modular vices, we have made the 150 mm jaws even more flexible. Now they are fit for the installation of the soft overjaws that the client may customise as he/she needs to.

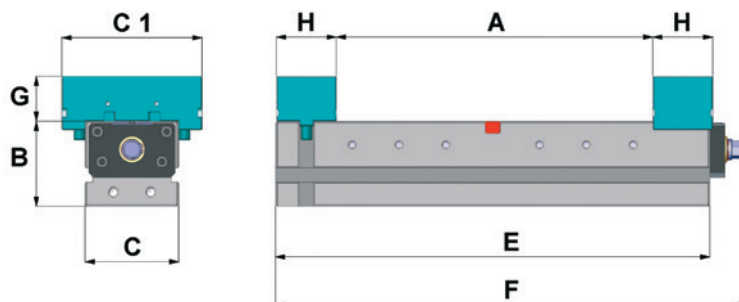
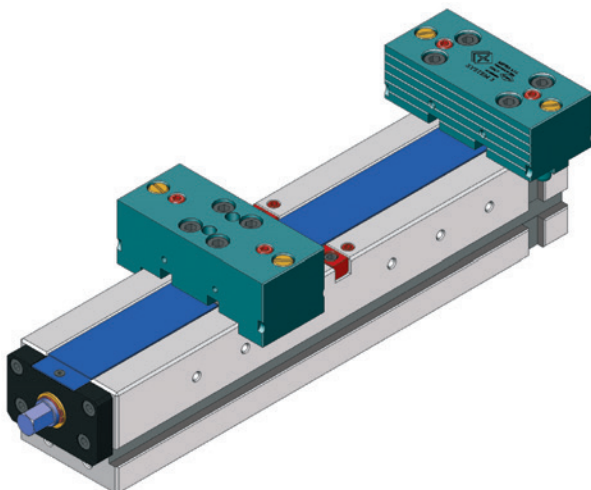
En appliquant le même concept des étaux modulaires, nous avons rendu encore plus flexible les mâchoires de 150 en ajoutant la prédisposition pour le montage des sur-mâchoires tendres, personnalisables par le client.

VERSIONE DOPPIA - DOUBLE TYPE - VERSION DOUBLE



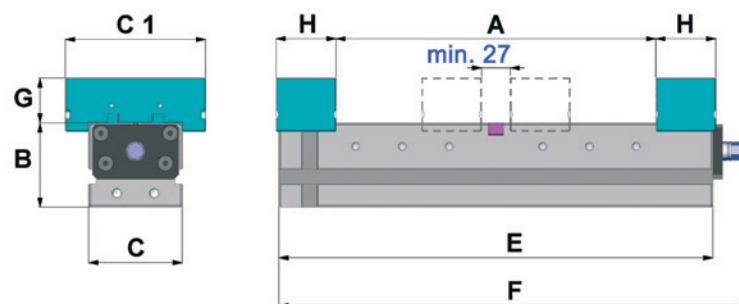
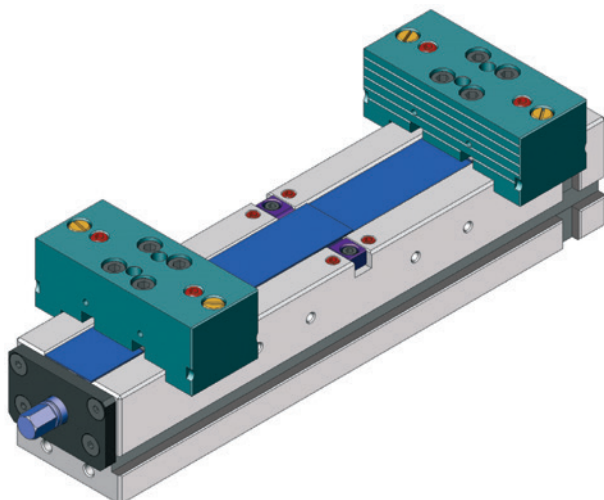
CODICE - CODE	A	B	C	C1	E	F	G	H	Kg
	mm	mm	mm	mm	mm	mm	mm	mm	
C0MDO100SY370	89	90	100	150	364	407	48	64	34.5
C0MDO100SY470	139	90	100	150	464	507	48	64	40.0
C0MDO100SY570	189	90	100	150	564	607	48	64	46.5

VERSIONE SEMPLICE - SIMPLE TYPE - VERSION SIMPLE



CODICE - CODE	A	B	C	C1	E	F	G	H	Kg
	mm	mm	mm	mm	mm	mm	mm	mm	
C0MSE100SY270	138	90	100	150	264	307	48	64	24.3
C0MSE100SY370	238	90	100	150	364	407	48	64	29.8
C0MSE100SY470	338	90	100	150	464	507	48	64	35.3
C0MSE100SY570	438	90	100	150	564	607	48	64	40.8

VERSIONE AUTOCENTRANTE - SELF-CENTERING TYPE - VERSION À CENTRAGE AUTOMATIQUE



CODICE - CODE	A	B	C	C1	E	F	G	H	Kg
	mm	mm	mm	mm	mm	mm	mm	mm	
C0MAU100SY270	138	90	100	150	264	307	48	64	24.5
C0MAU100SY370	238	90	100	150	364	407	48	64	30.0
C0MAU100SY470	338	90	100	150	464	507	48	64	35.5
C0MAU100SY570	438	90	100	150	564	607	48	64	41.0

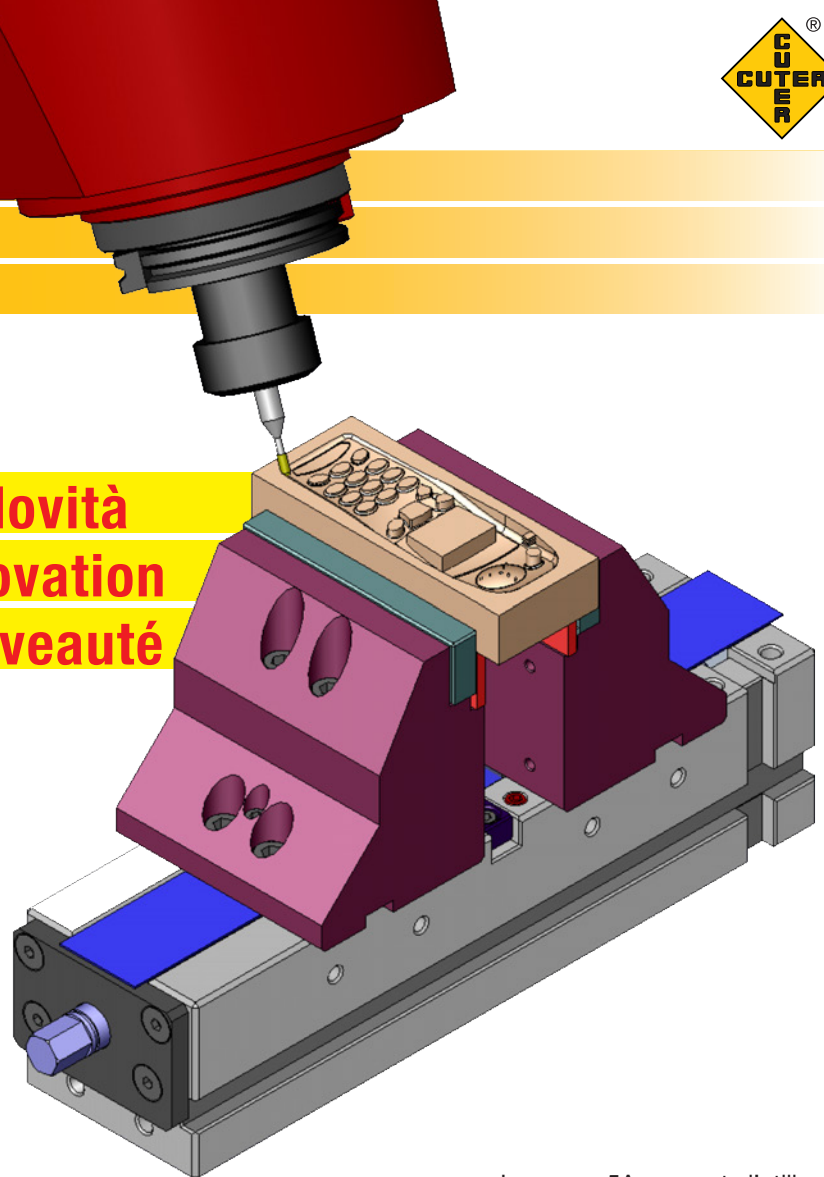
System 5A

La Nuova morsa System 5A autocentrante è ideata per le lavorazioni sulle macchine a 5 assi.
Grazie alla caratteristica delle ganasce alte e slanciate, consente di lavorare agevolmente sulle 5 facce libere.

The New self-centering System 5A vice is created for the workings on machine to 5 axis. Thanks to the characteristic of the high and bold jaws, it allows to work easily on the 5 free faces.

La Nouvelle étau System 5A à centrage automatique est créée pour les travaux sur les machines à 5 axes. Grâce à ses mâchoires hautes et minces, elle permet de travailler facilement sur les 5 faces libres.

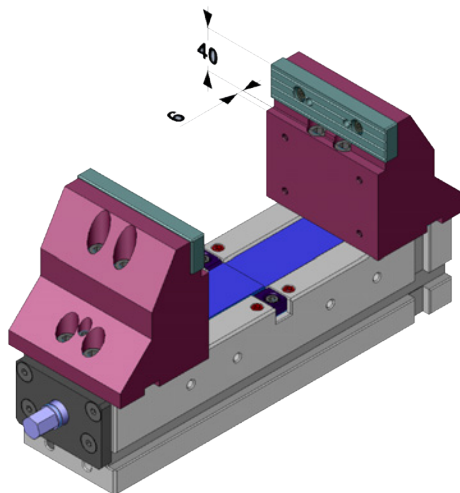
Novità
Innovation
Nouveauté



Morsa con appoggio standard altezza chiusura del pezzo 40x6.

Vice with standard support height closing of piece 40x6.

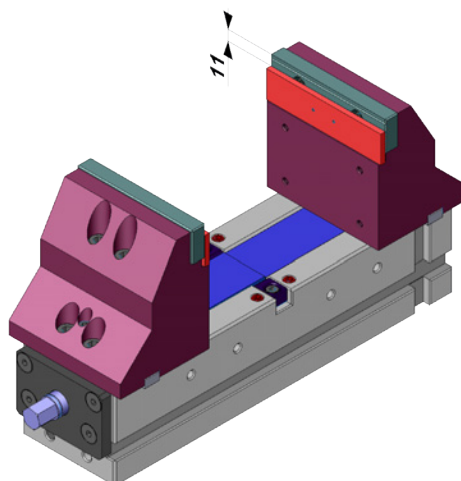
Étau avec support standard hauteur fermeture de pièce 40x6.



L'applicazione delle parallele IR rende possibile variare l'altezza di chiusura del pezzo.

The application of IR parallels give the possibility to change the closing height of piece.

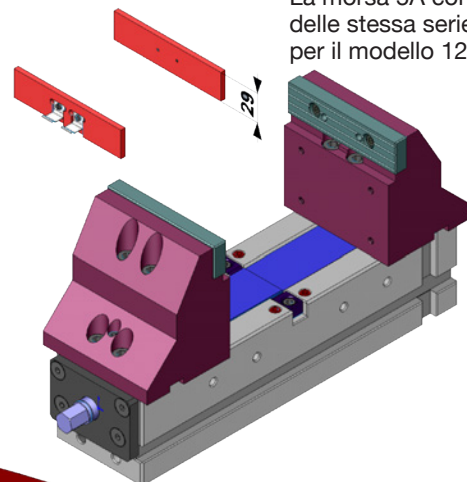
L'application des parallèles IR permet de changer l'hauteur de fermeture de pièce.



La morsa 5A consente l'utilizzo delle stessa serie di parallele IR per il modello 125.

The vice 5A allows the using of the set of IR parallels the same used for 125 model.

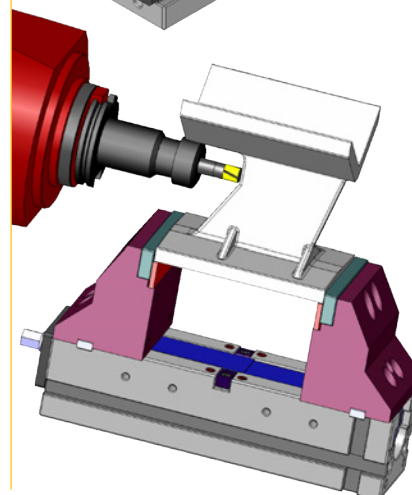
L'étau 5A permet l'emploi de la même série de parallèles IR que pour le modèle 125.

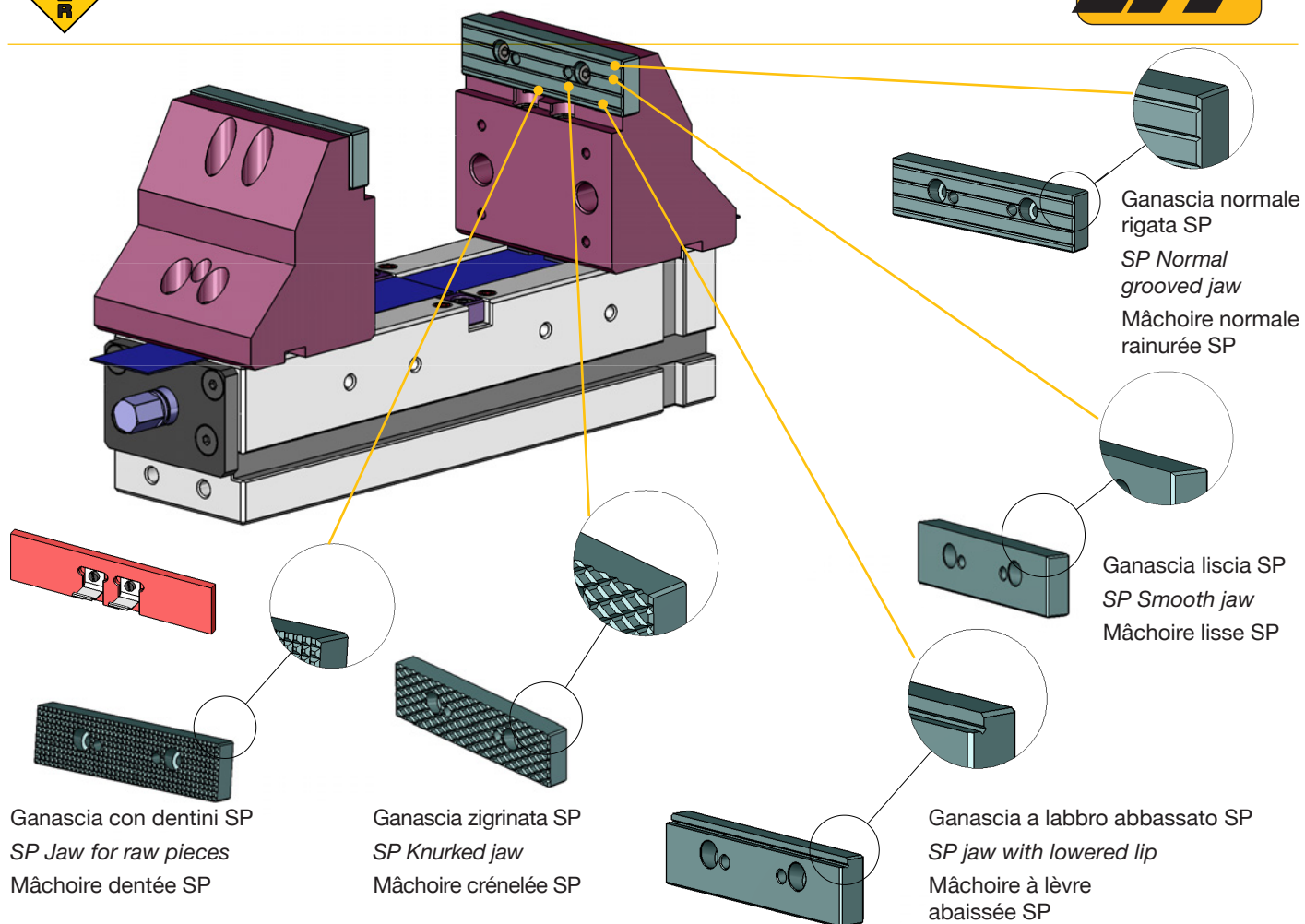


Le parallele IR sono sicure e precise e facili da applicare.

IR Parallels are sure, precise and easy to apply.

Les parallèles IR sont sûres précises et faciles à appliquer.

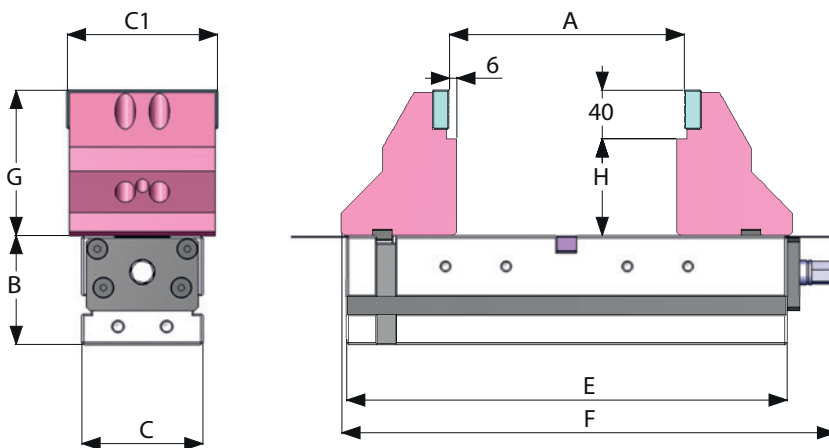




La Nuova morsa System 5A permette di montare tutta la serie di ganasce della morsa Modulare SP 125. Quindi le Ganasce Rigate, le Ganasce Lisce, le Ganasce a Labbro Abbassato, le Ganasce Zigrinate, le Ganasce con Dentini per pezzi grezzi.

The New System 5A allows to assemble all series of jaws of the Modular vice SP 125. So the Normal grooved Jaws, the Smooth Jaws, the Jaws with lowered lip, the knurled Jaws, the Jaws for raw pieces.

La Nouvelle étreinte System 5A permet de monter toute la série de mâchoire de l'étreinte modulaire SP 125. Donc Mâchoire normale rainurées, Mâchoire lisses, le Mâchoire à lèvres abaissées, le Mâchoire crénelées, le Mâchoire dentées.



CODICE CODE	A	B	C	C1	E	F	G	H	Kg
	mm	mm	mm	mm	mm	mm	mm	mm	
C0MAU100SA250	45 / 80	90	100	124	250	296	120	80	28.0
C0MAU100SA364	*15 / 190	90	100	124	364	410	120	80	33.0
C0MAU100SA464	*15 / 290	90	100	124	464	510	120	80	38.0
C0MAU100SA564	*15 / 390	90	100	124	564	610	120	80	43.0

* Nella posizione standard la chiusura parte da un pezzo minimo di 45mm. Da 15 a 45mm bisogna spostare in avanti le ganasce di un passo sulla chiocciola.

* In the standard position the closing start from a piece of 45mm minimum. From 15 to 45mm the jaws must be moved of a step forward on the lead screw.

* Dans la position standard l'ouverture minimum est de 45mm. Pour atteindre la course de 15 à 45 mm vous devez déplacer les mors sur la seconde rainure située sur les chariots.

Accessori per System

Accessories for System

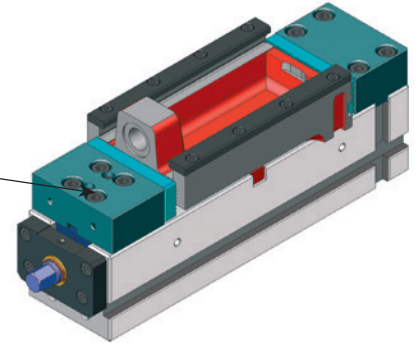
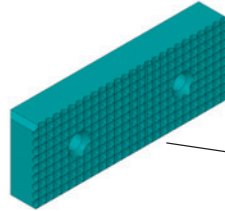
Accessoires pour System

GANASCIA RIPORTATA PER PEZZI GREZZI - SPECIAL JAW FOR RAW PIECES - MÂCHOIRE RAPPORTÉE POUR PIÈCES BRUTES

Le ganasce riportate si applicano alle ganasce standard delle morse System. Grazie alla serie di denti, le ganasce sono in grado di bloccare pezzi tagliati al seghetto o fusioni grezze.

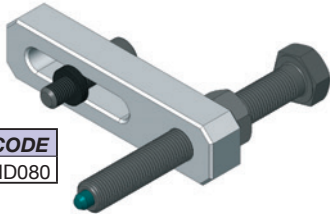
These special jaws are mounted on the System standard jaws. Thanks to their teeth, the jaws can block pieces cut by saws or casting pieces.

Les mâchoires rapportées s'appliquent aux mâchoires standard des étaux System. Grâce à leur série de dents, les mâchoires sont en mesure de bloquer des pièces coupées à la scie ou les fusions brutes.



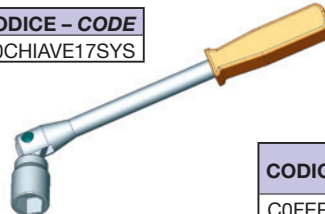
CODICE - CODE
COGNR100SY010

FERMO LATERALE WORKPIECE SIDE STOP BUTÉE D'ARRÊT LATÉRAL DES PIÈCES



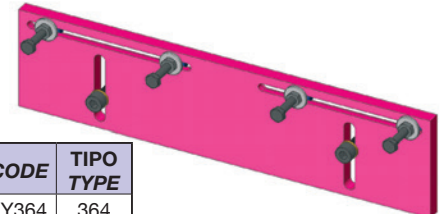
CODICE - CODE
COFER125MD080

CHIAVE SNODATA UNIVERSAL SOCKET WRENCH CLÉ À PIPE ARTICULÉE



CODICE - CODE
COCHIAVE17SYS

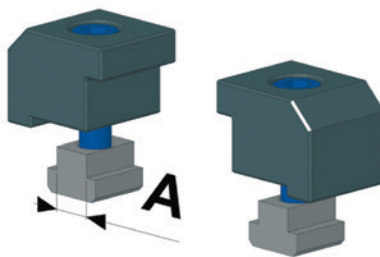
FERMO LATERALE MULTIPLO MULTIPLE WORKPIECE SIDE STOP BUTÉE D'ARRÊT LATÉRALE MULTIPLE



CODICE - CODE	TIPO TYPE
COFER100SY364	364
COFER100SY464	464

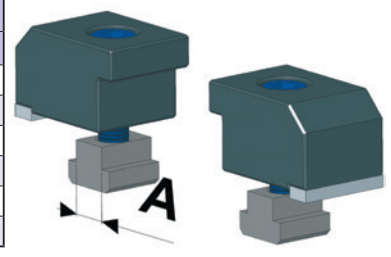
STAFFE LATERALI NORMALI SIDE CLAMPS BRIDES LATÉRALES NORMALES

CODICE - CODE	A mm
COSTF100SY012	12
COSTF100SY014	14
COSTF100SY016	16
COSTF100SY018	18
COSTF100SY020	20
COSTF100SY022	22



STAFFE LATERALI PER BANCHINE TENERE SIDE CLAMPS FOR SOFT PALLET BRIDES LATÉRALES POUR PALLET TENDRE

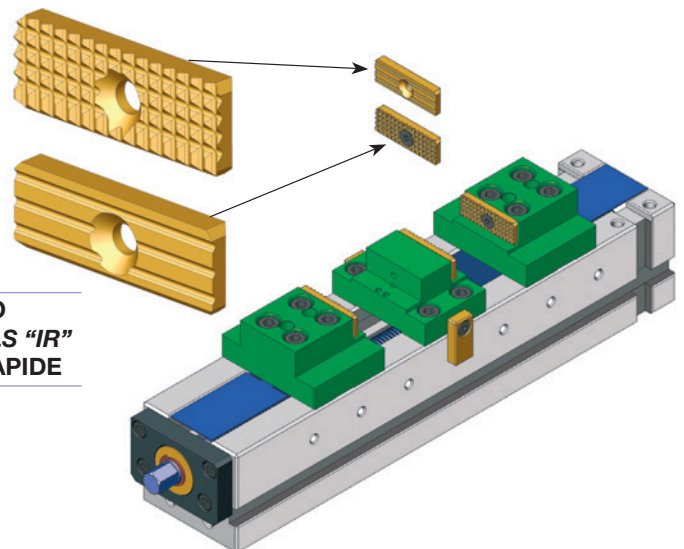
CODICE - CODE	A mm
COSTF100SY112	12
COSTF100SY114	14
COSTF100SY116	16
COSTF100SY118	18
COSTF100SY120	20
COSTF100SY122	22



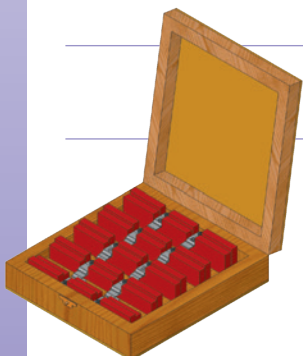
A richiesta possiamo realizzare ganasce speciali con piastrine riportate per la lavorazione di pezzi grezzi o lavorati.

We can build custom special jaws, on customer's request, with small plates for working raw or finished pieces.

Sur demande, nous pouvons réaliser des mâchoires spéciales avec de petites plaques rapportées pour le travail de pièces brutes ou façonnées.



PARALLELE "IR" AD INNESTO RAPIDO PATENTED QUICK-POSITIONING PARALLELS "IR" PARALLELES "IR" A' ENCLENCHEMENT RAPIDE



PARALLEL BLOCKS FOR MOD.125			
COCAS125MD305	SET 3 pcs		
TYPE SP.5	A	B	L
COPAR125MD345	34	5	123
COPAR125MD295	29	5	123
COPAR125MD245	24	5	123

Cubo SC System 3

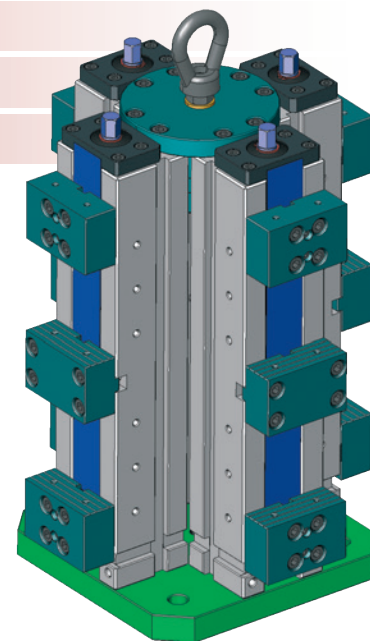
SC System 3 Cube

Cube SC System 3

La struttura e la rigidità di queste morse ci consente di utilizzarle oltre che montate su cubi anche in verticale assemblate fra di loro e bloccate su una piastra base. È possibile avere più combinazioni montando da 2 a 6 morse, inoltre si possono applicare le morse combinandole fra di loro nelle versioni semplice, doppia e autocentrante. La piastra base di interfaccia sul pallet viene fornita su misura del Cliente.

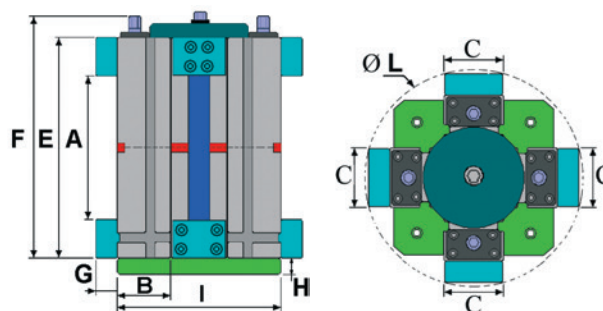
The structure and the hardness of these vices permit to use them whether assembled on cubes or vertically, assembled each other and clamped on a plate. It is possible to have different combinations assembling from 2 till 6 vices, besides the vices can be arranged in different ways : simple, double and self-centring. The base of interface on the pallet can be supplied to measure on special request of the customer.

Grâce à la structure et à la rigidité de ces étaux il est possible de les utiliser non seulement sur cubes mais en vertical aussi, assemblés l'un l'autre et bloqués sur une plaque-base. Il est possible d'avoir plusieurs combinaisons en assemblant de 2 à 6 étaux, en outre les étaux peuvent être transformés selon plusieurs versions: simple, double et à centrage automatique. La base d'interface sur le palet peut être fournie sur mesure sur demande du client.



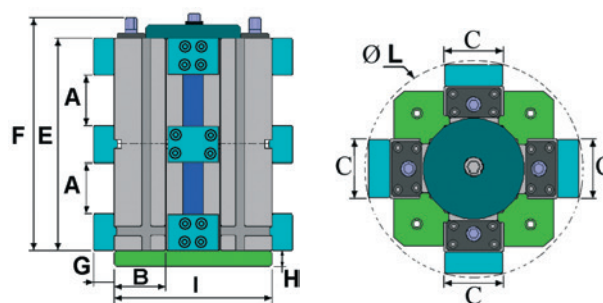
CUBO SC SYSTEM 3 VERSIONE SEMPLICE - SC SYSTEM 3 CUBE SIMPLE TYPE - CUBE SC SYSTEM 3 MODELE SIMPLE

CODICE CODE	TIPO TYPE	Nr.	A	B	C	E	F	G	H	I	L	Kg
			mm	mm	mm	mm	mm	mm	mm	mm	mm	
C0CSC100SY2S3	SEM. 364	2	238	90	100	364	407	38	38	280	275	81.0
C0CSC100SY2S4	SEM. 464	2	338	90	100	464	507	38	38	280	275	91.0
C0CSC100SY3S3	SEM. 364	3	238	90	100	364	407	38	38	280	330	105.0
C0CSC100SY3S4	SEM. 464	3	338	90	100	464	507	38	38	280	330	110.0
C0CSC100SY4S3	SEM. 364	4	238	90	100	364	407	38	38	280	370	132.0
C0CSC100SY4S4	SEM. 464	4	338	90	100	464	507	38	38	280	370	147.0
C0CSC100SY6S3	SEM. 364	6	238	90	100	364	407	38	38	400	440	210.0
C0CSC100SY6S4	SEM. 464	6	338	90	100	464	507	38	38	400	440	215.0



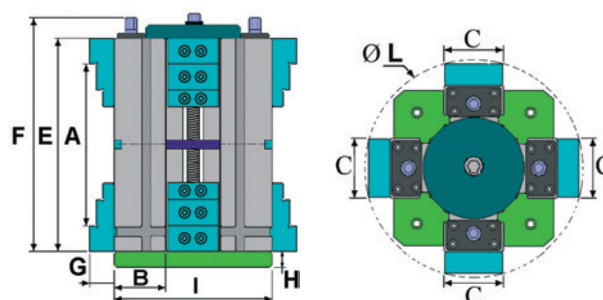
CUBO SC SYSTEM 3 VERSIONE DOPPIA - SC SYSTEM 3 CUBE DOUBLE TYPE - CUBE SC SYSTEM 3 MODELE DOUBLE

CODICE CODE	TIPO TYPE	Nr.	A	B	C	E	F	G	H	I	L	Kg
			mm	mm	mm	mm	mm	mm	mm	mm	mm	
C0CSC100SY2D3	DOP. 364	2	86	90	100	364	404	38	38	280	275	87.0
C0CSC100SY2D4	DOP. 464	2	136	90	100	464	504	38	38	280	275	97.0
C0CSC100SY3D3	DOP. 364	3	86	90	100	364	404	38	38	280	330	114.0
C0CSC100SY3D4	DOP. 464	3	136	90	100	464	504	38	38	280	330	129.0
C0CSC100SY4D3	DOP. 364	4	86	90	100	364	404	38	38	280	370	144.0
C0CSC100SY4D4	DOP. 464	4	136	90	100	464	504	38	38	280	370	164.0
C0CSC100SY6D3	DOP. 364	6	86	90	100	364	404	38	38	400	440	228.0
C0CSC100SY6D4	DOP. 464	6	136	90	100	464	504	38	38	400	440	258.0



CUBO SC SYSTEM 3 VERSIONE AUTOCENTRANTE - SC SYSTEM 3 CUBE SELF-CENTERING TYPE CUBE SC SYSTEM 3 MODELE CENTRAGE AUTOMATIQUE

CODICE CODE	TIPO TYPE	Nr.	A	B	C	E	F	G	H	I	L	Kg
			mm	mm	mm	mm	mm	mm	mm	mm	mm	
C0CSC100SY2A3	AUT. 364	2	286	90	100	364	404	38	38	280	275	87.0
C0CSC100SY2A4	AUT. 464	2	386	90	100	464	504	38	38	280	275	97.0
C0CSC100SY3A3	AUT. 364	3	286	90	100	364	404	38	38	280	330	114.0
C0CSC100SY3A4	AUT. 464	3	386	90	100	464	504	38	38	280	330	129.0
C0CSC100SY4A3	AUT. 364	4	286	90	100	364	404	38	38	280	370	144.0
C0CSC100SY4A4	AUT. 464	4	386	90	100	464	504	38	38	280	370	164.0
C0CSC100SY6A3	AUT. 364	6	286	90	100	364	404	38	38	400	440	228.0
C0CSC100SY6A4	AUT. 464	6	386	90	100	464	504	38	38	400	440	258.0



Cubo integrale System 4

System 4 Integral Cube

Cube Intégral System 4

Cubo integrale altamente flessibile.

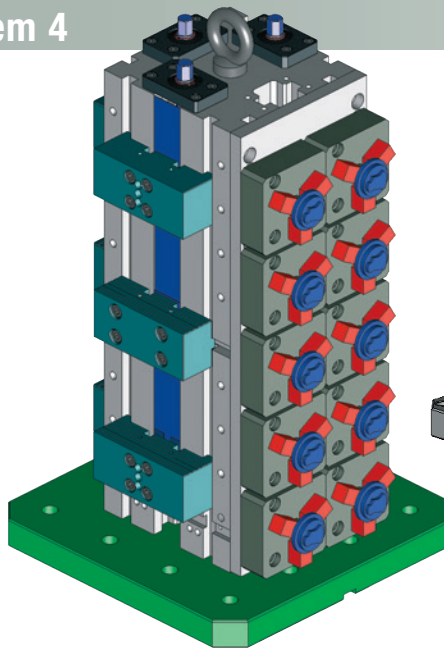
Ogni lato del cubo può essere trasformato a seconda delle proprie esigenze: in versione Semplice, Doppia, Autocentrante e con Piastre riportate.

Highly flexible integral cube.

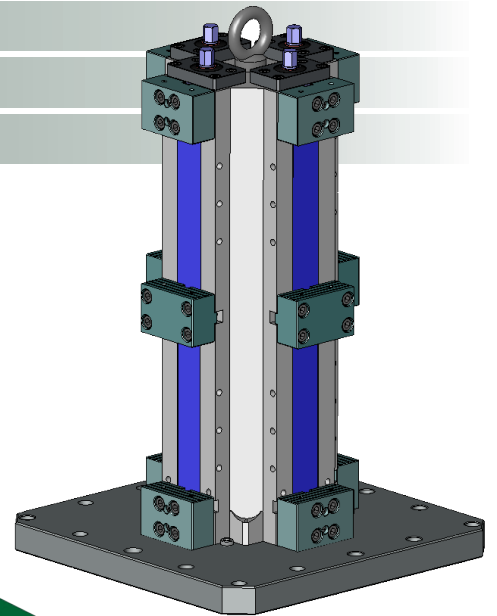
Each side of the cube can be modified to satisfy everyone's needs, featured versions are: Simple, Double, Self-centring, with Modular Plates.

Cube intégral hautement flexible.

Chaque côté du cube peut être transformé en fonction des besoins: en version Simple, Double, À centrage automatique et avec Plaques rapportées.



mod. 600



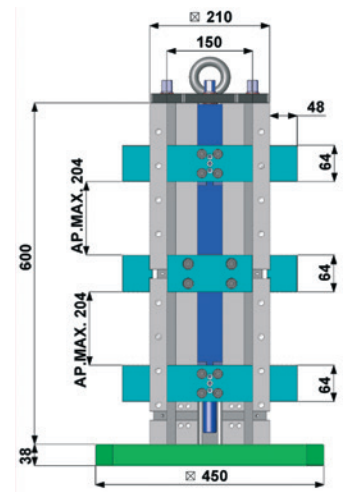
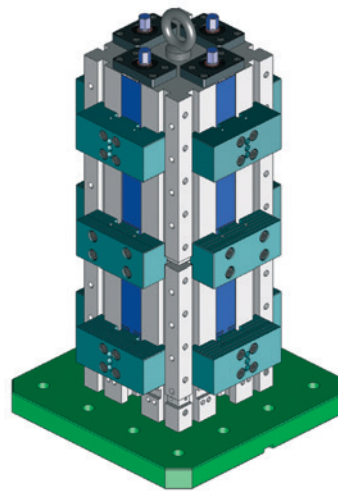
mod. 610

VERSIONE DOPPIA - DOUBLE VERSION - VERSION DOUBLE

Per bloccare due pezzi per ogni lato ed ammortizzare i tempi di cambio utensile.

To block up two pieces on each side and to reduce tool changing time.

Pour bloquer deux pièces de chaque côté et amortir les temps de changement d'outil.



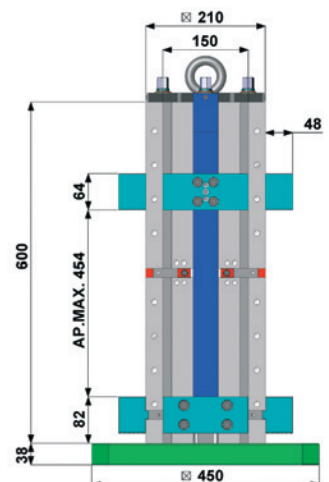
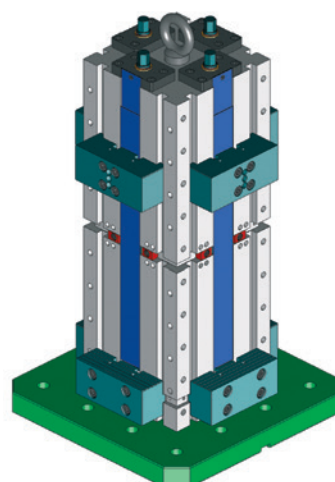
CODICE - CODE	Kg
C0CBD210SY600	282
C0CBD210SY610	212

VERSIONE SEMPLICE - SIMPLE VERSION - VERSION SIMPLE

Per bloccare un singolo pezzo e con un grande campo di apertura.

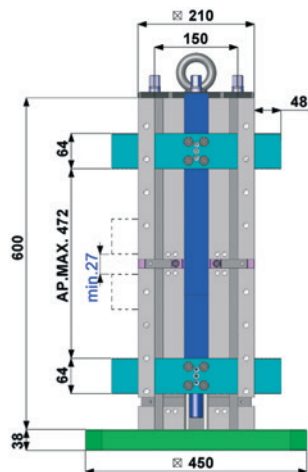
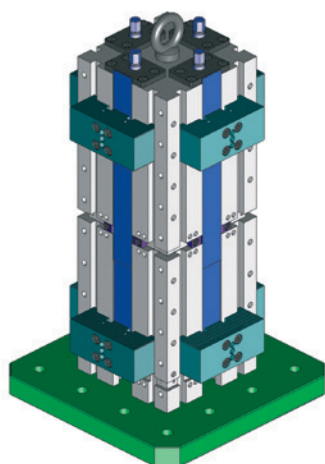
To block up one piece; features a large opening range.

Pour bloquer une seule pièce avec un grand champ d'ouverture.



CODICE - CODE	Kg
C0CBS210SY600	263
C0CBS210SY610	192

**VERSIONE AUTOCENTRANTE - SELF-CENTERING VERSION
VERSION À CENTRAGE AUTOMATIQUE**



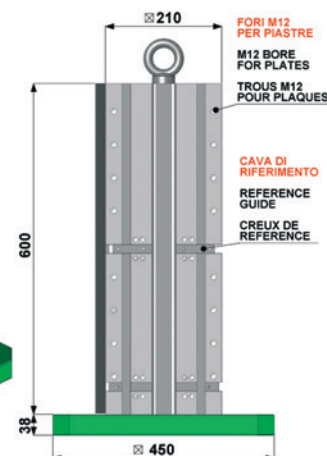
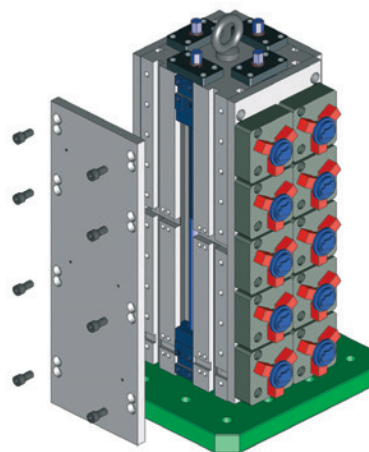
Per avere l'origine sempre fissa anche con pezzi di dimensioni diverse.

To keep the starting point fixed.

Pour maintenir toujours fixe le point d'origine, même avec des pièces de diverses dimensions.

CODICE - CODE	Kg
C0CBA210SY600	266
C0CBA210SY610	197

**CON PIASTRE RIPORTATE - WITH SOFT MODULAR PLATES
AVEC PLAQUES RAPPORTÉES**



Che consentono al cliente di creare le proprie attrezzature di bloccaggio.

To give the user the possibility to prepare their own blocking equipments.

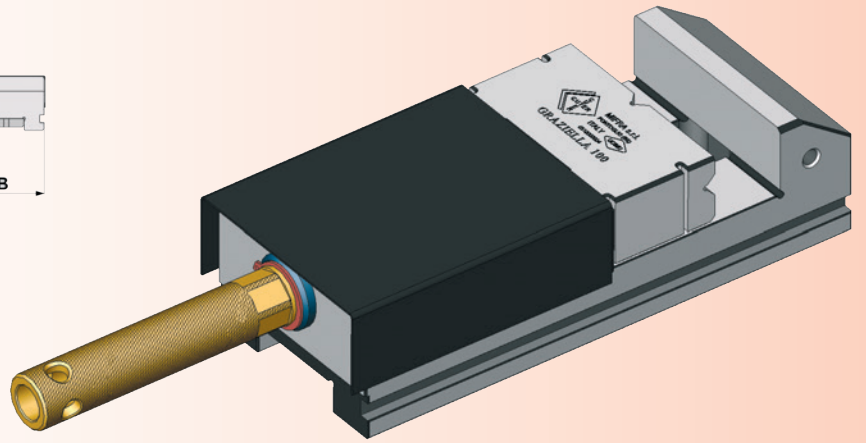
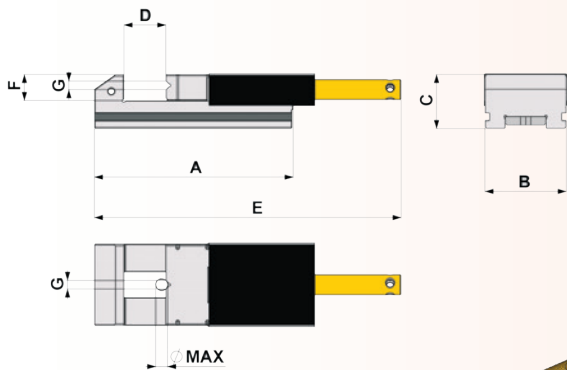
Permet au client de créer ses propres équipements de blocage.

CODICE - CODE	Kg
C0CBP210SY600	290

KIT DI TRASFORMAZIONE - CHANGING KIT - KIT DE TRANSFORMATION

VERSIONE DOPPIA DOUBLE VERSION VERSION DOUBLE	Kit di trasformazione dalla versione doppia alla versione semplice. <i>Kit for changing from double version to simple version.</i> Kit de transformation de la version double à la version simple.	 CODICE - CODE C0SYK150SD600
	Kit di trasformazione (con predisposizione del cubo) dalla versione doppia alla versione autocentrante. <i>Kit for changing (after cube adjustment) from double version to self-centring version.</i> Kit de transformation (avec prédisposition du cube) de la version double à la version à centrage automatique.	 CODICE - CODE C0SYK150DA600
VERSIONE SEMPLICE SIMPLE VERSION VERSION SIMPLE	Kit di trasformazione dalla versione semplice alla versione doppia. <i>Kit to change from simple version to double version.</i> Kit de transformation de la version simple à la version double.	 CODICE - CODE C0SYK150SD600
	Kit di trasformazione dalla versione semplice alla versione autocentrante. <i>Kit to change from simple version to self-centring version.</i> Kit de transformation de la version simple à la version à centrage automatique.	 CODICE - CODE C0SYK150SA600
VERSIONE AUTOCENTRANTE SELF-CENTERING VERSION VERSION À CENTRAGE AUTOMATIQUE	Kit di trasformazione dalla versione autocentrante alla versione semplice. <i>Kit to change from self-centring version to simple version.</i> Kit de transformation de la version à centrage automatique à la version simple.	 CODICE - CODE C0SYK150AS600
	Kit di trasformazione dalla versione autocentrante alla versione doppia. <i>Kit to change from self-centring version to double version.</i> Kit de transformation de la version à centrage automatique à la version double.	 CODICE - CODE C0SYK150AD600
CON PIASTRE WITH PLATES AVEC PLAQUES	Piastra tenera con tasselli di riferimento, 210 x 600 x 18 <i>Soft plate with datum pegs, 210 x 600 x 18.</i> Plaque tendre avec tasseaux de référence, 210 x 600 x 18.	 CODICE - CODE C0PIA210SY600

Graziella

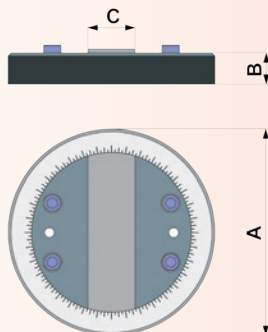
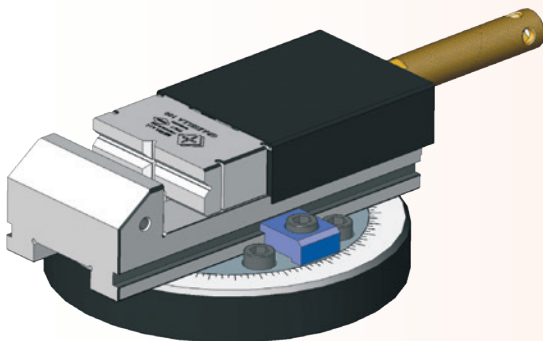


La morsa Graziella è particolarmente adatta per lavori di alta precisione su rettificatrici e apparecchiature di controllo. Costruita completamente in acciai legati ed indeformabili temprati a durezza 58/60 HRC. E' perfettamente rettificata su tutti i suoi piani onde ottenere i 90° in ogni posizione desiderata. Il carro mobile ha due V ortogonali per bloccare pezzi cilindrici. Tolleranze millesimali: ± 0.003 mm.

The Graziella vice is ideal for high precision grinding machines or as test and inspection equipment. Made entirely of undeformable alloy steels hardened to 58/60 HRC. It has been perfectly ground on all its planes in order to reach 90° in any position. The slide comes with two right angled 'V's in order to clamp cylindrical workpieces in position. Tolerance is thousandths: ± 0.003 mm.

L'étau Graziella est particulièrement indiqué pour les travaux de haute précision sur les rectifieuses et sur les appareils de contrôle. Entièrement construit avec des aciers alliés, indéformables et trempés à 58/60 HRC de dureté. Il est parfaitement rectifié sur tous ses plans de façon à atteindre les 90° quelle que soit la position désirée. Le chariot mobile à deux V orthogonaux pour bloquer les pièces cylindriques. Tolérances au millième: ± 0.003 mm.

CODICE CODE	TIPO TYPE	A	B	C	D	E	F	G	Ø	Kg
		mm	mm	mm	mm	mm	mm	mm	mm	
COGRAZIELLA60	60	162	56	52	72	243	25	6	8	3.0
COGRAZIELLA80	80	199	76	56	85	304	27	8	11	5.0
COGRAZIELLA100	100	235	96	64	108	362	31	10	14	9.0
COGRAZIELLA120	120	265	116	74	120	412	35	12	16	13.0
COGRAZIELLA140	140	307	144	95	170	557	42	16	22	31.0



CODICE CODE	TIPO TYPE	A	B	C	Kg
		mm	mm	mm	
COBAS100GR010	60	210	32	28	8.5
	80			38	
	100			48	
COBAS120GR010	120	295	32	58	15.5
	145			58	

La nuova base girevole per Graziella, graduata a 360°, rende la morsa adatta a realizzare tutte le angolazioni in piano.

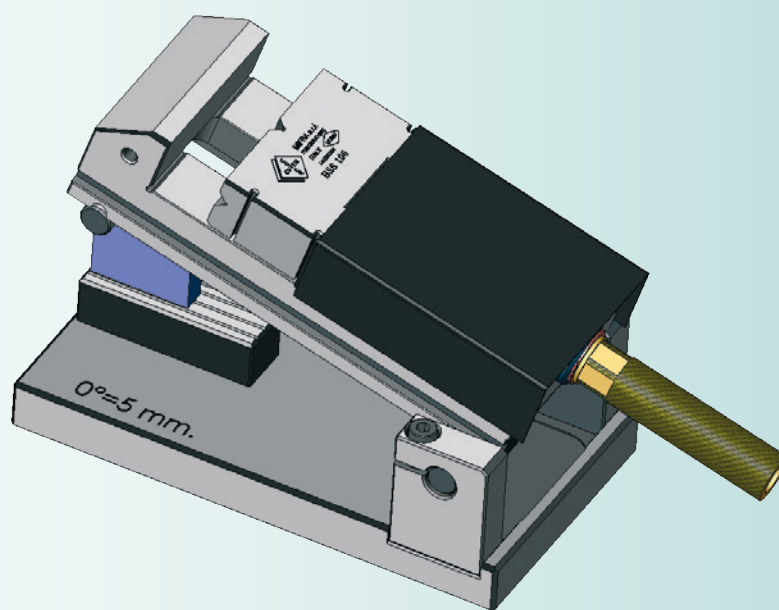
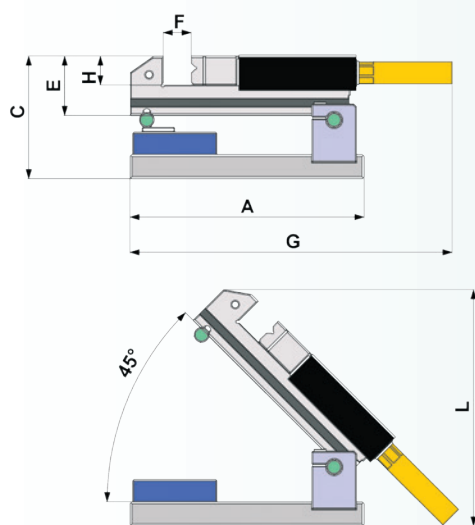
The new revolving base for Graziella, with 360° graduation, allows to the vice to obtain all the required angles on the plain.

La nouvelle base tournante de Graziella, graduée à 360°, permet à l'étou de réaliser tous les angles demandés sur le plan.

GRAZIELLA con barra seno semplice

GRAZIELLA with simple sine bar

GRAZIELLA à barre-sinus simple



Morsa di alta precisione montata a barra seno semplice. Precisione angolare $\pm 4''$ di grado nello spazio, sfruttando il posizionamento con blocchetti piano-paralleli. Adatta per lavori di alta precisione su rettificatrici o come strumento di controllo. Costruita completamente in acciai legati e indeformabili temprati a durezza 58/60 HRC. Il particolare sistema di bloccaggio garantisce la ripetibilità durante la lavorazione. Con la morsa viene fornita la tabella dei valori, da realizzare con i blocchetti pianoparalleli, per ottenere l'angolo voluto.

High precision vice of the simple sine bar type. Angle accuracy of $\pm 4''$ in space thanks to the gauge blocks. Suitable for high precision grinding or as test and inspection instrument. Manufactured completely of undeformable alloy steels hardened to 58/60 HRC. The special clamping system ensures repeatability of machining tasks. A data sheet is supplied with the vice. Act on the gauge blocks in order to obtain the required angle as shown in the data sheet.

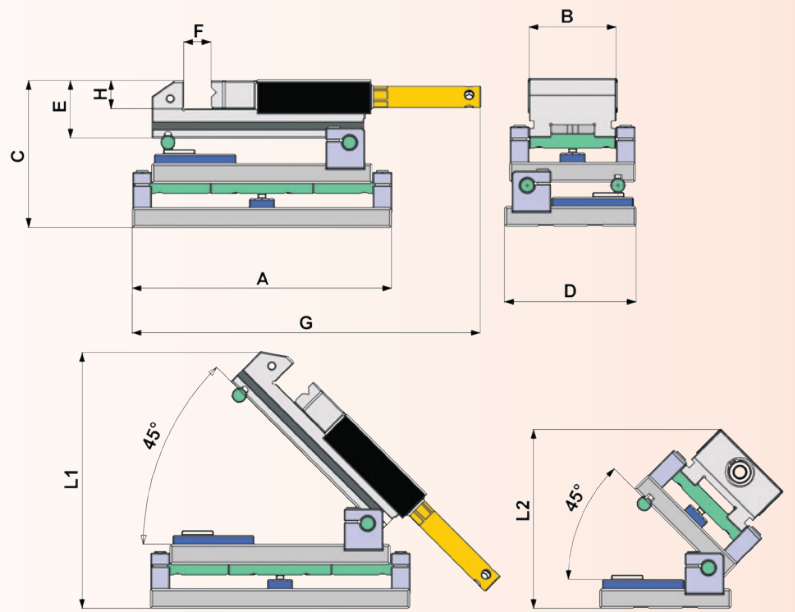
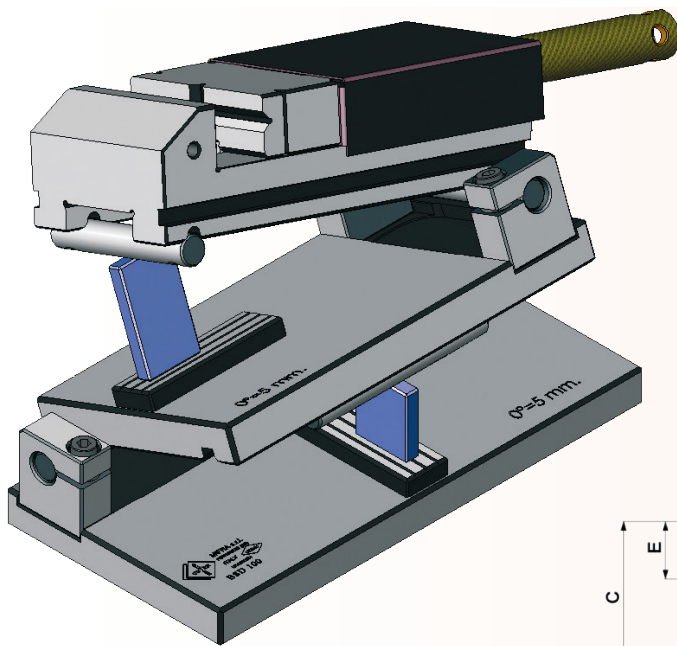
Etau de haute précision monté en barre-sinus simple. Précision d'angle: $\pm 4''$ de degré dans l'espace, en exploitant le positionnement avec des blocs plans-parallèles. Approprié aux travaux de haute précision sur des rectifieuses ou comme instrument de contrôle. Entièrement construit avec des aciers alliés, indéformables et trempés à 58/60 HRC de dureté. Le système de blocage particulier garantit la répétitivité au cours de l'usinage. L'étau est fourni avec une table de valeurs, à appliquer avec des blocs plans-parallèles, de façon à obtenir l'angle désiré.

CODICE CODE	TIPO TYPE	A	B	C	D	E	F	G	H	L1	Kg
		mm	mm	mm	mm	mm	mm	mm	mm	mm	
COBSSMORSA080	BSS80	205	76	113	117	56	85	278	27	209	12.0
COBSSMORSA100	BSS100	250	96	132	137	64	105	345	31	253	18.0
COBSSMORSA120	BSS120	280	116	156	157	74	120	395	35	295	25.0

GRAZIELLA con barra seno doppio

GRAZIELLA with double sine bar

GRAZIELLA à barre-sinus double



Morsa di alta precisione montata a barraseno doppio. Precisione angolare $\pm 4''$ di grado nello spazio, sfruttando il posizionamento con blocchetti piano-paralleli su ambo le inclinazioni. Adatta per lavori di alta precisione su rettificatrici o come strumento di controllo. Costruita completamente in acciai legati e indeformabili temprati a durezza 58/60 HRC. Il particolare sistema di bloccaggio garantisce la ripetibilità durante la lavorazione. Con la morsa viene fornita la tabella dei valori, da realizzare con i blocchetti pianoparalleli, per ottenere l'angolo voluto.

High precision vice of the double sine bar type. Angle accuracy $\pm 4''$ in space on both tilts, thanks to the gauge blocks. Suitable for high precision grinding or as test and inspection instrument. Manufactured completely of undeformable alloy steels hardened to 58/60 HRC. The special clamping system ensures repeatability of machining tasks. A data sheet is supplied with the vice. Act on the gauge blocks in order to obtain the required angle as shown in the data sheet.

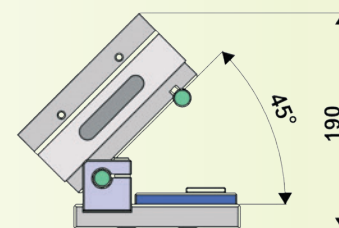
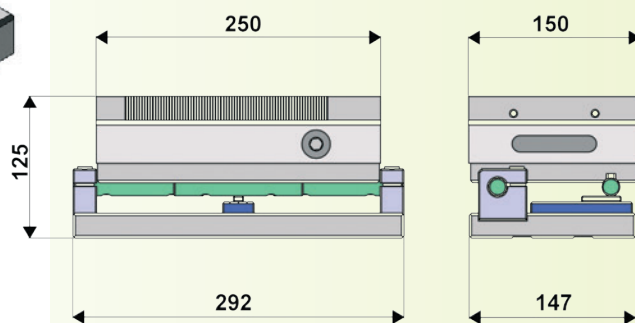
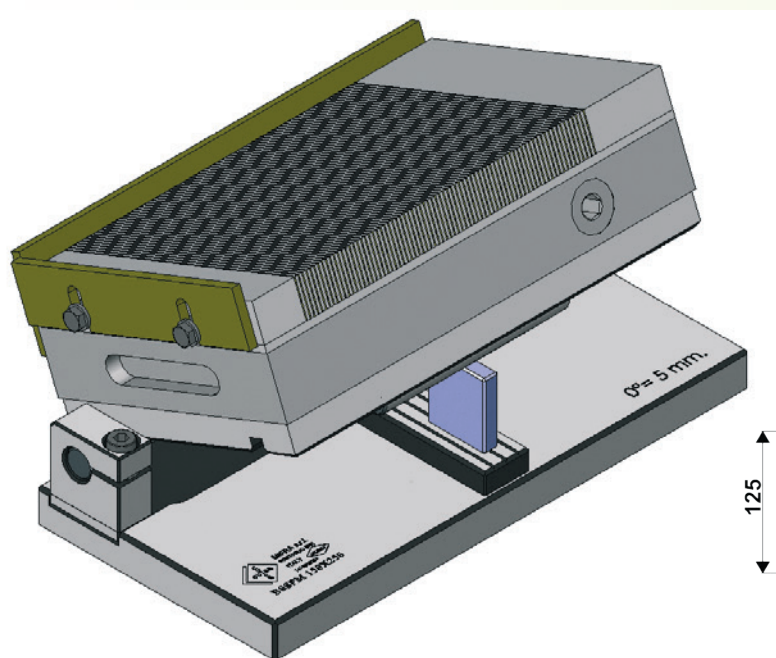
Etau de haute précision monté en barre-sinus double. Précision d'angle: $\pm 4''$ de degré dans l'espace, en exploitant le positionnement avec des blocs plans-parallèles sur les deux inclinaisons. Approprié aux travaux de haute précision sur des rectifieuses ou comme instrument de contrôle. Entièrement construit avec des aciers alliés, indéformables et trempés à 58/60 HRC de dreté. Le système de blocage particulier garantit la répétitivité au cours de l'usinage. L'étau est fourni avec une table de valeurs, à appliquer avec des blocs plans-parallèles, de façon à obtenir l'angle désiré.

CODICE CODE	TIPO TYPE	A	B	C	D	E	F	G	H	L1	L2	Kg
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
C0BSDMORSA080	BSD80	246	76	154	122	56	85	327	27	250	176	17.0
C0BSDMORSA100	BSD100	286	96	162	144	64	105	385	31	283	197	24.0
C0BSDMORSA120	BSD120	315	116	172	161	74	120	435	35	310	210	31.0

BARRA SENO SEMPLICE con piano magnetico a poli fitti 250x150

SIMPLE SINE BAR
with 250x150 dense pole magnetic chuck

BARRE-SINUS SIMPLE
à table magnétique à pôles denses 250x150



CODICE - CODE	Kg
C0BSSPMAGN150	32.0

Il principio a barra-seno permette la realizzazione di angoli con tolleranza $\pm 4''$ di grado sfruttando il posizionamento con blocchetti piano-paralleli. E' adatto per lavori di alta precisione su rettificatrici o come strumento di controllo. Il piano magnetico a poli fitti permette una salda presa anche di pezzi di piccole dimensioni. Costruito completamente in acciai legati e indeformabili temprati a durezza 58/60 HRC. Il particolare sistema di bloccaggio garantisce la ripetibilità durante la lavorazione. Con il barra seno viene fornita la tabella dei valori, da realizzare con i blocchetti piano-paralleli, per ottenere l'angolo voluto.

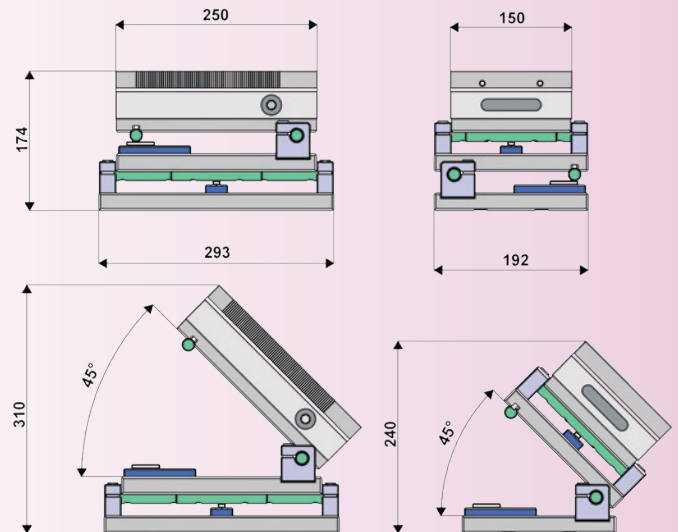
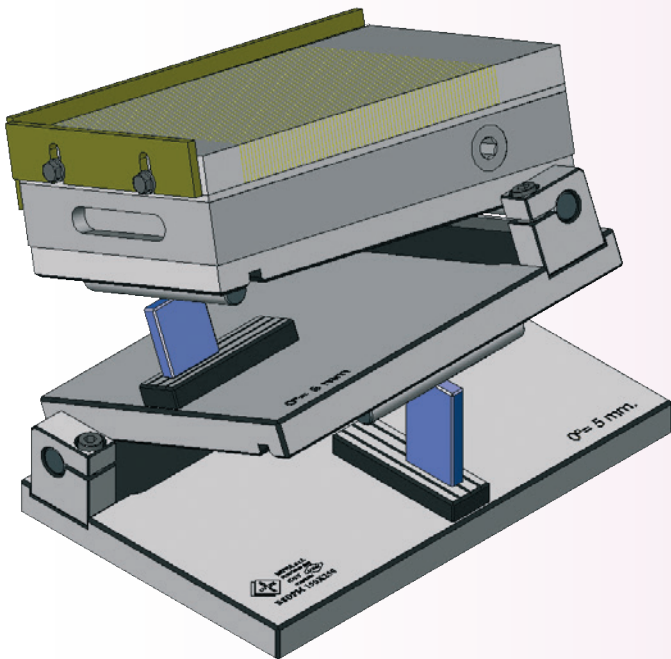
The sine bar principle enables angles with $\pm 4''$ tolerance to be achieved by means of the gauge block ensuring correct positioning. Suitable for high precision grinding or test and inspection instrument. The dense pole magnetic chuck ensures a firm hold even of small workpieces. Manufactured completely of undeformable alloy steels hardened to 58/60 HRC. The special clamping system ensures repeatability of machining tasks. A data sheet is supplied with the sine bar. Act on the gauge blocks in order to obtain the required angle as shown in the data sheet.

Le système à barre-sinus permet de réaliser des angles avec une tolérance de $\pm 4''$ de degré, en exploitant le positionnement avec des blocs plans-parallèles. Il est approprié aux travaux de haute précision sur des rectifieuses ou comme instrument de contrôle. La table magnétique à pôles denses assure une prise sûre, même en cas de pièces de petites dimensions. Entièrement construit avec des aciers alliés, indéformables et trempés à 58/60 HRC de dureté. Le système de blocage particulier garantit la répétitivité au cours de l'usinage. La barre-sinus est fournie avec une table de valeurs, à appliquer avec des blocs plans-parallèles, de façon à obtenir l'angle désiré.

BARRA SENO DOPPIO
con piano magnetico a poli fitti 250x150

DOUBLE SINE BAR
with 250x150 dense pole magnetic chuck

BARRE-SINUS DOUBLE
à table magnétique à pôles denses 250x150



CODICE - CODE	Kg
COBSDPMAGN150	44.0

Il principio a barra-seno permette la realizzazione di angoli con tolleranza $\pm 4''$ di grado sfruttando il posizionamento con blocchetti piano-paralleli su ambo le inclinazioni. E' adatto per lavori di alta precisione su rettificatrici o come strumento di controllo. Il piano magnetico a poli fitti permette una salda presa anche di pezzi di piccole dimensioni. Costruito completamente in acciai legati e indeformabili temprati a durezza 58/60 HRC. Il particolare sistema di bloccaggio garantisce la ripetibilità durante la lavorazione. Con il barra-seno viene fornita la tabella dei valori, da realizzare con i blocchetti piano-paralleli, per ottenere l'angolo voluto.

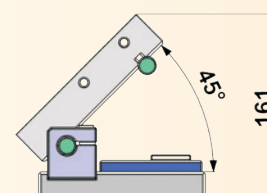
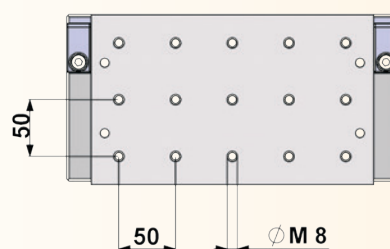
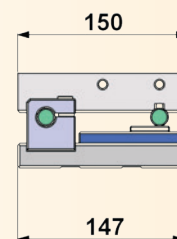
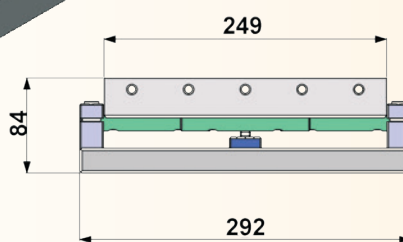
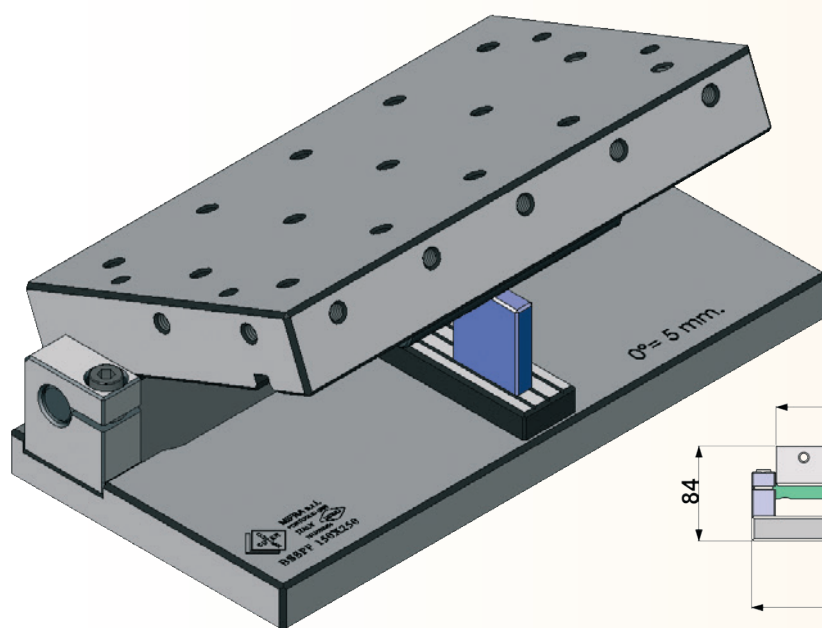
The sine bar principle enables angles with $\pm 4''$ tolerance to be achieved by means of the gauge blocks ensuring correct positioning on both tilts. Suitable for high precision grinding or as test and inspection instrument. The dense pole magnetic chuck ensures a firm hold even of small workpieces. Manufactured completely of undeformable alloy steels hardened to 58/60 HRC. The special clamping system ensures repeatability of machining tasks. A data sheet is supplied with the sine bar. Act on the gauge blocks in order to obtain the required angle as shown in the data sheet.

Le système à barre-sinus permet de réaliser des angles avec une tolérance de $\pm 4''$ de degré, en exploitant le positionnement avec des blocs plans-parallèles sur les deux inclinaisons. Il est approprié aux travaux de haute précision sur des rectifieuses ou comme instrument de contrôle. La table magnétique à pôles denses assure une prise sûre, même en cas de pièces de petites dimensions. Entièrement construit avec des aciers alliés, indéformables et trempés a 58/60 HRC de dureté. Le système de blocage particulier garantit la répétitivité au cours de l'usinage. La barre-sinus est fournie avec une table de valeurs, à appliquer avec des blocs plans-parallèles, de façon à obtenir l'angle désiré.

BARRA SENO SEMPLICE con piastra forata mm 250x150

SIMPLE SINE BAR
with 250x150 mm pierced plate

BARRE SINUS SIMPLE
à plaque percée 250x150 mm



CODICE - CODE	Kg
C0BSSPFORT150	20.0

Il principio a barra-seno permette la realizzazione di angoli con tolleranza $\pm 4''$ di grado sfruttando il posizionamento con blocchetti piano-paralleli. E' adatto per lavori di alta precisione su rettificatrici o come strumento di controllo. Costruito completamente in acciai legati e indeformabili temprati a durezza 58/60 HRC. Il particolare sistema di bloccaggio garantisce la ripetibilità durante la lavorazione. Con il barra-seno viene fornita la tabella dei valori, da realizzare con i blocchetti piano-paralleli, per ottenere l'angolo voluto.

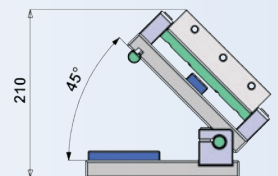
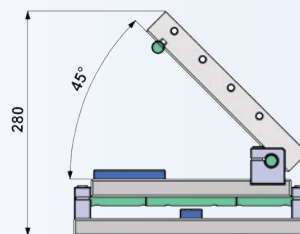
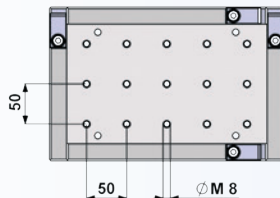
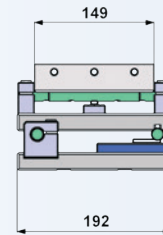
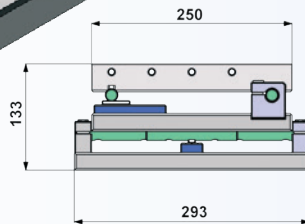
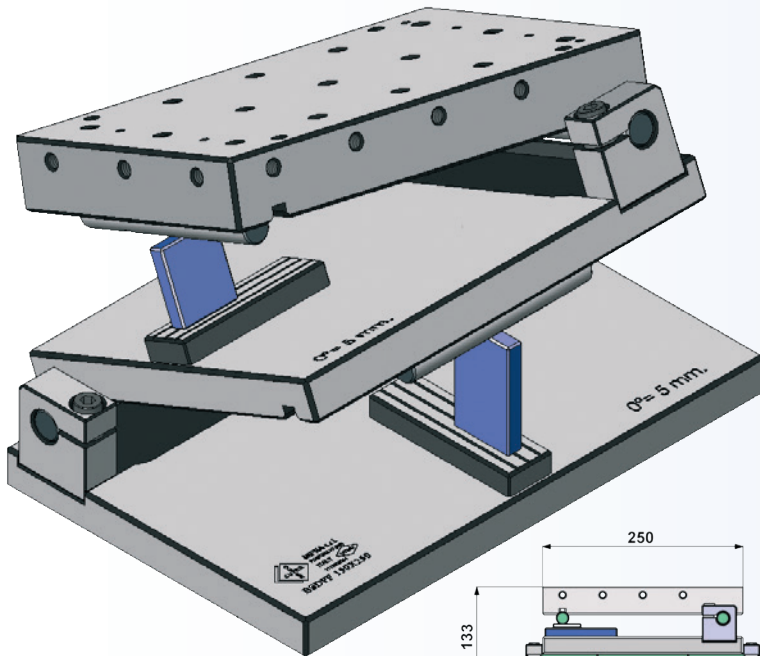
The sine bar principle enables angles with $\pm 4''$ tolerance to be achieved by means of the gauge blocks enabling correct positioning. Suitable for high precision grinding or test and inspection instruments. Manufactured completely of undeformable alloy steels hardened to 58/60 HRC. The special clamping system ensures repeatability of machining tasks. A data sheet is supplied with the sine bar. Act on the gauge blocks in order to obtain the required angle as shown in the data sheet.

Le système à barre-sinus permet de réaliser des angles avec une tolérance de $\pm 4''$ de degré, en exploitant le positionnement avec des blocs plans-parallèles. Il est approprié aux travaux de haute précision sur des rectifieuses ou comme instrument de contrôle. Entièrement construit avec des aciers alliés, indéformables et trempés à 58/60 HRC de dureté. Le système de blocage particulier garantit la répétitivité au cours de l'usinage. La barre-sinus est fournie avec une table de valeurs, à appliquer avec des blocs plans-parallèles, de façon à obtenir l'angle désiré.

BARRA SENO DOPPIO con piastra forata mm 250x150

DOUBLE SINE BAR
with 250x150 mm pierced plate

BARRE SINUS DOUBLE
à plaque percée 250x150 mm



CODICE - CODE	Kg
COBSDPFORT150	32.0

Il principio a barra-seno permette la realizzazione di angoli con tolleranza $\pm 4''$ di grado sfruttando il posizionamento con blocchetti piano-paralleli su ambo le inclinazioni. E' adatto per lavori di alta precisione su rettificatrici o come strumento di controllo. Costruito completamente in acciai legati e indeformabili temprati a durezza 58/60 HRC. Il particolare sistema di bloccaggio garantisce la ripetibilità durante la lavorazione. Con il barra seno viene fornita la tabella dei valori, da realizzare con i blocchetti piano-paralleli, per ottenere l'angolo voluto.

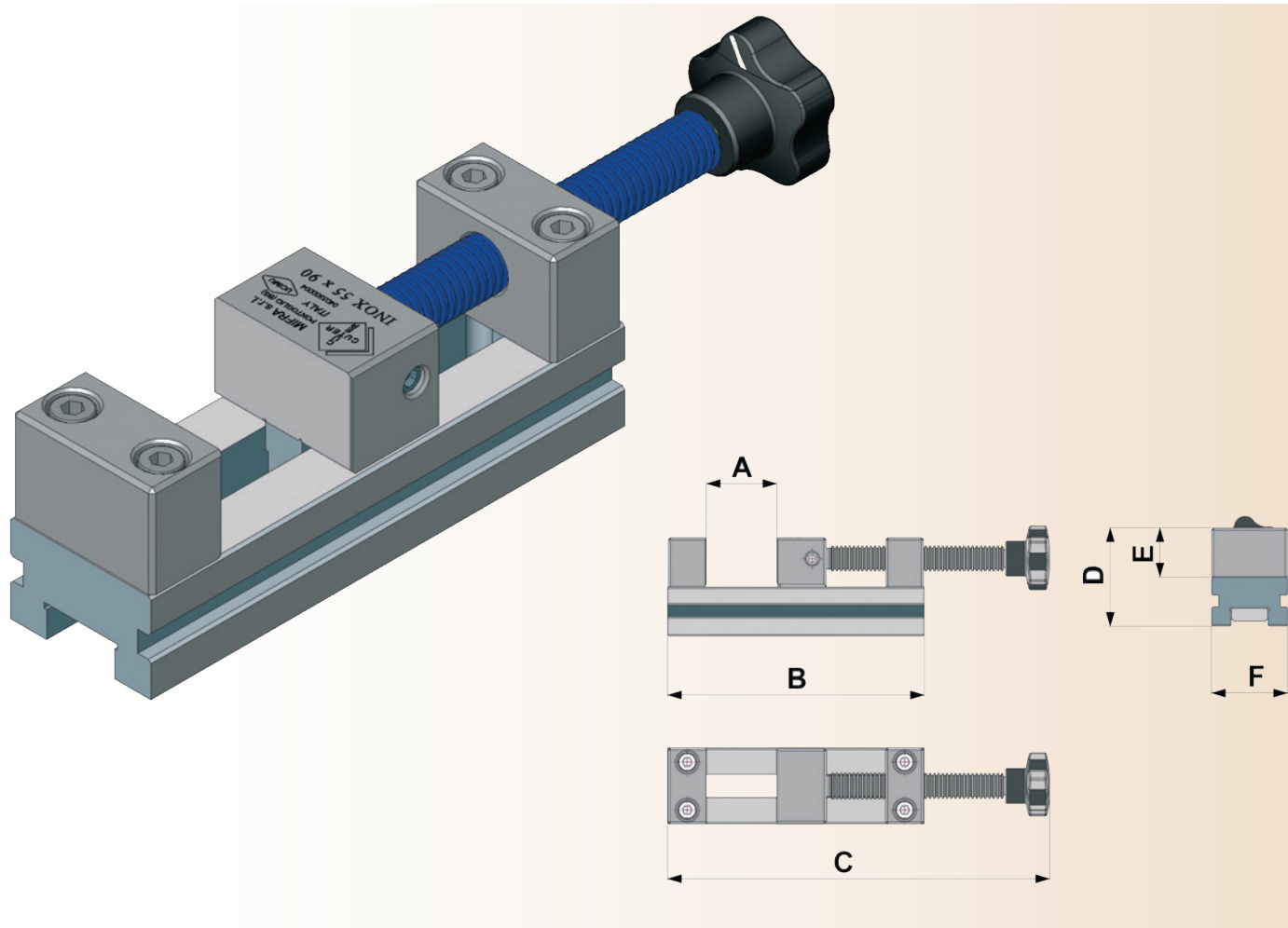
The sine bar principle enables angles with $\pm 4''$ tolerance to be achieved by means of the gauge block ensuring correct positioning on both tilts. Suitable for high precision grinding or test and inspection instrument. Manufactured completely of undeformable alloy steels hardened to 58/60 HRC. The special clamping system ensures repeatability of machining tasks. A data sheet is supplied with the sine bar. Act on the gauge blocks in order to obtain the required angle as shown in the data sheet.

Le système à barre-sinus permet de réaliser des angles avec une tolérance de $\pm 4''$ de degré, en exploitant le positionnement avec des blocs plans-parallèles sur les deux inclinaisons. Il est approprié aux travaux de haute précision sur des rectifieuses ou comme instrument de contrôle. Entièrement construit avec des aciers alliés, indéformables et trempés a 58/60 HRC de dreté. Le système de blocage particulier garantit la répétitivité au cours de l'usinage. La barre-sinus est fournie avec une table de valeurs, à appliquer avec des blocs plans-parallèles, de façon à obtenir l'angle désiré.

MORSA ELETTROEROSIONE

ELECTROEROSION VICE

ÉTAU ÉLECTROÉROSION



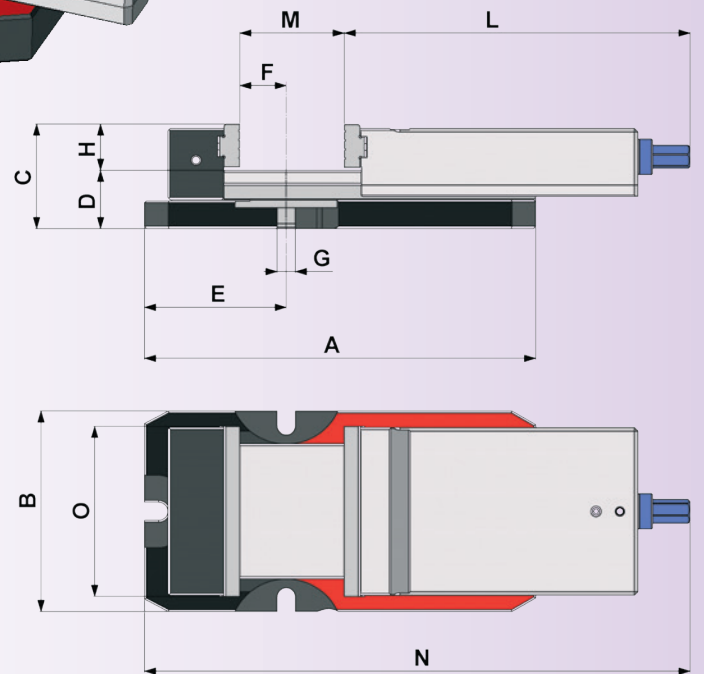
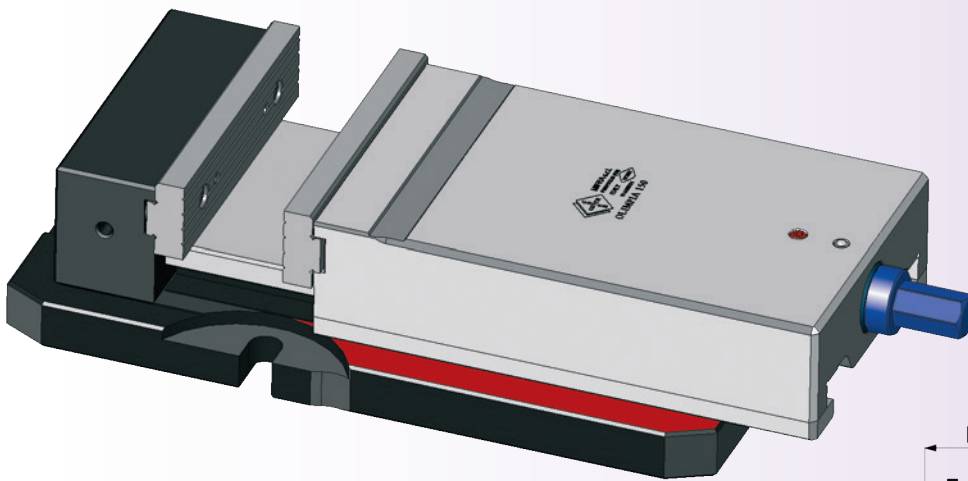
Progettata espressamente per macchine ad elettroerosione a filo e a tuffo la nuova morsa é costruita interamente in acciaio inossidabile temprato, con precisioni di costruzione centesimali, caratteristica di tutti i nostri prodotti. Abbinati alla morsa vi sono vari accessori, come staffe e lardoni sempre in materiale inossidabile.

Especially designed for electroerosion machines, this new vice is completely made of hardened stainless steel, built with centesimal accuracy like all of our products. The vice is supplied with some accessories such as stainless steel clamps and gibs in stainless steel as well.

Conçu expressément pour les machines d'électroérosion filaire et en plongée, le nouvel étau est construit entièrement en acier trempé inoxydable, et avec une précision de construction centésimale qui caractérise tous nos produits. L'étau dispose de plusieurs accessoires, comme les brides et les lardons, construits eux aussi en matériau inoxydable.

CODICE CODE	TIPO TYPE	A	B	C	D	E	F	Kg
		mm	mm	mm	mm	mm	mm	
COELE055AP090	55 x 90	90	182	313	70	35	54	4.0
COELE055AP130	55 x 130	130	222	393	70	35	54	5.0

OLIMPIA



Il corpo morsa è interamente in acciaio, le guide di scorrimento sono temprate. La parte mobile (carro) e la base girevole sono in ghisa G.250. La vite e chiocciola sono in acciaio trattato. Le ganasce in acciaio temprato sono rettificate e intercambiabili. La base girevole è graduata sui 360°. In dotazione: tasselli di riferimento e manovella di bloccaggio. Su richiesta viene montato ai tipi 150 e 200 il bloccaggio oleopneumatico.

The vice body is made entirely of steel. The slide guides are hardened. The mobile part (slide) and the revolving base are of G.250 cast iron. The screw and lead screw are of treated steel. The jaws of hardened steel are ground and interchangeable. Revolving base with 360° graduation. Supplied as standard: shape blocks and clamping crank. A hydraulic clamping system can be fitted to the 150 and 200 models on request.

Le corps est entièrement en fonte G.250 stabilisée à très haute résistance mécanique. La vis et la filière sont en acier traité. Les mâchoires en acier trempé sont rectifiées et interchangeables. La base tournante est graduée à 360°. Fourniture: chevilles de référence et manivelle de blocage. Le blocage oléopneumatique est monté sur demande, sur le modèles 150 et 200.

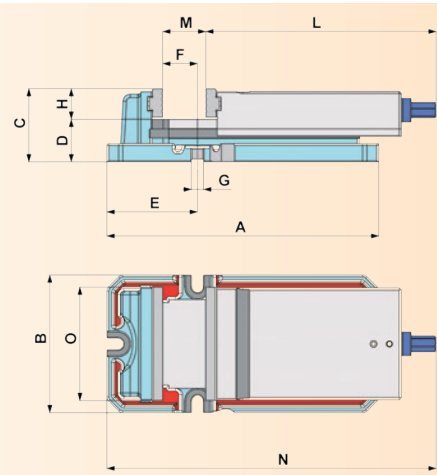
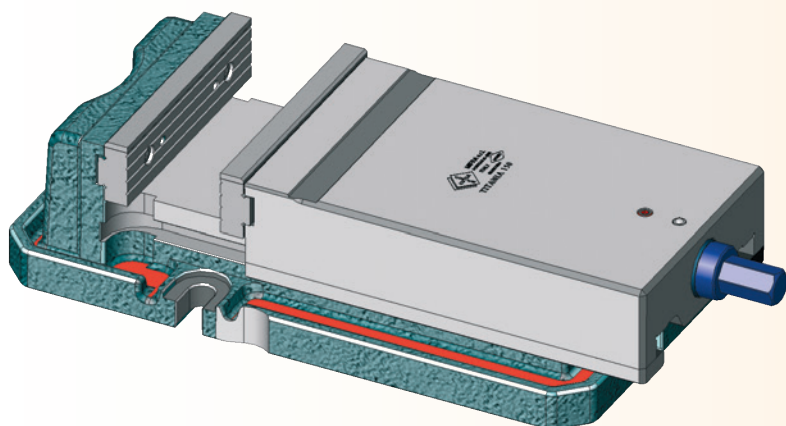
CODICE CODE	TIPO TYPE	A	B	C	D	E	F	G	H	L	M	N	O	Kg
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
COOLIMPISB100	OL. 100	265	122	73	43	100	25	14 H7	30	228	100	403	100	13.0
COOLIMPISB120	OL. 120	305	152	83	47	115	40	14 H7	36	271	120	466	120	20.0
COOLIMPISB150	OL. 150	345	182	92	52	125	41	16 H7	40	305	150	539	150	31.0
COOLIMPISB200	OL. 200	435	235	107	57	117	22.5	16 H7	50	387	200	682	200	60.0

TITANIA

Il corpo è interamente in ghisa G.250 stabilizzata di altissima resistenza meccanica. La vite e chiocciola sono in acciaio trattato. Le ganasce in acciaio temprato sono rettificare e intercambiabili. La base girevole è graduata sui 360°. In dotazione: tasselli di riferimento e manovella di bloccaggio. Su richiesta viene montato ai tipi 150 e 200 il bloccaggio oleopneumatico.

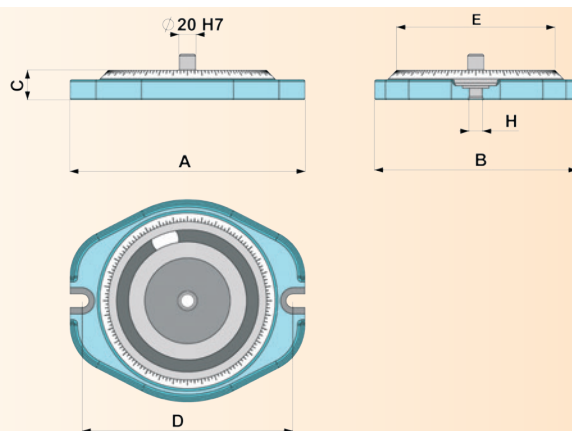
The body is made entirely of stabilised G.250 cast iron with high mechanical strength. The screw and lead screw are of treated steel. The jaws of hardened steel are ground and interchangeable. Revolving base with 360° graduation. Supplied as standard: shape blocks and clamping crank. A hydraulic clamping system can be fitted to the 150 and 200 models on request.

Le corps est entièrement en fonte G.250 stabilisée à très haute résistance mécanique. La vis et la filière sont en acier traité. Les mâchoires en acier trempé sont rectifiées et interchangeables. La base tournante est graduée à 360°. Fourniture: chevilles de référence et manivelle de blocage. Le blocage oléopneumatique est monté sur demande, sur les modèles 150 et 200.



CODICE CODE	TIPO TYPE	A	B	C	D	E	F	G	H	L	M	N	O	Kg
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
COTITANISB085	TIT. 85	252	107	70	42	95	33	14 H7	28	199	85	346	85	9.5
COTITANISB100	TIT. 100	276	126	76	45	92	30	14 H7	31	228	100	390	100	11.5
COTITANISB120	TIT. 120	318	156	87	50	113	45	14 H7	37	271	120	459	120	17.0
COTITANISB150	TIT. 150	363	186	96	56	120	50	16 H7	40	305	150	526	150	27.0
COTITANISB200	TIT. 200	444	238	108	58	130	47.5	16 H7	50	387	200	670	200	47.0

BASI PER MORSE TITANIA - OLIMPIA REVOLVING BASE FOR TITANIA - OLIMPIA BASE TOURNANTE DE TITANIA - OLIMPIA

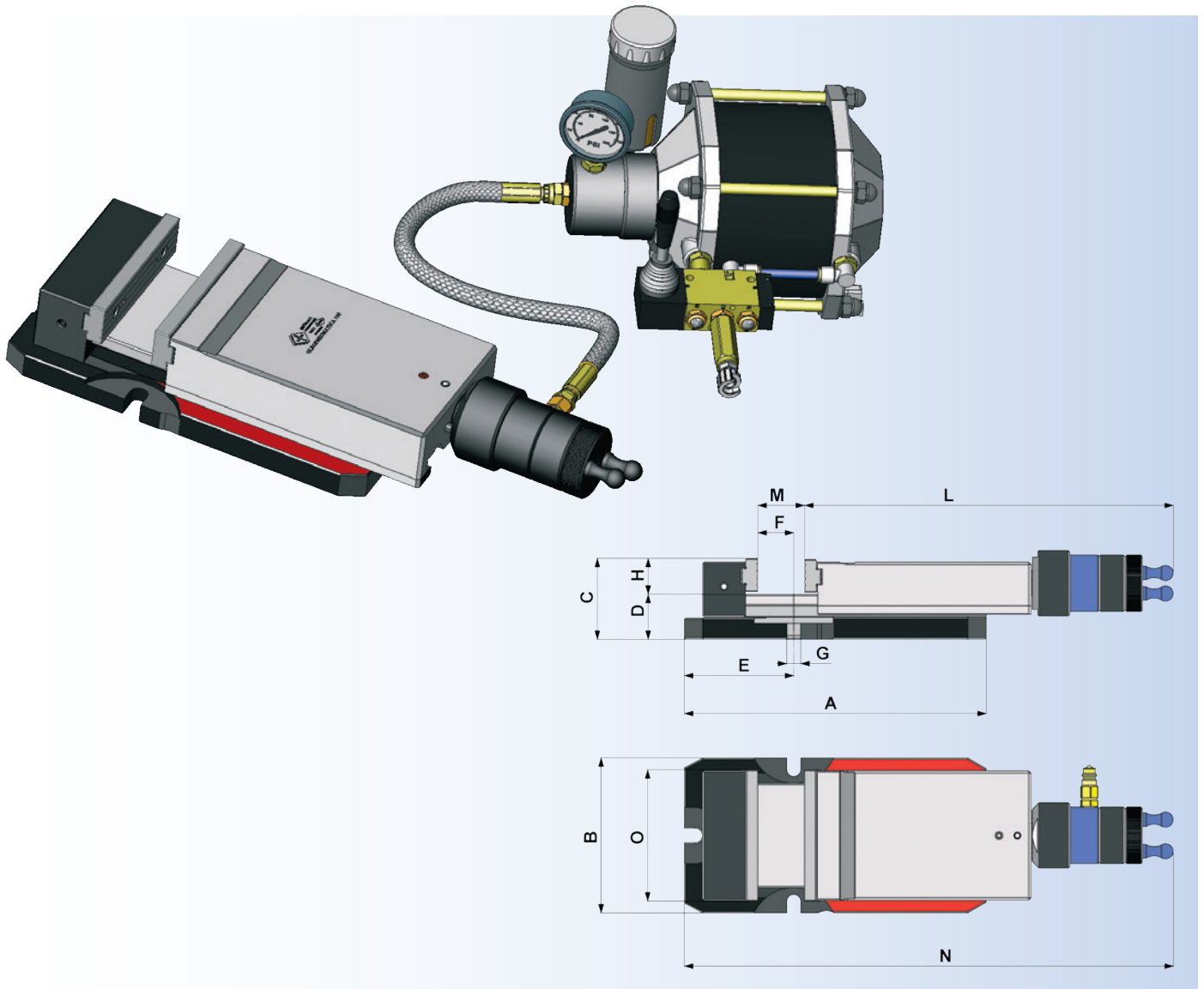


CODICE CODE	TIPO TYPE	A	B	C	D	E	H	Kg
		mm	mm	mm	mm	mm	mm	
COBAS085T1140	TIT. 85	176	145	24	155	105	14 H7	3.0
COBAS100T1140	TIT-OL. 100	204	174	28	186	125	14 H7	4.0
COBAS120T1140	TIT-OL-PNM. 120	232	200	32	208	154	14 H7	6.0
COBAS150T1140	TIT-OL. 150	275	237	35	248	185	16 H7	9.0
COBAS200T1140	TIT-OL. 200	340	295	35	300	240	16 H7	13.0

Morse a BLOCCAGGIO OLEOPNEUMATICO

HYDRAULIC vices

Étaux de BLOCAGE OLÉOPNEUMATIQUE



Le morse Titania e Olimpia 150/200 possono essere fornite con bloccaggio oleopneumatico. Adatte per lavorazioni di media e grande serie. La massima forza di bloccaggio è di 4.500 kg. alla pressione di 6.5 ate. Corsa del cilindro 4 mm.

The Titania and Olimpia 150/200 vices can be fitted with hydraulic clamping system. They are suitable for medium to large workpieces. The maximum clamping force is 4.500 kg with 6.5 ATE pressure and 4 mm cylinder stroke.

Les étaux Titania et Olimpia 150/200 peuvent être fournis avec un système de blocage oléopneumatique. Appropriés aux usinages de moyenne et de grande série. La force moyenne de blocage est de 4.500 kg sous une pression de 6.5 ATE; course du cylindre: 4mm.

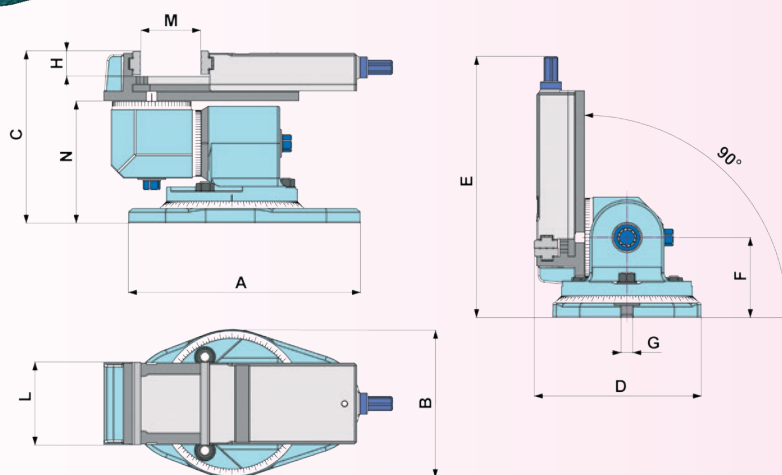
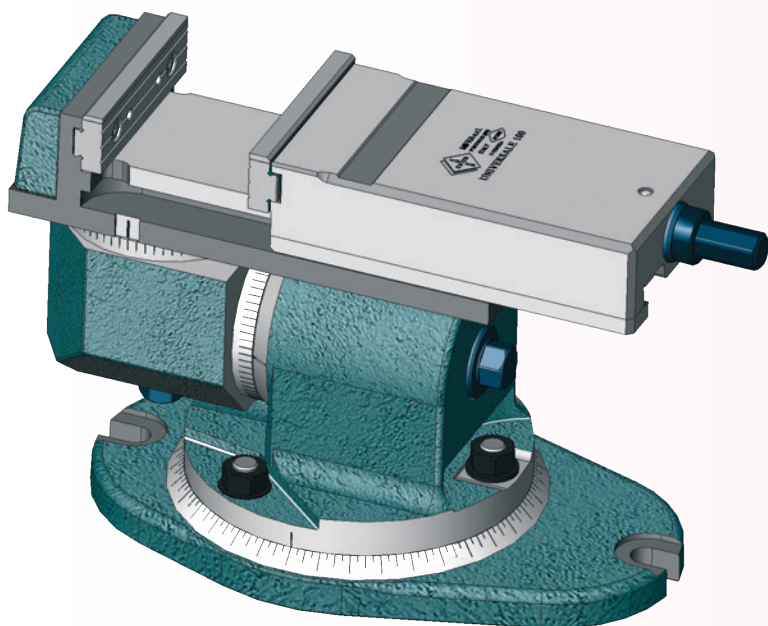
CODICE CODE	TIPO TYPE	A	B	C	D	E	F	G	H	L	M	N	O	Kg
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
C0TITOLEOP150	TIT. 150	363	186	96	56	120	50	16 H7	40	420	150	631	150	43.5
C0TITOLESP150 *	TIT. 150	363	186	96	56	120	50	16 H7	40	420	150	631	150	48.0
C0TITOLEOP200	TIT. 200	444	238	108	58	130	47.5	16 H7	50	492	200	775	200	64.0
C0TITOLESP200 *	TIT. 200	444	238	108	58	130	47.5	16 H7	50	492	200	775	200	68.5
C0OLMOLEOP150	OL. 150	345	182	92	52	125	41	16 H7	40	420	150	644	150	47.0
C0OLMOLESP150 *	OL. 150	345	182	92	52	125	41	16 H7	40	420	150	644	150	51.5
C0OLMOLEOP200	OL. 200	435	235	107	57	117	22.5	16 H7	50	492	200	787	200	76.0
C0OLMOLESP200 *	OL. 200	435	235	107	57	117	22.5	16 H7	50	492	200	787	200	80.5

* Senza moltiplicatore di pressione. *Without pressure multiplier.* Sans multiplicateur de pression.

UNIVERSALE

UNIVERSAL

UNIVERSEL



La morsa è ottima per lavorazioni su affilatrici, è costruita in modo da garantire una assoluta stabilità e permette la lavorazione dei pezzi in diverse angolazioni. Il bloccaggio ad albero conico permette l'esecuzione di lavori della massima precisione. Le posizioni angolari sono date da noni con lettura di 2 gradi. Costruita in ghisa sferoidale GS 600/3 UNI 4544/79. Le ganasce in acciaio temprato sono rettificata e intercambiabili. La base girevole è graduata sui 360°. In dotazione: tasselli di riferimento e manovella di bloccaggio.

The clamp is excellent for use on sharpening machines and has been manufactured in such a way as to ensure total stability. Workpieces can be machined at different angles. The tapered shaft clamping system enables high precision machining. A range of vernier scales enables readings of the angle positions with 2° accuracy. It is manufactured of GS 600/3 UNI 4544/79 nodular cast iron. The jaws in hardened steel are ground and interchangeable. Revolving base with 360° graduation. Supplied as standard: shape blocks and clamping crank.

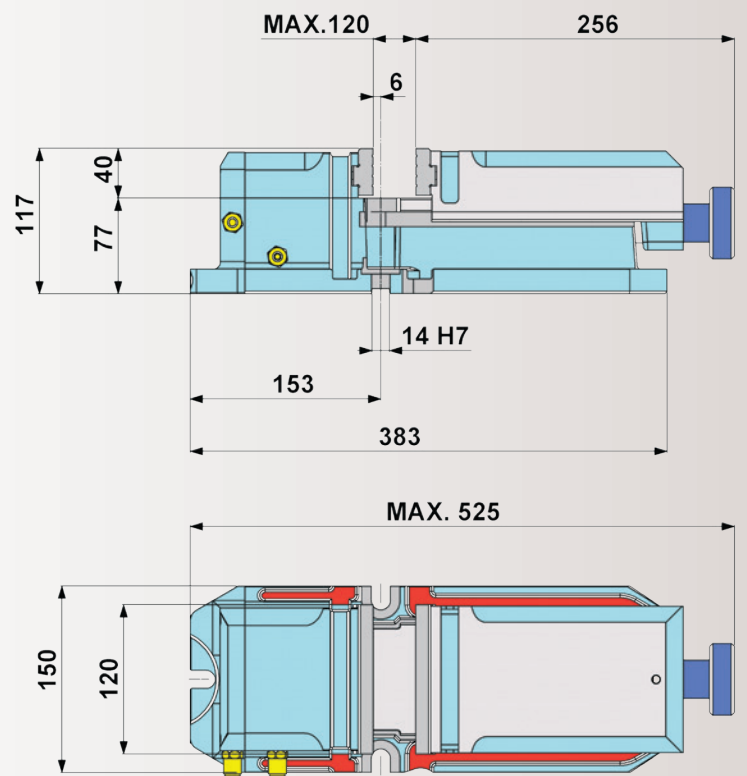
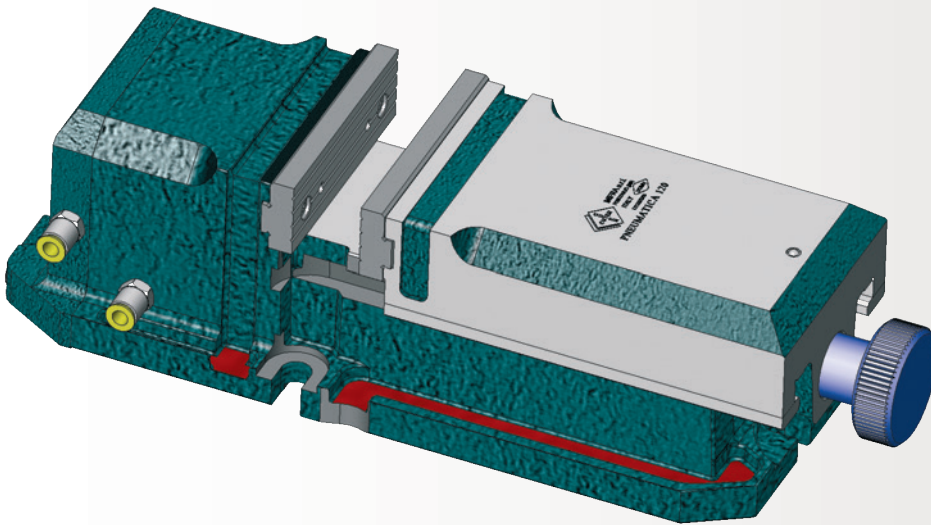
L'étau est excellent pour les usinages sur affûteuses. Il est construit de façon à garantir une stabilité absolue et à permettre l'usinage des pièces sous différents angles. Le blocage à arbre conique permet d'exécuter des travaux de très haut niveau de précision. Les positions d'angle sont données par des verniers permettant de régler à 2 degré de précision. Construit en fonte sphéroïdale GS 600/3 UNI 4544/79. Les mâchoires en acier trempé sont rectifiées et interchangeables. La base tournante est graduée à 360°. Fourniture: chevilles de référence et manivelle de blocage.

CODICE CODE	TIPO TYPE	A	B	C	D	E	F	G	H	L	M	N	Kg
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
COUNIVERSAL65	UN 65	200	130	156	149	225	72	14 H7	25	65	65	107	10.0
COUNIVERSAL85	UN 85	250	155	188	180	300	85	14 H7	27	85	85	130	19.0
COUNIVERSAL10	UN 100	280	178	208	202	330	96	14 H7	30	100	100	147	27.0

PNEUMATICA PNM 120X120

PNEUMATIC PNM 120X120

PNEUMATIQUE PNM 120X120



CODICE - CODE	Kg
C0PNEUMASB120	24.0

Morsa a funzionamento pneumatico adatta per lavorazioni medio-leggere di fresatura e foratura su particolari di media o grande serie. Unisce alla velocità di chiusura una forza di bloccaggio di 800 kg. a 6 ATM. Costruita in ghisa sferoidale GS 600/3 UNI 4544/79. La vite e chiocciola sono in acciaio temprato. Le ganasce in acciaio temprato sono rettificate e intercambiabili. In dotazione: tasselli di riferimento. A richiesta vengono fornite base girevole e ganasca a V per corpi cilindrici.

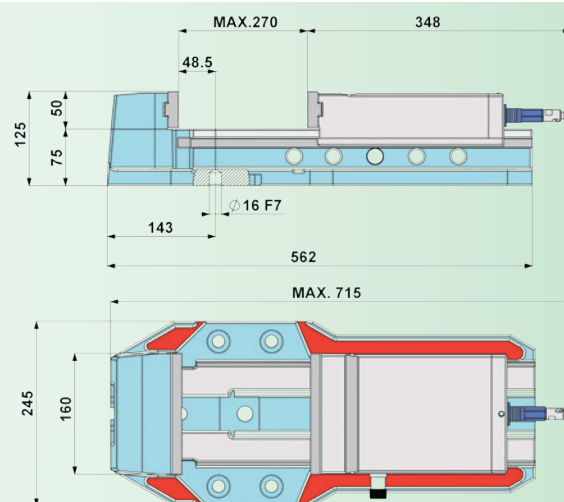
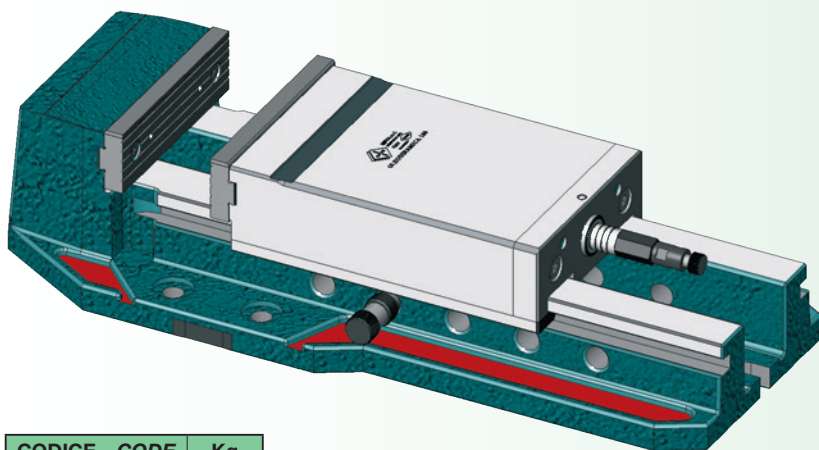
Pneumatically operated vice for light to medium duty milling and drilling of medium or large workpieces. High speed closing combined with 800 kg clamping force at 6 ATM. It is manufactured of GS 600/3 UNI 4544/79 nodular cast iron. The screw and lead screw are of treated steel. The hardened steel jaws are ground and interchangeable. Supplied as standard: shape blocks. Revolving base and 'V' shaped jaw for cylindrical workpieces are supplied on request.

Etau à fonctionnement pneumatique approprié aux usinages moyens/légers de fraisage et de perçage, sur des pièces de moyenne ou de grande série. La vitesse de fermeture s'unit à une force de blocage de 800 kg à 6 ATM. Construit en fonte sphéroïdale GS 600/3 UNI 4544/79. La vis et la filière sont en acier traité. Les mâchoires en acier trempé sont rectifiées et interchangeables. Fourniture: chevilles de référence. Sur demande, il est possible de fournir la base tournante et la mâchoire en V pour les corps cylindriques.

CONTINENTAL OLEODINAMICA

CONTINENTAL HYDRAULIC

CONTINENTAL HYDRAULIQUE

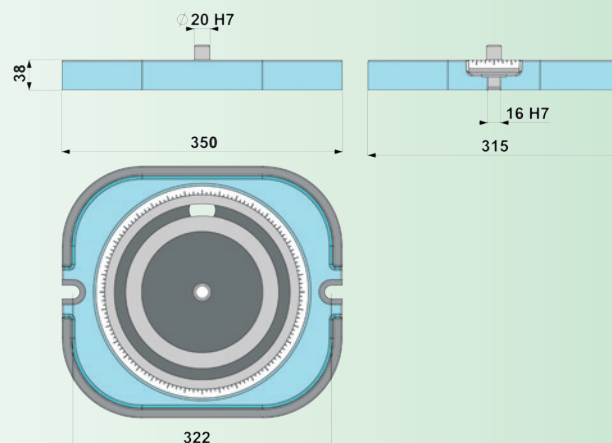
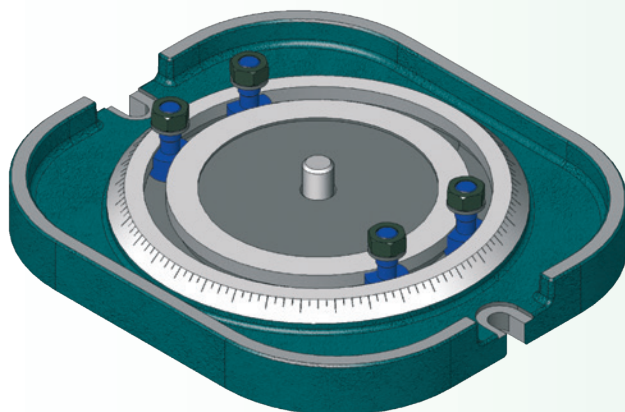


CODICE - CODE	Kg
C0COLEODSB160	55.0

La morsa ha la caratteristica di regolare la forza di bloccaggio da un minimo di kg 1.000 ad un massimo di kg. 5.000, senza affaticamento dell'operatore grazie al moltiplicatore oleodinamico incorporato. Costruita in ghisa sferoidale GS 600/3 UNI 4544/79 con guide di scorrimento temprate. Il moltiplicatore oleodinamico è completamente intercambiabile. Le ganasce in acciaio temprato sono rettificata e intercambiabili. La base girevole è graduata sui 360°. In dotazione: tasselli di riferimento e manovella di bloccaggio.

The vice enables the clamping force to be adjusted from min. 1.000 kg to max. 5.000 kg without any effort on the operator's part thanks to the built in hydraulic overgear. It is manufactured of GS 600/3 UNI 4544/79 nodular cast iron with hardened slide guides. The hydraulic overgear is completely interchangeable. Hardened steel jaws, ground and interchangeable. Revolving base with 360° graduation. Supplied as standard: shape block and clamping crank.

L'étau présente la caractéristique de régler la force de blocage d'un minimum de 1.000 kg à un maximum de 5.000 kg, sans que l'opérateur se fatigue grâce au multiplicateur hydraulique incorporé. Construit en fonte sphéroïdale GS 600/3 UNI 4544/79, à glissières de coulissement trempées. Le multiplicateur hydraulique est totalement interchangeable. Les mâchoires en acier trempé sont rectifiées et interchangeables. La base tournante est graduée à 360°. Fourniture: chevilles de référence et manivelle de blocage.

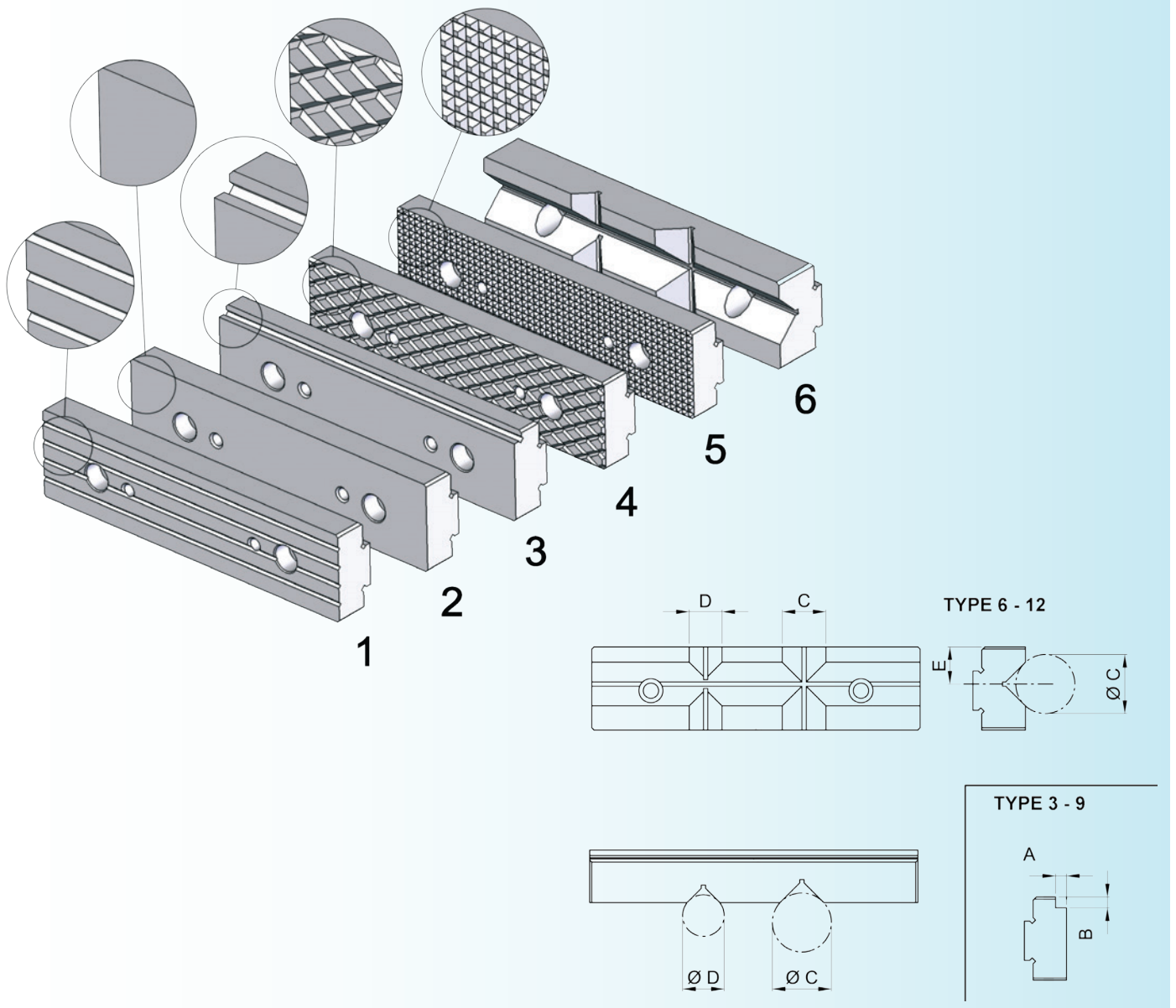


CODICE - CODE	Kg
C0BSG160OD090	21.0

GANASCE

JAWS

MÂCHOIRES



- 1) Ganascia normale rigata
- 2) Ganascia liscia
- 3) Ganascia a labbro abbassato
- 4) Ganascia zigrinata
- 5) Ganascia con dentini
- 6) Ganascia a V per corpi cilindrici

- 1) Normal grooved jaw
- 2) Smooth jaw
- 3) Jaw with lowered lip
- 4) Knurled jaw
- 5) Jaw for raw pieces
- 6) 'V' shaped jaw for cylindrical workpieces

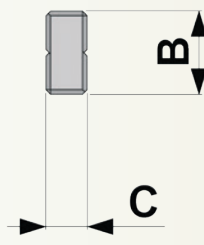
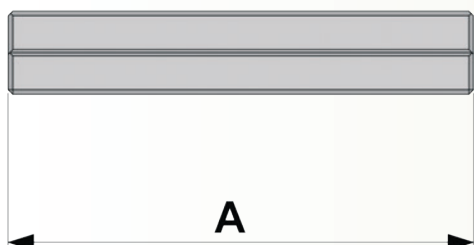
- 1) Mâchoire normale rainurée
- 2) Mâchoire lisse
- 3) Mâchoire à lèvres abaissées
- 4) Mâchoire chagrinée
- 5) Mâchoire pour morceau brut
- 6) Mâchoire en V pour corps cylindriques

TYPE	A	B	C	D	Ø C min	Ø C max	Ø D min	Ø D max	E
65	3	3	12	9	5	16	4	13	9
85	3	3	14	9	6	20	4	13	10
100	4	4	16	12	7	22	5.5	16	13
120	4	4	16	12	7	22	5.5	16	16
150	5	5	20	15	9	27	7	25	17
200	5	5	21	16	9	29	7	25	19

PARALLELE per morse

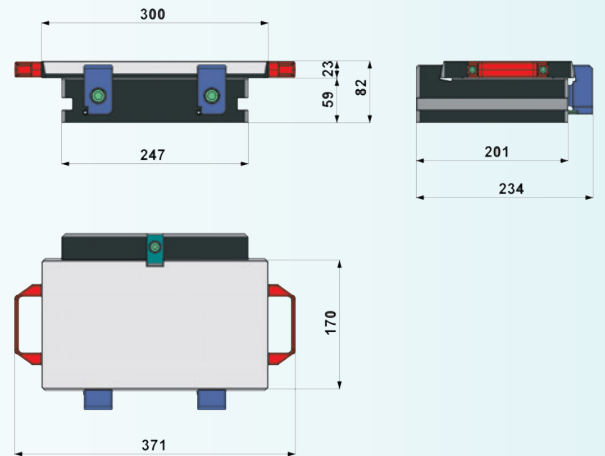
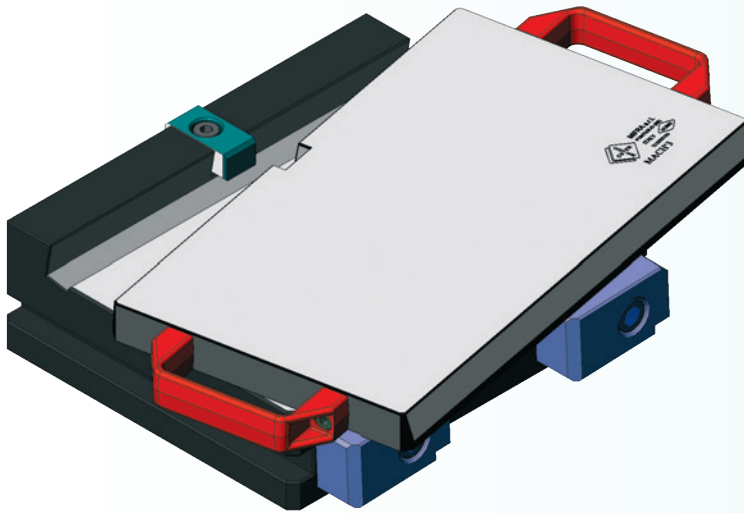
PARALLEL blocks for vices

PARALLELES pour étaux

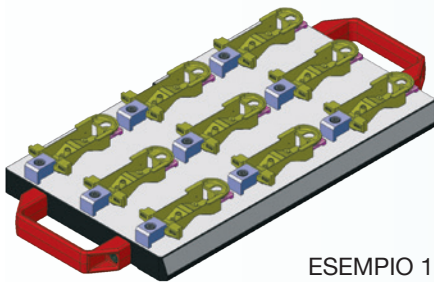


CODICE CODE	TIPO TYPE	A	B	C
		mm	mm	mm
C0CASSPARA085		SET 2 pcs.		
C0PAR085TI200	PAR. 85 - 1	82	18	10
C0PAR085TI210	PAR. 85 - 2	82	22	13
C0CASSPARA100		SET 2 pcs.		
C0PAR100TI200	PAR. 100 - 1	95	20	12
C0PAR100TI210	PAR. 100 - 2	95	23	16
C0CASSPARA120		SET 3 pcs.		
C0PAR120TI200	PAR. 120 - 1	115	21	10
C0PAR120TI210	PAR. 120 - 2	115	22	13
C0PAR120TI220	PAR. 120 - 3	115	28	18
C0CASSPARA150		SET 3 pcs.		
C0PAR150TI200	PAR. 150 - 1	145	26	13
C0PAR150TI210	PAR. 150 - 2	145	28	18
C0PAR150TI220	PAR. 150 - 3	145	33	22
C0CASSPARA200		SET 4 pcs.		
C0PAR200TI200	PAR. 200 - 1	190	32	15
C0PAR200TI210	PAR. 200 - 2	190	35	18
C0PAR200TI220	PAR. 200 - 3	190	38	27
C0PAR200TI230	PAR. 200 - 4	190	42	23

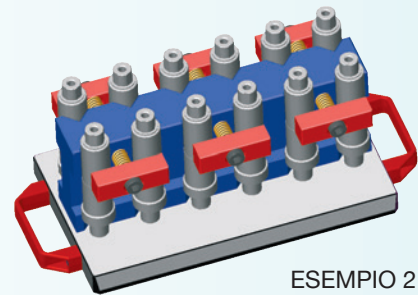
MACH'3



CODICE - CODE	Kg
COMACH3030X17	34.0



ESEMPIO 1



ESEMPIO 2

Attrezzo a cambio rapido sovrapietra per lavorazioni di serie, con cambi di lavorazione o attrezzature su CNC verticali, fresatrici NC, elettroerosioni etc.

VANTAGGI

- Possibilità di attrezzare o cambiare i pezzi fuori macchina senza ricerca degli zeri;
- Tempi di montaggio e bloccaggio minimi;
- Ripetibilità nel riposizionamento sui tre assi con precisioni centesimali.

DATI TECNICI

- Basetta fissa, costruita con acciai speciali per tempra ad induzione, da staffare sulla banchina con cava a T, oppure su piastre con reticoli di fori in F7 a passo 40/50/60.
- Sovrapietra asportabile in acciaio dolce, temprata ad alta frequenza sul piano inclinato e sulla sede del tassello, che funziona da cambio pallet.

FUNZIONAMENTO

La basetta ha un tassello di centraggio atto ad alloggiare la sovrapietra, che tramite due staffe, viene bloccata contro un piano inclinato dando una precisione di bloccaggio elevata.

FORNIBILE ANCHE CON BLOCCAGGIO IDRAULICO

Equipment with quick change of the plate during volume production. Quick change of the machining task or of the tools on vertical NC machining centers, NC milling machines, EDM, etc.

ADVANTAGES:

- *The machine can be tooled up with no need to set it to zero;*
- *Very low assembling and clamping times;*
- *Repeatability of positioning on the three axes with centesimal accuracy.*

TECHNICAL DATA

- *Fixed terminal bar of special steel suitable for induction hardening, to be clamped on the T-slot shoe or on pierced plates with F7 holes, 40/50/60 pitch.*
- *Removable and interchangeable plate of mild steel, hardened at high frequency on the lopsided face and on the block seat, acting also as pallet change system.*

OPERATION

The terminal bar is equipped with a centering block to facilitate positioning of the plate. The plate is locked against a lopsided plane by means of two clamps, thus allowing a considerable clamping precision.

IT CAN BE DELIVERED ALSO WITH HYDRAULIC LOCKING SYSTEM

Outillage à changement rapide de la plaque pour travaux en série avec changement de l'usinage ou de l'équipement sur des CNC verticales, fraiseuses NC, électroérosions etc.

AVANTAGES

- Possibilità d'équiper ou de changer les pièces hors de la machine sans rechercher les zéros;
- Temps de montage et de blocage minimum;
- Répétitivité dans le repositionnement sur trois axes avec des précisions centésimales.

DONNEES TECHNIQUES

- Base fixe, obtenue en acier spécial pour trempe à induction, à brider sur le banc avec rainure à T, ou bien sur plaques avec réseaux de trous en F7 à pas de 40/50/60 mm;
- Plaque amovible et interchangeable en acier doux, trempée à haute fréquence sur le plan incliné et sur le siège de la cheville qui sert au changement des palettes.

FONCTIONNEMENT

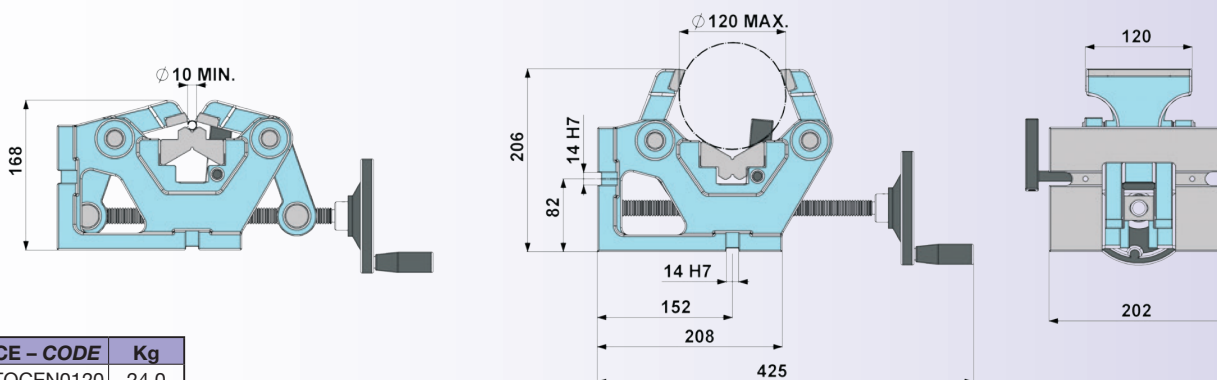
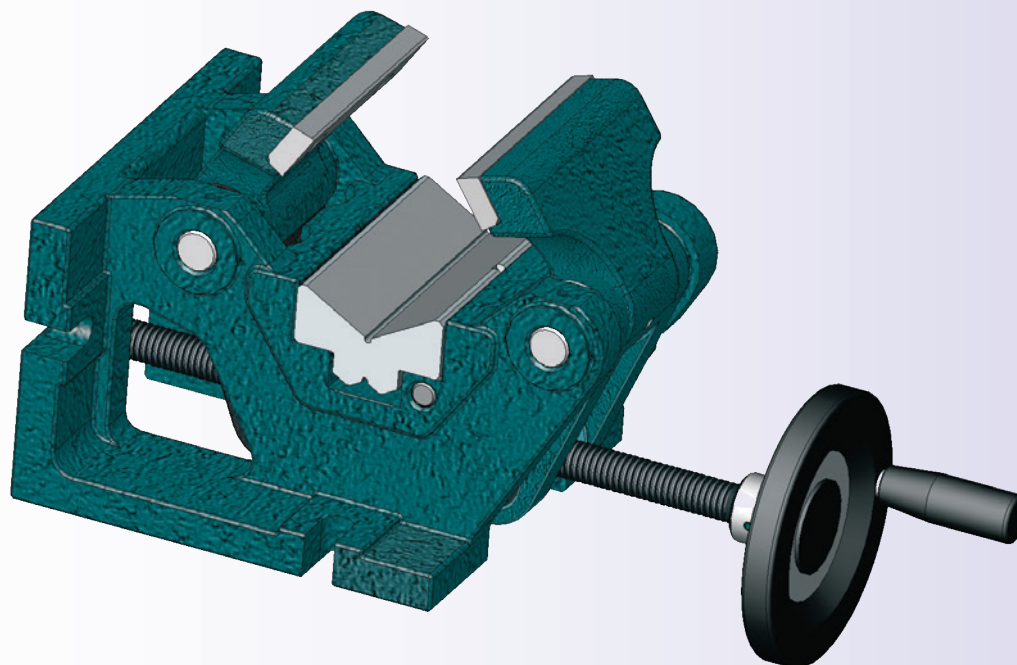
La base dispose d'une cheville utilisée pour loger la plaque qui est bloquée contre le plan incliné par l'entremise de deux brides en donnant une précision de blocage élevée.

LIVRABLE AUSSI AVEC BLOCCAGE HYDRAULIQUE

MORSA AUTOCENTRANTE per corpi cilindrici 120x120

SELF CENTERING VICE
for 120x120 cylindrical workpieces

ETAU A CENTRAGE AUTOMATIQUE
pour corps cylindriques 120x120



CODICE - CODE	Kg
C0AUTOCEN0120	24.0

Adatta per lavorazioni di pezzi cilindrici su: cavatrici, fresatrici, trapani. Il movimento simultaneo delle due ganasce oscillanti autocentra il pezzo sulla ganascia prismatica fissa, consentendo una perfetta ripetibilità di posizionamento. La morsa può essere usata su macchine sia orizzontali che verticali, grazie ai due piani di appoggio, che sono perfettamente ortogonali tra loro. La struttura della morsa è in ghisa sferoidale stabilizzata GS 600/3 UNI 4544/79. La vite è interamente trattata. Le ganasce in acciaio temprato sono rettificata e intercambiabili. In dotazione: tasselli di riferimento.

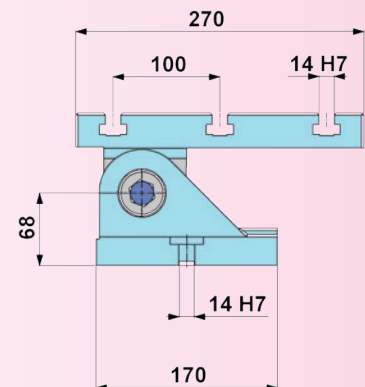
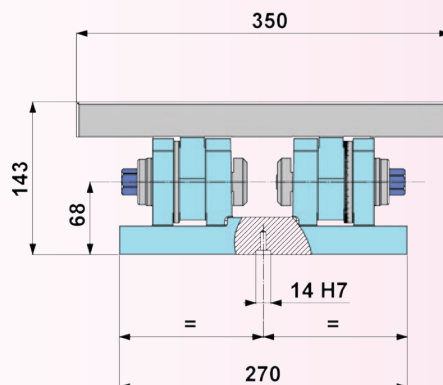
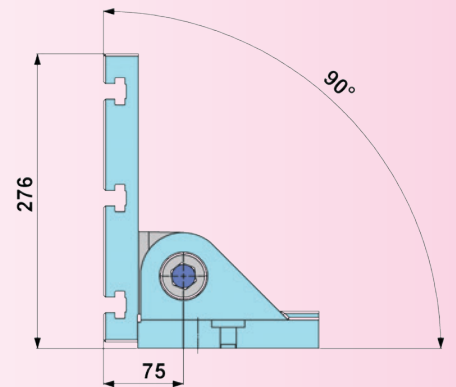
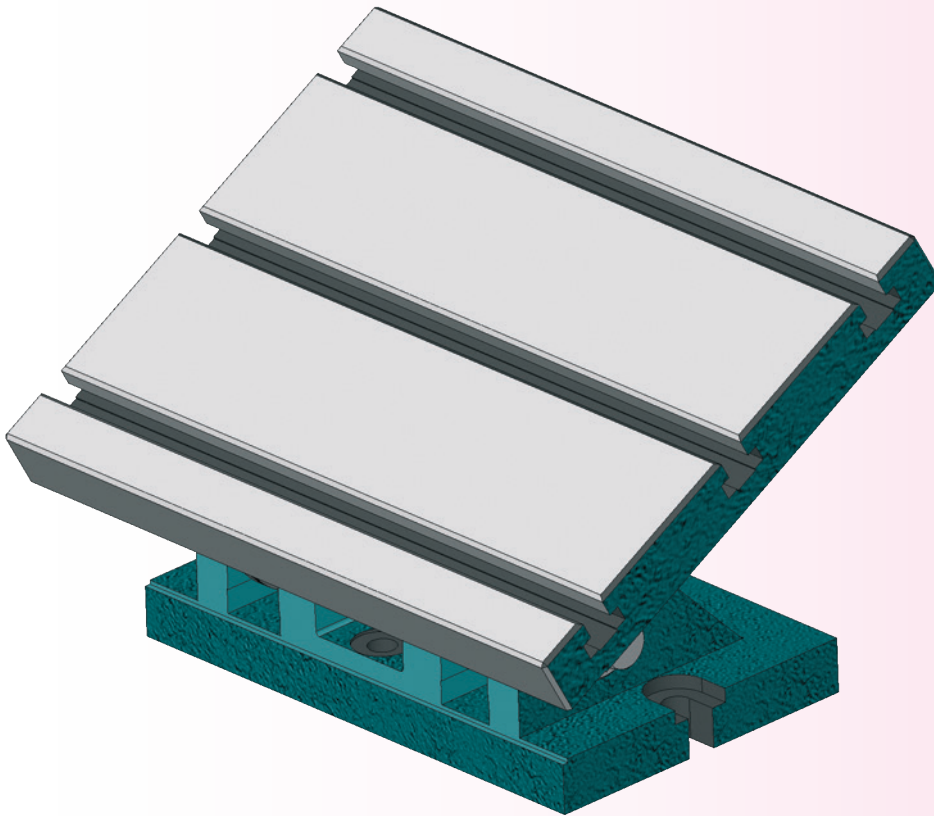
Suitable for holding cylindrical workpieces during slotting, milling and drilling operations. The simultaneous movement of the two oscillating jaws automatically centres the workpiece on the prismatic fixed jaw to ensure repeatability of positioning. The vice can be used both on horizontal and vertical machines thanks to the two faces that are at right angle to one another. The vice body is in GS 600/3 UNI 4544/79 stabilised nodular cast iron. The screw has been entirely treated. The hardened steel jaws are ground and interchangeable. Supplied as standard: shape blocks.

Approprié à l'usinage de pièces cylindriques sur mortaiseuses, fraiseuses et perceuses. Le mouvement simultané des deux mâchoires oscillantes centre automatiquement la pièce sur la mâchoire prismatique fixe, ce qui permet de répéter parfaitement le positionnement. L'étau peut être utilisé aussi bien sur des machines horizontales que sur des machines verticales, grâce à ses deux plans d'appui qui sont parfaitement orthogonaux l'un par rapport à l'autre. La structure de l'étau est en fonte sphéroïdale stabilisée GS 600/3 UNI 4544/79. La vis est totalement traitée. Les mâchoires en acier trempé sont rectifiées et interchangeable. Fourniture: chevilles de référence.

SQUADRA ORIENTABILE
con scanalature a "T" 350x270

ADJUSTABLE SQUARE
350x270 with "T" grooves

EQUERRE ORIENTABILE
à rainures en "T" 350x270



CODICE - CODE	Kg
CSQUA270X350	38.5

Costruita in ghisa legata perlitica G.250 stabilizzata di altissima resistenza. E' dotata di un doppio bloccaggio che garantisce la completa eliminazione di ogni vibrazione. Precisione e costanza di piazzamento, molteplicità di impiego e praticità d'uso. La posizione angolare è data da un nonio con lettura in 2 gradi.

Made of extremely resistant G.250 pearlitic cast iron alloy. The double clamping ensures that all vibrations are completely eliminated. It can be positioned accurately every time and can easily be used for a great number of applications. A vernier scale enables readings of the angle position with 2° accuracy.

Construite en fonte alliée à la perlite G.250 stabilisée à très haute résistance. Elle est munie d'un blocage double qui permet d'éliminer totalement les vibrations. Précision et constance de la mise en place, utilisations multiples et emploi facile. La position d'angle est donnée par un vernier de lecture à 2 degrés de précision.



CONDIZIONI GENERALI DI VENDITA

Le ordinazioni sono accettate esclusivamente alle seguenti condizioni:

PREZZI

Si intendono Franco nostra sede.

IMBALLO

Da effettuarsi al costo.

PAGAMENTI

- a) Devono essere effettuati nei termini stabiliti.
- b) Non sono riconosciuti validi i pagamenti effettuati a persone non munite di nostro regolare mandato.
- c) Gli assegni devono essere sbarrati, intestati a noi con la dicitura <<NON TRASFERIBILE>> anche se l'assegno viene consegnato direttamente ai nostri incaricati.
- d) Non si accettano sconti, abbuoni e arrotondamenti non concordati preventivamente per iscritto.
- e) Eventuali contestazioni non danno diritto alla sospensione dei pagamenti.
- f) Sui pagamenti non effettuati alla scadenza, decorreranno gli interessi di mora.
- g) Sconti di pronta cassa, regolarmente concordati si devono calcolare sull'importo netto della merce escluso imposte, imballo e trasporto.

SPEDIZIONI

- a) La merce viaggia sempre a rischio e pericolo del committente anche se venduta franco destino.
- b) Non indicando sull'ordine il mezzo di spedizione, questa verrà da noi effettuata con il mezzo ritenuto più idoneo, senza assumere alcuna responsabilità.

CONSEGNE

- a) Gli ordini vengono evasi secondo le disponibilità del magazzino senza garanzia di saldo.
- b) I termini di consegna indicati nelle nostre offerte si devono intendere sempre salvo venduto e comunque senza alcun nostro impegno.

RITORNI

- a) Non si accetta merce di ritorno senza preventiva autorizzazione scritta.
- b) La merce resa, qualunque ne sia il motivo, deve essere resa FRANCO nostra sede di Antegnate (Bergamo).

GARANZIA

- a) Ci impegnamo alla sostituzione o all'accredito (a nostra scelta) degli articoli eventualmente riscontrati difettosi, senza però assumere a nostro carico alcun debito per danno e spese di qualsiasi ragione o causa.

RECLAMI

- a) Per eventuali ammanchi nei quantitativi o per difetti, dovranno pervenirci entro 8 giorni dalla data di spedizione della merce.

COSTI

- a) Verificandosi nel corso della fornitura, aumenti salariali, di materie prime o di altre voci connesse alla produzione applicheremo la corrispondente maggiorazione.

CONTROVERSIA

- a) Per ogni controversia s'intendono competenti il Foro di Treviglio e di Bergamo.

AGGIORNAMENTI

- a) Le dimensioni e le caratteristiche degli articoli descritti nel presente catalogo non sono impegnative e possono essere variate senza preavviso.





LTF S.p.A.

24051 ANTEGNATE (BG) ITALIA - VIA CREMONA, 10
TEL. 0363 94901 (15 linee r.a.) - TELEFAX 0363 914770-914797
CAPITALE SOCIALE € 12.500.000 i.v
R.E.A. BG n. 189980 - ISCR. TRIB. BG, C.F. e P.IVA 01276740162
COD. ID. CEE IT 01276740162 - EXPORT BG 002668
E-Mail: lf@lff.it - Internet: www.lff.it