

freud®



PUNTE E UTENSILI CNC ROUTER BITS AND CNC TOOLS



ISO 9001:2000

LA FREUD ATTUA UN SISTEMA DI GESTIONE DELLA QUALITÀ CERTIFICATO ISO 9001:2000 PER LA COMMERCIALIZZAZIONE DI LAME CIRCOLARI CON RIPORTI IN HW E DI COMPONENTI IN METALLO DURO SINTERIZZATO.

FREUD APPLIES A QUALITY SYSTEM ISO 9001:2000 FOR TRADING OF HW TIPPED SAWBLADES AND HARD METAL COMPONENTS.



CERTIFICATO • CERTIFICAT • CERTIFIKAT • CERTIFICADO • CERTIFICAT



CERTIFICATO

Nr 55 100 4138 - Rev. 02
Si attiene alla Norma ISO 9001:2000
IL SISTEMA QUALITÀ DI
THE QUALITY SYSTEM OF

freud®
POZZO S.p.A.

SEDE OPERATIVA: VIA MADONNA 3
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10355 S. MARCO (CN)

SEDE LEGALE: VIA VOLTURNO 37
00187 ROMA (RM)

È CONFORME AI REQUISITI DELLA NORMA
UN EN ISO 9001:2000
Refer to manual for details of restrictions
of requirements of the norm ISO 9001:2000

Questo certificato è valido per il seguente campo di applicazione
Comercializzazione a proprio marchio di lame circolari, teste
portabilite, teste sinterizzate, punte e componenti in metallo
duro, Comercializzazione di lame e punte in diamante, macchine
sinterizzate ed utensili da triv.

Trade of own brand of saw blades, cutter heads, brazed cutters,
router bits and hard metal components. Trade of PCD tipped saw
blades and router bits, cleaning machines and grinding machine
etc. etc.

Data di emissione: 2007-05-23

SINCERT

Per informazioni e certificazioni
P.O. Box 1000
10100 TORINO (TO)



Ritornazione del certificato ammesso per la prima volta in data 2006-05-16
Con riserva di annullamento in qualsiasi momento in caso di non conformità
al sistema di gestione qualità con procedura standard
The validity of this document is subject to the annual surveillance every 12 months
and in the complete absence of company's management quality after three years.

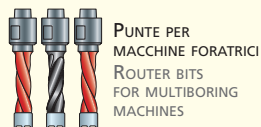
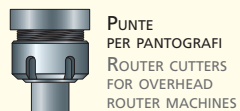
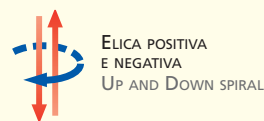
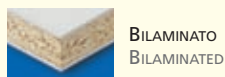
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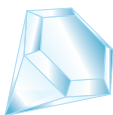
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LEGENDA DEI SIMBOLI E DELLE ABBREVIAZIONI

EXPLANATION OF SYMBOLS AND ABBREVIATIONS

CODICE	CODICE ARTICOLO ITEM CODE	D	DIAMETRO DIAMETER	H	ALTEZZA TOTALE OVERALL HEIGHT
A	ATTACCO SHANK	d	FORO BORE	H1	ALTEZZA D'INGOMBRO ACTUAL HEIGHT
Z	NUMERO DI DENTI NUMBER OF TEETH	D1	DIAMETRO ESTERNO ATTACCO SHANK OUTER DIAMETER	h	ALTEZZA UTILE CUTTING HEIGHT
B	SPESORE DI TAGLIO CUTTING THICKNESS	D2	DIAMETRO INTERNO ATTACCO SHANK INNER DIAMETER	h1	ALTEZZA SCARICO TAGLIENTE CUTTING EDGE'S DISCHARGING AREA H.
B/b	SP. TAGLIO / SP. CORPO CUTTING THICK./BODY THICK.				
b	SPESORE CORPO BODY THICKNESS				





CALCOLO COSTO FRESE E PUNTE SAGOMATE IN DIAMANTE

HOW TO DETERMINE TOTAL COST OF PROFILED PCD ROUTER BITS AND BRAZED CUTTERS

- FREUD fornisce utensili in PCD su richiesta: ecco un esempio per calcolare il costo finale di un utensile con profilo complesso in PCD.
- FREUD provides on-demand PCD tools. Here is a sample to determine the total cost of a Shaped PCD tool.

Esempio: *(i prezzi qui riportati sono solo indicativi)

Utensile in DIA H6 con *Sviluppo lineare del profilo sagomato* di 78,8 mm

Formula:

(Sviluppo lineare profilo x n° Taglienti x Costo placchetta) + Costo corpo = Prezzo totale utensile

Fresa a Z=1 DIA H6

$$(78,8 \times 1 \times 10,00 \text{€}^*) + 60,00 \text{€}^* = 848,00 \text{€}^*$$

Fresa a Z=2 DIA H6

$$(78,8 \times 2 \times 10,00 \text{€}^*) + 60,00 \text{€}^* = 1.636,00 \text{€}^*$$

Fresa a Z=3 DIA H6

$$(78,8 \times 3 \times 10,00 \text{€}^*) + 60,00 \text{€}^* = 2.424,00 \text{€}^*$$

Example: *(sample prices)

Tool in H6 DIA with *Shaped profile development* of 78,8 mm.

Formula:

(Profile length x no. of Cutting edges x Tip's price) + Body's price = Tool's total price.

Brazed cutter with Z=1 H6 DIA

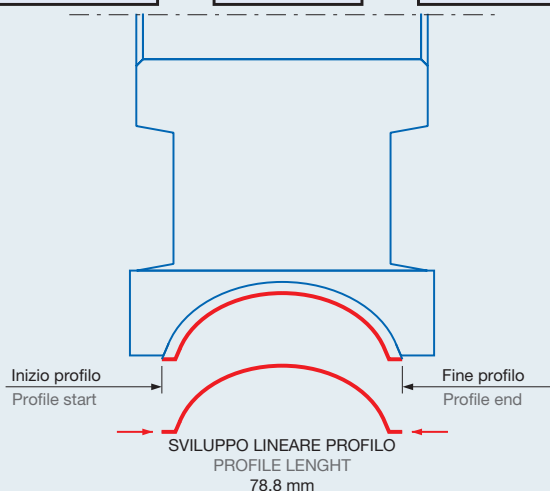
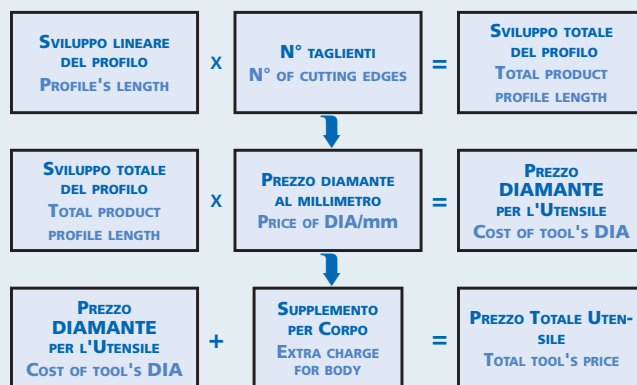
$$(78,8 \times 1 \times 10,00 \text{€}^*) + 60,00 \text{€}^* = 848,00 \text{€}^*$$

Brazed cutter with Z=2 H6 DIA

$$(78,8 \times 2 \times 10,00 \text{€}^*) + 60,00 \text{€}^* = 1.636,00 \text{€}^*$$

Brazed cutter with Z=3 H6 DIA

$$(78,8 \times 3 \times 10,00 \text{€}^*) + 60,00 \text{€}^* = 2.424,00 \text{€}^*$$



Progetto tradizionale
Old fashion design



Tecnologia innovativa
New advanced design



CARATTERISTICHE TECNOLOGICHE DELLE PUNTE CNC TECHNOLOGICAL FEATURES OF CNC ROUTER CUTTERS

■ PUNTE CNC FREUD BREVETTATE (BREVETTO NR. UD93A000248).

- I coltelli profilati sono riaffilabili fino a 6-8 volte.
- Sostituzione dei coltelli semplice e veloce.
- Per sostituire i coltelli non è necessario smontare la punta dalla macchina.
- Bloccaggio dei coltelli di assoluta sicurezza.
- Angoli di taglio mordente e assiale più elevati rispetto alle punte tradizionali garantiscono la massima finitura.
- Scarico del truciolo notevolmente agevolato rispetto alle punte tradizionali.
- Programmi completi standard e speciali per centri di lavoro CNC per produrre serramenti, porte e antine personalizzabili in base alle esigenze del Cliente.

■ NEW PATENTED FREUD CNC ROUTER BITS.

- The profiled knives can be resharpened up to 6-8 times.
- Replace worn-out knives quickly and easily.
- Knives can be replaced without removing the router bit.
- All knives have a special safety locking system.
- More extreme cutting angles (shear and hook) compared to traditional router bits, guarantee a higher quality finish.
- More efficient chip discharging compared to traditional router bits.
- Complete standard and special programs for CNC work centres for the production of customized windows, doors and cabinet doors.

CARATTERISTICHE TECNOLOGICHE TECHNOLOGICAL FEATURES



- Le mole diamantate, che presentano caratteristiche variabili per quanto riguarda la grana, le dimensioni e la forma, vengono appropriatamente combinate in gruppi per l'esecuzione di utensili che vengono così completati in pochi passaggi.
- Diamond grinding wheels have various dimensions and forms and they are appropriately combined in groups so as to produce tools which are completed in only a few stages.



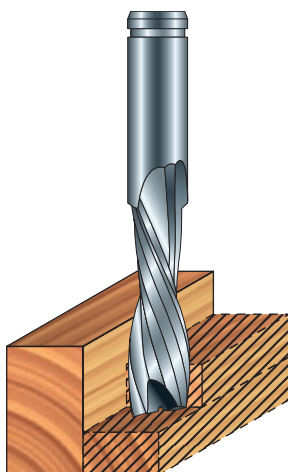
- Le punte elicoidali con diametro uguale o superiore ai 14 mm presentano un anello di sicurezza, incavato sul gambo dell'utensile, che ha lo scopo di rendere sicuro il bloccaggio in macchina durante l'utilizzo.
- Diamond grinding wheels have various dimensions and forms and they are appropriately combined in groups so as to produce tools which are completed in only a few stages.



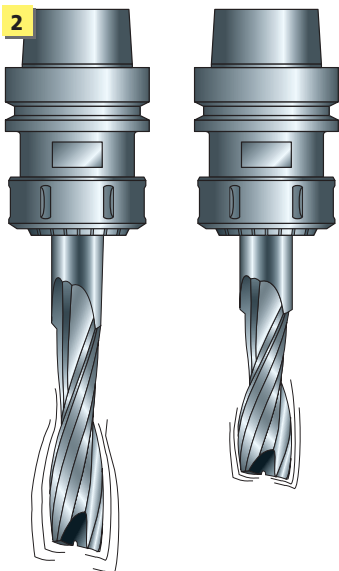
- Le punte cosiddette "levanodi" vengono realizzate con 4 mole diverse: una inclinata che conferisce il diametro finale di taglio dell'utensile, una piana per la realizzazione dello scarico, una mola a piano inclinato ed una a più inclinazioni per la cuspeide ed i rasanti.
- The so called carbide boring bits for hinges are produced with 4 different types of grinding wheels: an inclined one that confirms the final cutting diameter of the tool, a flat one for waste, a flat and inclined one and one with more inclinations for carrying out the point and the spurs.

- Le punte Freud vengono realizzate con macchine a controllo numerico, completamente automatizzate, in grado di eseguire tutti gli utensili con la massima precisione e di mantenere costante il livello di qualità per tutta la produzione.
- L'utensile che va ad asportare il materiale di cui è costituita la punta (acciaio o metallo duro) è la mola diamantata. Essa possiede una parte fortemente abrasiva costituita da una miscela a grana più o meno fine di diamante e legante, variabile in base al refrigerante utilizzato per la lavorazione. Generalmente la grana media viene utilizzata per la tornitura della punta mentre la grana più fine si può utilizzare per la realizzazione dei taglienti, in modo da conferire la massima precisione di taglio.
- Le complesse asportazioni sono possibili grazie ad una completa mobilità ed orientabilità sia della parte che regge l'utensile sia del complesso che guida la mola: il tutto si muove automaticamente seguendo dei programmi preimpostati a computer.
- Per la realizzazione delle punte elicoidali si utilizzano ben 5 mole diverse, di larghezza variabile (10÷12 mm) a seconda del diametro della punta. In base a questo, inoltre, si possono utilizzare mole inclinate di 10°÷20°, utilizzate per tornire le punte con diametro superiore. Tali combinazioni di utensili sono necessarie a causa delle superfici diversificate di questo genere di punte: basti pensare alle molte sfaccettature delle eliche, che possono essere positive (cioè spingere il truciolo verso l'alto, utile nella lavorazione di laminati o impiallacciati con rivestimenti sulla superficie inferiore del pezzo) o negative (che al contrario permettono di ottenere una migliore finitura su laminati o impiallacciati con rivestimento sulla superficie superiore del pezzo). Inoltre, la Freud propone delle punte che combinano queste due azioni: si tratta di punte come le PI07MD e le PI08MD, che presentano elica sia positiva che negativa per ottenere una buona finitura sia sulla superficie superiore che inferiore del pezzo da lavorare.
- Mole sottili (c.ca 3 mm di spessore) vengono utilizzate per la realizzazione dei canaletti più difficili, come quello che tecnicamente si chiama "spoglia superiore frontale".
- Mole a doppia fascia, cioè con una parte abrasiva a grana media e una parte a grana fine vengono utilizzate in casi particolari quali la rettifica o per punte a taglienti dritti.
- Le parti seghettate delle punte con rompitrucciolo (vedi gli articoli PI04MD, PI04ME, PI06MD) vengono realizzate utilizzando apposite mole con superficie abrasiva a scanalature di passo variabile (il passo viene scelto in base al diametro della punta).
- All Freud router bits are produced using automatic, numerically controlled machinery, which make sure that each tool maintains a constant quality level throughout the entire production phase.
- The tool used to grind the material of which the router bit is composed (steel, hard metal) is known as a diamond grinding wheel. This component possesses a very abrasive side, made up of a mixture of diamond grain bonded together and which varies second to the type of coolant used. Generally a medium grain is used during the production of the actual router bit and a finer grain can be used to produce the cutters so as to confirm maximum precision cutting.
- The complicated sharpening process is possible thanks to the great mobility and orientability of both the appliance that holds the router bit and that which guides the grinding wheel. All this is automatically carried out with a pre-imposed computer program.
- Solid carbide spiral router bits are produced with 5 different types of grinding wheels, with variable widths (10÷12 mm) second to the router bits diameter. Based on this, it is possible to use inclined grinding wheels, with an inclination of 10°÷20°, used to turn router bits with a larger diameter. These combinations are necessary because of the many facets of these type of router bits. The spirals can be either right or left: right spirals push the chips towards the surface, useful for working laminates or veneered materials with a bottom covered surface. Left spirals are good for finishing laminates or veneered materials with a top covered surface. Furthermore Freud proposes router bits which combine both these actions, such as the PI07MD and the PI08MD which have both left and right spirals, so as to obtain a good finish on both sides of the workpiece.
- Thin grinding wheels (around 3 mm thick) are used to carry out smaller grooves, where sharpening is more difficult, such as what is technically called the top front clearance.
- A grinding wheel with a double band with medium grain on one side and fine grain on the other is used in particular cases such as rectifying jobs and on straight cutters.
- The serrated parts of the router bit with chip breaker (see articles PI04MD, PI04ME and PI06MD) are produced using grinding wheels with an abrasive grooved surface, with variable pitch (the pitch is based on the diameter of the router bit).
- Spiral router bits with a 14 mm diameter or over, have a safety ring incision on to its shank, so as to render the blocking of the tool more safe when applying it to the machine.

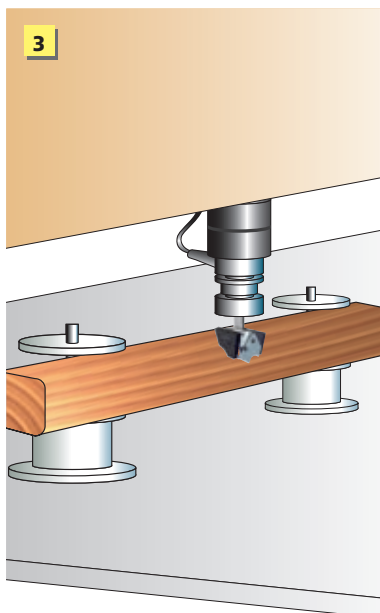
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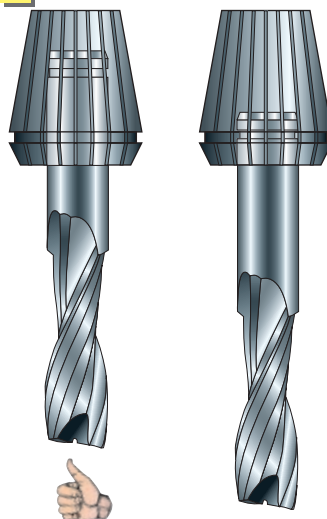
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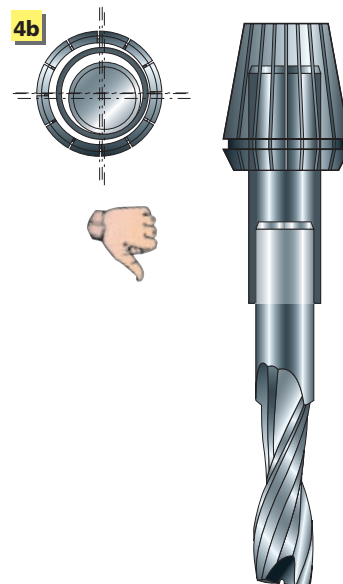
Per ridurre le vibrazioni dell'utensile, che potrebbero compromettere la finitura, nonché causare danni al pezzo da lavorare ed all'utensile stesso, è necessario rispettare le seguenti condizioni:

- Per grosse asportazioni, eseguire più passate e procedere con avanzamento e numero di giri proporzionati alla profondità del taglio da eseguire (Fig. 1).
- A parità di diametro, un utensile con lunghezza utile inferiore vibra di meno (Fig. 2).
- Controllare periodicamente la macchina (spec. guide e cuscinetti), verificando che non ci siano problemi di eccentricità, per evitare che si generino deleterie vibrazioni dell'albero, particolarmente pericolose per utensili con riporti in diamante.
- Bloccare accuratamente il pezzo al piano di lavoro (Fig. 3).
- Rispettare la lunghezza di fissaggio minima del gambo e preferire mandrini corti, al fine di minimizzare gli errori di eccentricità (Fig. 4a). Per lo stesso motivo, in generale vanno evitati i prolungamenti (Fig. 4b).
- Gli utensili a taglienti sfalsati tendono a lasciare dei segni a causa delle piccole tolleranze di eccentricità (Fig. 5).
- Per individuare difetti di eccentricità nell'utensile o nel mandrino: ruotare di 90° l'utensile nel mandrino, eseguire ancora la fresatura ed osservare i segni lasciati sul pezzo. Se questi restano invariati rispetto alla fresatura precedente, l'utensile è difettoso, se invece i segni variano, è probabile che l'errore risieda nel mandrino.
- Non superare il numero massimo di giri marcato sugli utensili. Con velocità di avanzamento troppo elevate o profondità di taglio eccessive si rischia la rottura dell'utensile (spec. frese a candela).
- Per evitare danneggiamenti alle frese a candela, si consiglia di controllare che le superfici di fissaggio del mandrino e dell'utensile siano pulite e non presentino imperfezioni (Fig. 6).
- Scegliere sempre punte con dimensioni appropriate al tipo di lavorazione da eseguire.
- Per evitare pericolosi contraccolpi si consiglia di fissare al piano di lavoro eventuali sfridi e di fresare completamente i piccoli scarti formati con la lavorazione, eseguendo più passate (Figg. 7 e 8).
- Assicurarsi che il pezzo da lavorare sia fissato ad un supporto di dimensioni adeguate. Soprattutto nel caso di punte per pantografo con taglienti in diamante è necessario fissare bene il pezzo, provvedendo ampie superfici per il fissaggio a vuoto.

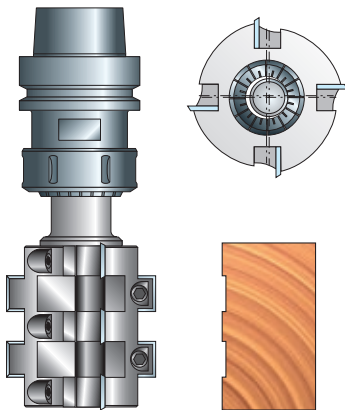
4a



4b



5



To reduce vibrations from the router bit, which can compromise the finish and cause damage to both the tool and the workpiece, it is necessary to respect the following conditions:

- For large removals, carry out more passes or proceed with an advancement and RPM rate in proportion to the depth of cut (Fig. 1).
- A router bit with a shorter cutting height vibrates less than a router bit with the same diameter but with a longer cutting height (Fig. 2).
- Control your machine regularly (especially guides and ball bearings), making sure that there are no eccentricity problems, so as to avoid the arbor from vibrating hazardously, particularly dangerous for router bits with tips in PCD.
- Accurately block the workpiece to the work table surface (Fig. 3).
- Respect the minimum fixing length of the shank with a preference to short chucks, with the aim of reducing eccentricity errors (Fig. 4a).

For the same reason the use of extensions are generally avoided (Fig. 4b).

- Router bits with staggered cutters tend to leave marks caused by small eccentricity tolerances (Fig. 5).

- To identify eccentricity defects in a router bit or a chuck: rotate the router bit by 90° in the chuck, carry out a moulding and observe the marks left on the workpiece. If they are invaried with respect to the previous moulding, then the tool is defective, if instead the marks vary, then it is possible that the error lies in the chuck.

- Do not exceed the maximum RPM limit marked on the tool. With too high an advancement rate, or an excessive cutting depth, there is the possibility that the tool may break (especially spiral router bits).

- To avoid damaging router bits, we suggest controlling if the fixing surface of the chuck and the router bit are clean and that there are no imperfections (Fig. 6).

- Always choose router bits with the appropriate dimensions for the kind of work to carry out.

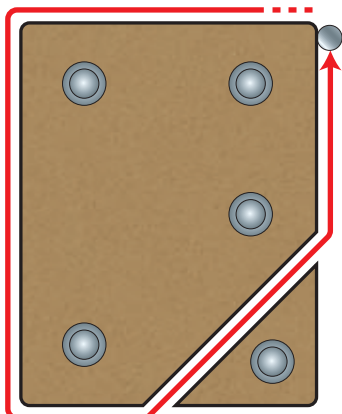
- To avoid dangerous kick backs, we suggest fixing a spare piece of material and moulding small parts of waste which have accumulated during the working process, by carrying out more passes (Fig. 7 - 8).

- Make sure that the workpiece is properly fixed to a support with adequate dimensions. In the case of all router bits, but especially those with tips in PCD for overhead CNC router machines, it is necessary to fix the piece properly, preparing an abundant space when blocking by means of vacuum.

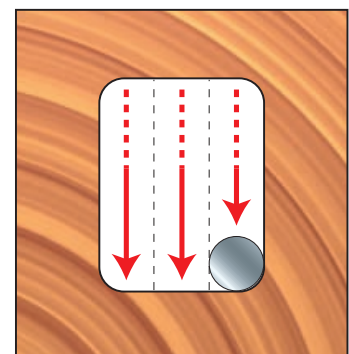
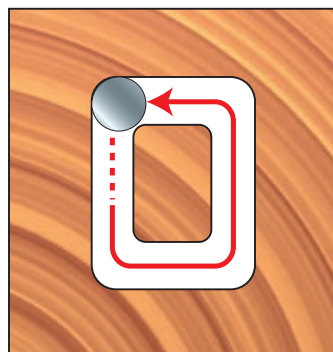
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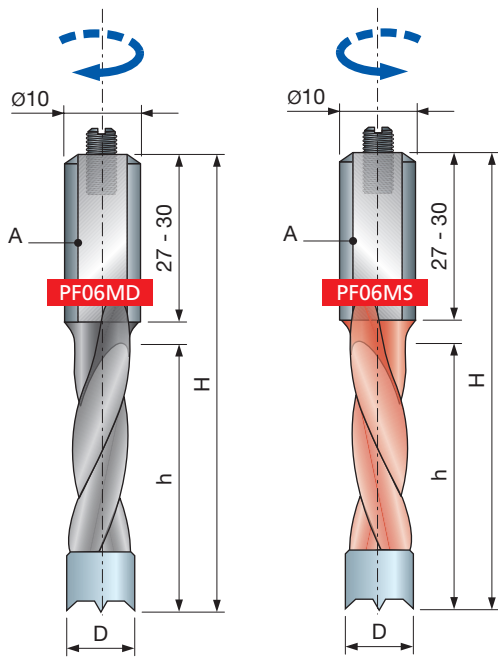
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PF06MD PF06MS

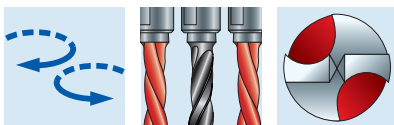
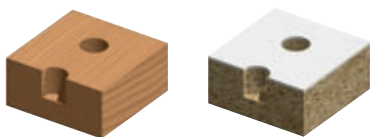
PUNTE PER FORATRICI MULTIPLE - FORI CIECHI

CARBIDE BITS FOR MULTIBORING MACHINES - BLIND HOLES



■ Per macchine foratrici con l'uso di mandrini o adattatori. Adatta all'esecuzione di fori ciechi su legno massiccio, derivati e laminati. Cuspide in HW, punta di centraggio e vite di regolazione M5x10 mm. Attacco Ø10x27 mm o Ø10x30 mm.

■ For multiboring machines with chucks or adapters. Suitable for blind holes on solid wood and laminates. HW tip with center point and M5x10 mm adjusting screw. Ø10x27 mm or Ø10x30 mm shank.



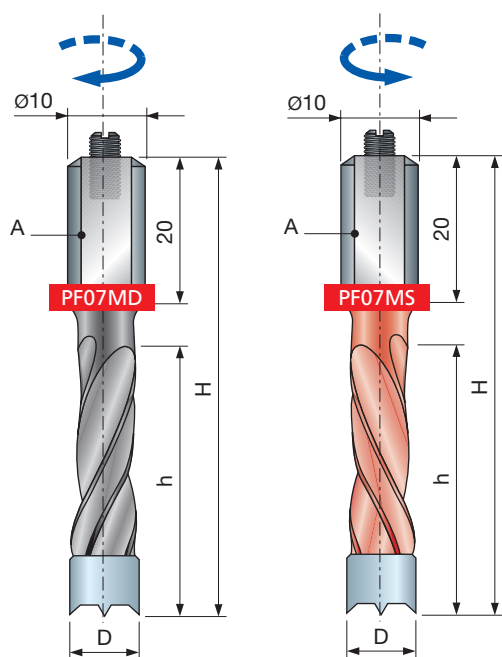
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5	27	57,5	10x27		PF06MD AA3
5	35	70	10x30		PF06MD AC3
5	42	77	10x30		PF06MD AD3
6	27	57,5	10x27		PF06MD BA3
6	35	70	10x30		PF06MD BC3
6	42	77	10x30		PF06MD BD3
7	27	57,5	10x27		PF06MD CA3
7	35	70	10x30		PF06MD CC3
7	42	77	10x30		PF06MD CD3
8	27	57,5	10x27		PF06MD DA3
8	35	70	10x30		PF06MD DC3
8	42	77	10x30		PF06MD DD3
9	27	57,5	10x27		PF06MD EA3
9	35	70	10x30		PF06MD EC3
10	27	57,5	10x27		PF06MD FA3
10	35	70	10x30		PF06MD FC3
10	42	77	10x30		PF06MD FD3
12	27	57,5	10x27		PF06MD GA3
12	35	70	10x30		PF06MD GC3
12	42	77	10x30		PF06MD GD3
14	27	57,5	10x27		PF06MD HA3
14	35	70	10x30		PF06MD HC3
15	27	57,5	10x27		PF06MD IA3
15	35	70	10x30		PF06MD IC3
16	27	57,5	10x27		PF06MD KA3
16	35	70	10x30		PF06MD KC3
4	27	57,5	10x27		PF06MS ZA3
5	27	57,5	10x27		PF06MS AA3
5	35	70	10x30		PF06MS AC3
5	42	77	10x30		PF06MS AD3
6	27	57,5	10x27		PF06MS BA3
6	35	70	10x30		PF06MS BC3
6	42	77	10x30		PF06MS BD3
7	27	57,5	10x27		PF06MS CA3
7	35	70	10x30		PF06MS CC3
7	42	77	10x30		PF06MS CD3
8	27	57,5	10x27		PF06MS DA3
8	35	70	10x30		PF06MS DC3
8	42	77	10x30		PF06MS DD3
9	27	57,5	10x27		PF06MS EA3
9	35	70	10x30		PF06MS EC3
10	27	57,5	10x27		PF06MS FA3
10	35	70	10x30		PF06MS FC3
10	42	77	10x30		PF06MS FD3
12	27	57,5	10x27		PF06MS GA3
12	35	70	10x30		PF06MS GC3
12	42	77	10x30		PF06MS GD3
14	27	57,5	10x27		PF06MS HA3
14	35	70	10x30		PF06MS HC3
15	27	57,5	10x27		PF06MS IA3
15	35	70	10x30		PF06MS IC3
16	27	57,5	10x27		PF06MS KA3
16	35	70	10x30		PF06MS KC3

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Vite / Screw	 M5x10	2602M DC9

PF07MD PF07MS

PUNTE PER FORATRICI MULTIPLE - FORI CIECHI

CARBIDE BITS FOR MULTIBORING MACHINES - BLIND HOLES

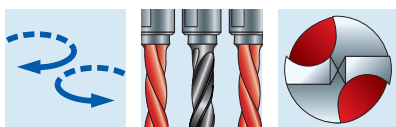
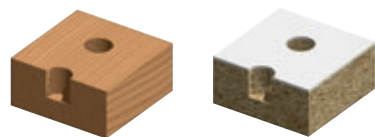


■ Per macchine foratrici con l'uso di mandrini o adattatori. Adatta all'esecuzione di fori ciechi su legno massiccio, derivati e laminati. Cuspide in HW, punta di centraggio e vite di regolazione M5x10 mm. Attacco Ø10x20 mm.

■ For multiboring machines with chucks or adapters. Suitable for blind holes on solid wood and laminates. HW tip with center point and M5x10-mm adjusting screw. Ø10x20 mm shank.

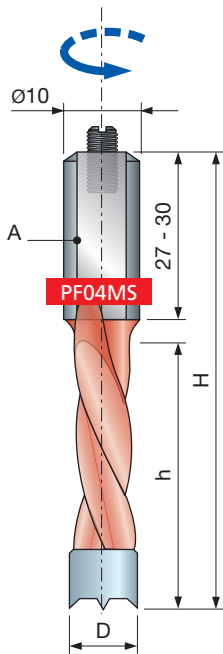
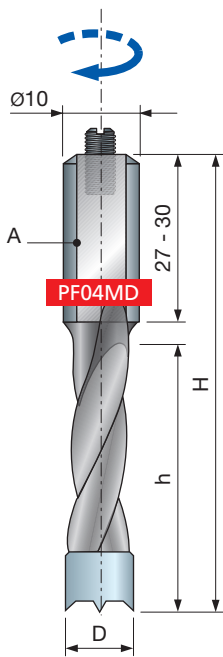
D	h	H	A	Z	Codice
mm	mm	mm	mm		Code
4	30	57,5	10x20		PF07MD ZA3
5	30	57,5	10x20		PF07MD AA3
5	43	70	10x20		PF07MD AC3
6	30	57,5	10x20		PF07MD BA3
6	43	70	10x20		PF07MD BC3
7	30	57,5	10x20		PF07MD CA3
7	43	70	10x20		PF07MD CC3
8	30	57,5	10x20		PF07MD DA3
8	43	70	10x20		PF07MD DC3
9	30	57,5	10x20		PF07MD EA3
9	43	70	10x20		PF07MD EC3
10	30	57,5	10x20		PF07MD FA3
10	43	70	10x20		PF07MD FC3
12	30	57,5	10x20		PF07MD GA3
12	43	70	10x20		PF07MD GC3
14	30	57,5	10x20		PF07MD HA3
14	43	70	10x20		PF07MD HC3
15	30	57,5	10x20		PF07MD IA3
15	43	70	10x20		PF07MD IC3
16	30	57,5	10x20		PF07MD KA3
16	43	70	10x20		PF07MD KC3
4	30	57,5	10x20		PF07MS ZA3
5	30	57,5	10x20		PF07MS AA3
5	43	70	10x20		PF07MS AC3
6	30	57,5	10x20		PF07MS BA3
6	43	70	10x20		PF07MS BC3
7	30	57,5	10x20		PF07MS CA3
7	43	70	10x20		PF07MS CC3
8	30	57,5	10x20		PF07MS DA3
8	43	70	10x20		PF07MS DC3
9	30	57,5	10x20		PF07MS EA3
9	43	70	10x20		PF07MS EC3
10	30	57,5	10x20		PF07MS FA3
10	43	70	10x20		PF07MS FC3
12	30	57,5	10x20		PF07MS GA3
12	43	70	10x20		PF07MS GC3
14	30	57,5	10x20		PF07MS HA3
14	43	70	10x20		PF07MS HC3
15	30	57,5	10x20		PF07MS IA3
15	43	70	10x20		PF07MS IC3
16	30	57,5	10x20		PF07MS KA3
16	43	70	10x20		PF07MS KC3

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Vite / Screw	 M5x10	2602M DC9



PF04MD PF04MS

PUNTE CON RASANTI RAGGIATI PER FORATRICI MULTIPLE - FORI CIECHI CARBIDE BITS WITH ROUND SPURS FOR MULTIBORING MACHINES

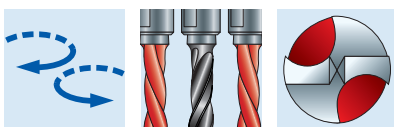
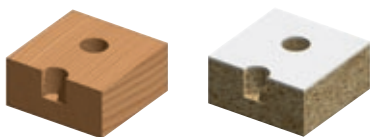
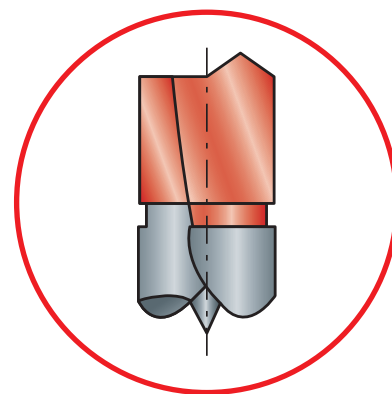


D	h	H	A	Z	Codice
mm	mm	mm	mm		Code
5	30,5	57,5	10x27		PF04MD AA3
5	40	70	10x30		PF04MD AC3
6	30,5	57,5	10x27		PF04MD BA3
6	40	70	10x30		PF04MD BC3
8	30,5	57,5	10x27		PF04MD DA3
8	40	70	10x30		PF04MD DC3
10	30,5	57,5	10x27		PF04MD FA3
10	40	70	10x30		PF04MD FC3
5	30,5	57,5	10x27		PF04MS AA3
5	40	70	10x30		PF04MS AC3
6	30,5	57,5	10x27		PF04MS BA3
6	40	70	10x30		PF04MS BC3
8	30,5	57,5	10x27		PF04MS DA3
8	40	70	10x30		PF04MS DC3
10	30,5	57,5	10x27		PF04MS FA3
10	40	70	10x30		PF04MS FC3

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Vite / Screw	 M5x10	2602M DC9

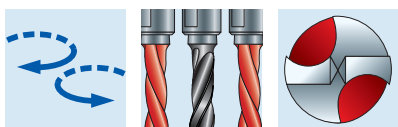
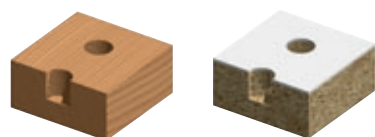
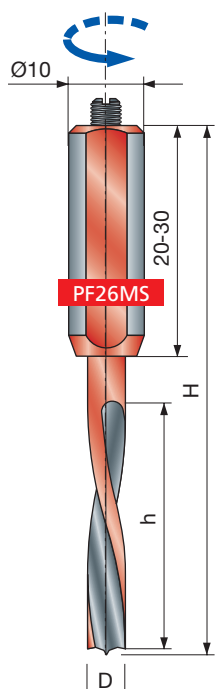
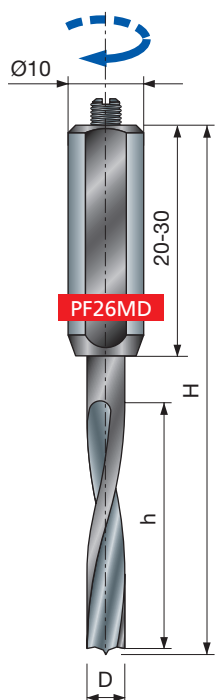
- Da montare su macchine foratrici con l'impiego di mandrini o adattatori, per l'esecuzione di fori ciechi su laminati e simili. I rasanti raggiati evitano la scheggiatura del rivestimento. Attacco Ø10 x 27 mm o Ø10 x 30 mm.
- Use on drilling machines with chucks or adapters to make holes on laminated and such. The round spurs avoid splintering. Ø10 x 27 mm or Ø10 x 30 mm shank.

GEOMETRIA DELLA PUNTA GEOMETRY OF THE TIP



PF26MD PF26MS

PUNTE INTEGRALI PER FORATRICI MULTIPLE - FORI CIECHI SOLID CARBIDE BITS FOR MULTIBORING MACHINES - BLIND HOLES



D	h	H	A	Z	Codice
mm	mm	mm	mm		Code
4	35	70	10x30		PF26MD ZC3
5	35	70	10x30		PF26MD AC3
6	35	70	10x30		PF26MD BC3
8	35	70	10x20		PF26MD DC3
4	35	70	10x30		PF26MS ZC3
5	35	70	10x30		PF26MS AC3
6	35	70	10x30		PF26MS BC3
8	35	70	10x20		PF26MS DC3

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Vite / Screw	 M5x10	2602M DC9

■ Per macchine foratrici con l'uso di mandrini o adattatori. Adatta all'esecuzione di fori ciechi su laminati. In HW, con punta di centraggio e vite di regolazione M5 x 10 mm. Attacco Ø10 x 20 mm o Ø10 x 30 mm.

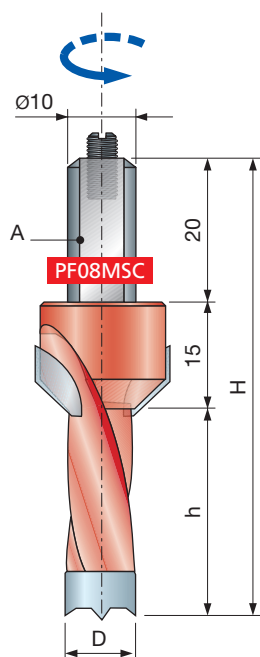
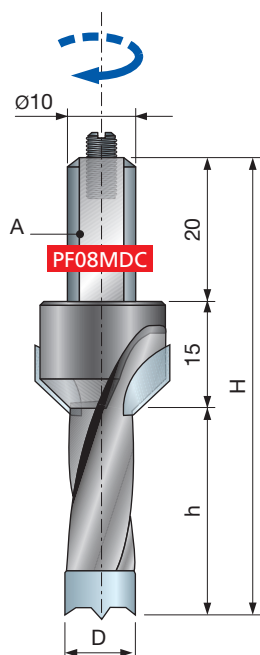
N.B. Per dimensioni diverse, chiedere preventivo.

■ For multiboring machines with chucks or adapters. Suitable for blind holes or laminates. In HW with central point and M5 x 10 mm adjusting screw. Ø10 x 20 mm or Ø10 x 30 mm shank.

Note: for dimensions not included, ask for a quote.

PF08MDC PF08MSC

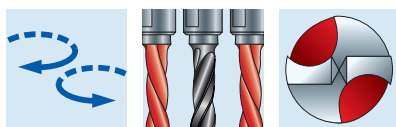
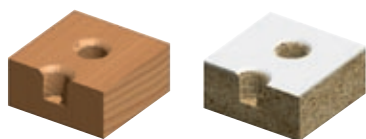
PUNTE PER FORATRICI MULTIPLE CON SVASATORE CARBIDE BORING BITS FOR HOLES WITH COUNTERSINK



D	h	H	A	Z	Codice Code
5	15	50	10x20		PF08MDCAB3
5	20	55	10x20		PF08MDCAC3
6	15	50	10x20		PF08MDCBB3
6	20	55	10x20		PF08MDCBC3
8	15	50	10x20		PF08MDCCB3
8	20	55	10x20		PF08MDCCC3
10	15	50	10x20		PF08MDCDB3
10	20	55	10x20		PF08MDCDC3
5	15	50	10x20		PF08MSCAB3
5	20	55	10x20		PF08MSCAC3
6	15	50	10x20		PF08MSCBB3
6	20	55	10x20		PF08MSCBC3
8	15	50	10x20		PF08MSCCB3
8	20	55	10x20		PF08MSCCC3
10	15	50	10x20		PF08MSCDB3
10	20	55	10x20		PF08MSCDC3

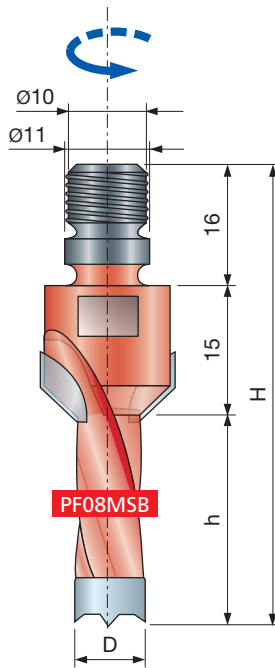
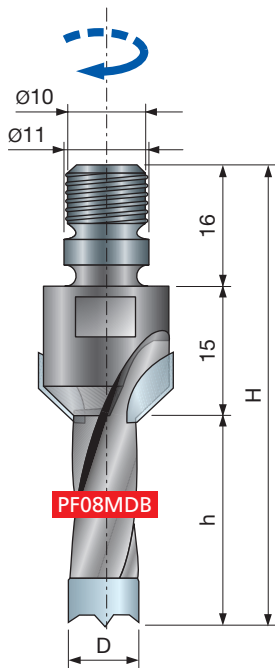
Parti di ricambio Spare parts	Dimensioni Dimensions	Codice Code
Vite / Screw	 M5x10	2602M DC9

- Per macchine foratrici con l'uso di mandrini o adattatori. Adatta all'esecuzione di fori ciechi svasati su legno massiccio, derivati e laminati. Cuspide in HW, punta di centraggio e vite di regolazione M5x10 mm. Attacco Ø10x20 mm.
- For multiboring machines with chucks or adapters. Suitable for blind holes with countersinks on solid wood and laminates. HW tip with center point and M5x10 mm adjusting screw. Ø10x20 mm shank.



PF08MDB PF08MSB

PUNTE PER FORATRICI MULTIPLE CON SVASATORE CARBIDE BORING BITS FOR HOLES WITH COUNTERSINK



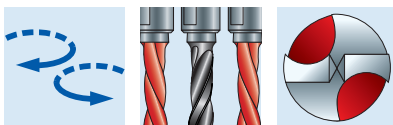
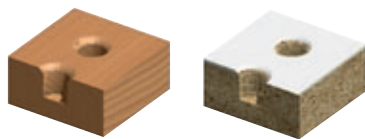
D	h	H	A	Z	Codice Code
mm	mm	mm	mm		
5	30	61			PF08MDBAB3
5	40	71			PF08MDBAC3
5	50	81			PF08MDBAD3
6	30	61			PF08MDBBB3
6	40	71			PF08MDBBC3
6	50	81			PF08MDBBD3
8	30	61			PF08MDBCB3
8	40	71			PF08MDBCC3
8	50	81			PF08MDBCD3
10	30	61			PF08MDBDB3
10	40	71			PF08MDBDC3
10	50	81			PF08MDBDD3
12	30	61			PF08MDBEB3
12	40	71			PF08MDBEC3
12	50	81			PF08MDBED3
14	30	61			PF08MDBFB3
14	40	71			PF08MDBFC3
14	50	81			PF08MDBFD3
5	30	61			PF08MSBAB3
5	40	71			PF08MSBAC3
5	50	81			PF08MSBAD3
6	30	61			PF08MSBBB3
6	40	71			PF08MSBBC3
6	50	81			PF08MSBBD3
8	30	61			PF08MSBCB3
8	40	71			PF08MSBCC3
8	50	81			PF08MSBCD3
10	30	61			PF08MSBDB3
10	40	71			PF08MSBDC3
10	50	81			PF08MSBDD3
12	30	61			PF08MSBEB3
12	40	71			PF08MSBEC3
12	50	81			PF08MSBED3
14	30	61			PF08MSBFB3
14	40	71			PF08MSBFC3
14	50	81			PF08MSBFD3

Attacchi per foratrici:

Shanks for:

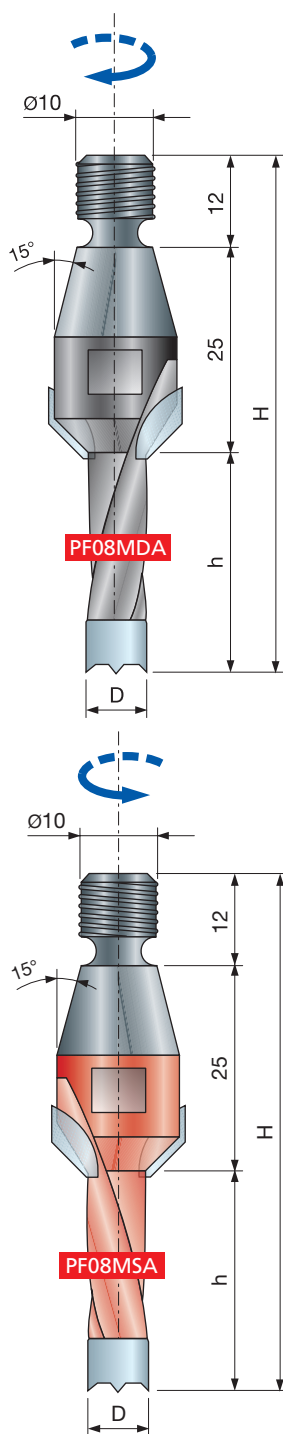
Alberti, Balestrini, Biese, Busellato, Gessner,
Morbidelli, Torwegge, Weeke

- Per l'esecuzione su macchine foratrici di fori ciechi svasati su legno, suoi derivati, laminati e simili. Cuspide in HW e punta di centraggio.
- For multiboring machines. Suitable for blind holes with countersinks on solid wood and laminates. HW tip with center point.



PF08MDA PF08MSA

PUNTE PER FORATRICI MULTIPLE CON SVASATORE CARBIDE BORING BITS FOR HOLES WITH COUNTERSINK



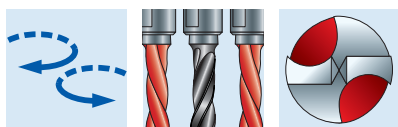
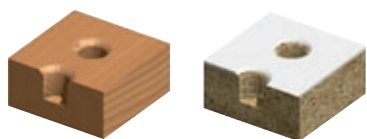
D	h	H	A	Z	Codice Code
mm	mm	mm	mm		
5	30	67			PF08MDAAB3
5	40	77			PF08MDAAC3
5	50	87			PF08MDAAD3
6	30	67			PF08MDABB3
6	40	77			PF08MDABC3
6	50	87			PF08MDABD3
8	30	67			PF08MDACB3
8	40	77			PF08MDACC3
8	50	87			PF08MDACD3
10	30	67			PF08MDADB3
10	40	77			PF08MDADC3
10	50	87			PF08MDADD3
12	30	67			PF08MDAEB3
12	40	77			PF08MDAEC3
12	50	87			PF08MDAED3
14	30	67			PF08MDAFB3
14	40	77			PF08MDAFC3
14	50	87			PF08MDAFD3
5	30	67			PF08MSAAB3
5	40	77			PF08MSAAC3
5	50	87			PF08MSAAD3
6	30	67			PF08MSABB3
6	40	77			PF08MSABC3
6	50	87			PF08MSABD3
8	30	67			PF08MSACB3
8	40	77			PF08MSACC3
8	50	87			PF08MSACD3
10	30	67			PF08MSADB3
10	40	77			PF08MSADC3
10	50	87			PF08MSADD3
12	30	67			PF08MSAEB3
12	40	77			PF08MSAEC3
12	50	87			PF08MSAED3
14	30	67			PF08MSAFB3
14	40	77			PF08MSAFC3
14	50	87			PF08MSAFD3

Attacchi per foratrici:

Shanks for:

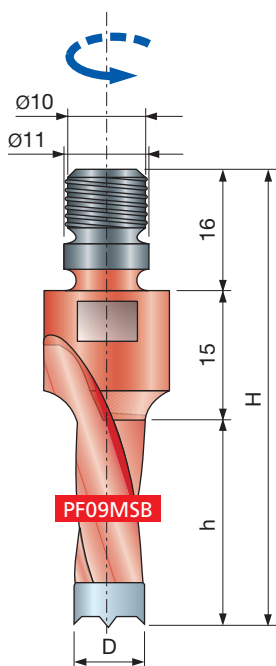
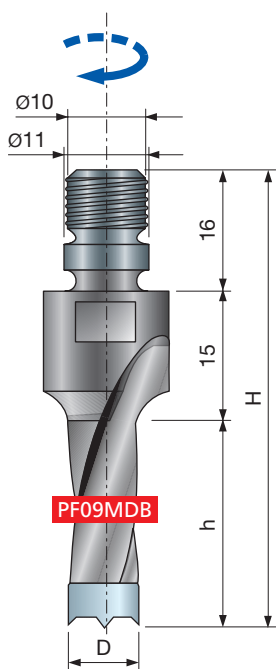
Alberti, Balestrini, Bilek, Busellato, Ompec, Reimall,
Schlicher, Tanzani, Viciani, Vitap, Weingärter

- Per l'esecuzione su macchine foratrici di fori ciechi svasati su legno, suoi derivati, laminati e simili. Cuspide in HW e punta di centraggio.
- For multiboring machines. Suitable for blind holes with countersinks on solid wood and laminates. HW tip with center point.



PF09MDB PF09MSB

PUNTE PER FORATRICI MULTIPLE SENZA SVASATORE CARBIDE BORING BITS FOR HOLES WITHOUT COUNTERSINK



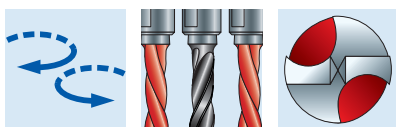
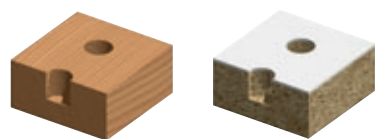
D	h	H	A	Z	Codice Code
mm	mm	mm	mm		
5	30	61			PF09MDBAB3
5	40	71			PF09MDBAC3
5	50	81			PF09MDBAD3
6	30	61			PF09MDBBB3
6	40	71			PF09MDBBC3
6	50	81			PF09MDBBD3
8	30	61			PF09MDBCB3
8	40	71			PF09MDBCC3
8	50	81			PF09MDBCD3
10	30	61			PF09MDBDB3
10	40	71			PF09MDBDC3
10	50	81			PF09MDBDD3
12	30	61			PF09MDBEB3
12	40	71			PF09MDBEC3
12	50	81			PF09MDBED3
14	30	61			PF09MDBFB3
14	40	71			PF09MDBFC3
14	50	81			PF09MDBFD3
5	30	61			PF09MSBAB3
5	40	71			PF09MSBAC3
5	50	81			PF09MSBAD3
6	30	61			PF09MSBBB3
6	40	71			PF09MSBBC3
6	50	81			PF09MSBBD3
8	30	61			PF09MSBCB3
8	40	71			PF09MSBCC3
8	50	81			PF09MSBCD3
10	30	61			PF09MSBDB3
10	40	71			PF09MSBDC3
10	50	81			PF09MSBDD3
12	30	61			PF09MSBEB3
12	40	71			PF09MSBEC3
12	50	81			PF09MSBED3
14	30	61			PF09MSBFB3
14	40	71			PF09MSBFC3
14	50	81			PF09MSBFD3

Attacchi per foratrici:

Shanks for:

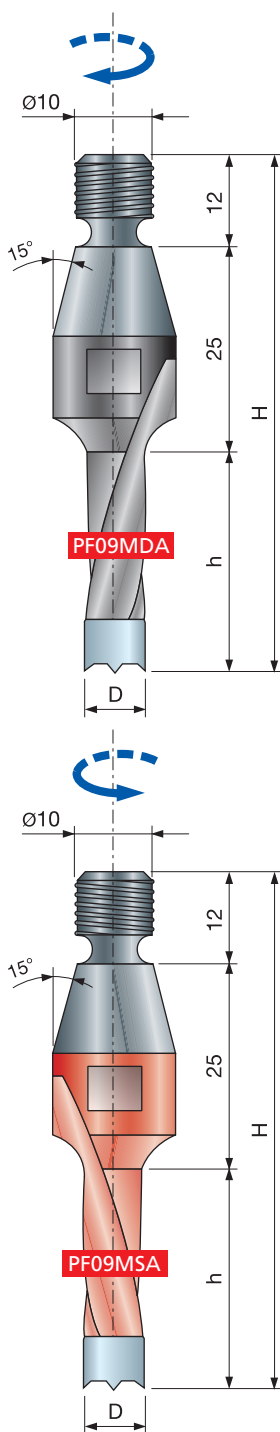
Alberti, Balestrini, Biesse, Busellato,
Gessner, Morbidelli, Torwegge, Weeke

- Per l'esecuzione su macchine foratrici di fori ciechi senza svasature su legno, suoi derivati, laminati e simili. Cuspide in HW e punta di centraggio.
- For multiboring machines. Suitable for blind holes without countersinks on solid wood and laminates. HW tip with center point.



PF09MDA PF09MSA

PUNTE PER FORATRICI MULTIPLE SENZA SVASATORE CARBIDE BORING BITS FOR HOLES WITHOUT COUNTERSINK



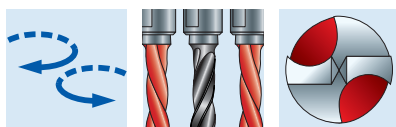
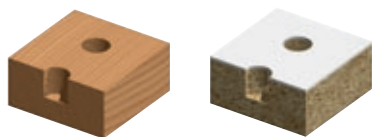
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6	50	87			PF09MDABD3
8	30	67			PF09MDACB3
8	40	77			PF09MDACC3
8	50	87			PF09MDACD3
10	30	67			PF09MDADB3
10	40	77			PF09MDADC3
10	50	87			PF09MDADD3
12	30	67			PF09MDAEB3
12	40	77			PF09MDAEC3
12	50	87			PF09MDAED3
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12	30	67			PF09MSAEB3
12	40	77			PF09MSAEC3
12	50	87			PF09MSAED3
14	30	67			PF09MSAFB3
14	40	77			PF09MSAFC3
14	50	87			PF09MSAFD3

Attacchi per foratrici:

Shanks for:

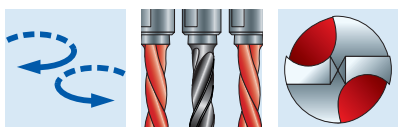
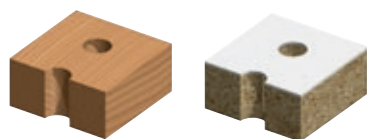
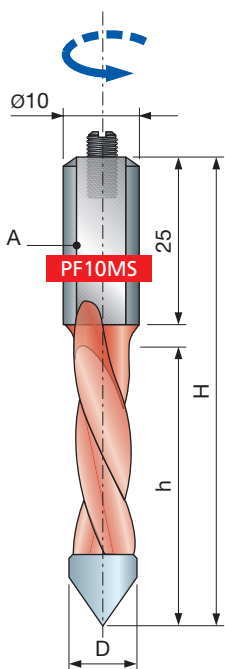
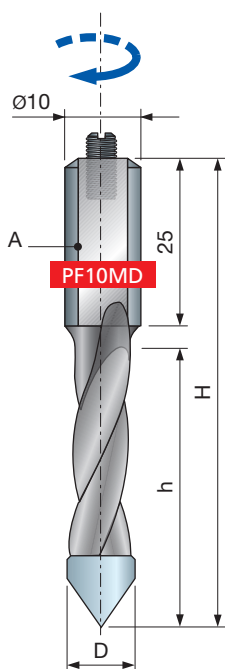
Alberti, Balestrini, Bilek, Busellato, Ompec, Reimall,
Schlicher, Tanzani, Viciani, Vitap, Weingärter

- Per l'esecuzione su macchine foratrici di fori ciechi senza svasature su legno, suoi derivati, laminati e simili. Cuspide in HW e punta di centraggio.
- For multiboring machines. Suitable for blind holes without countersinks on solid wood and laminates. HW tip with center point.



PF10MD PF10MS

PUNTE PER FORATRICI MULTIPLE - FORI PASSANTI CARBIDE BITS FOR MULTIBORING MACHINES - THROUGH HOLES



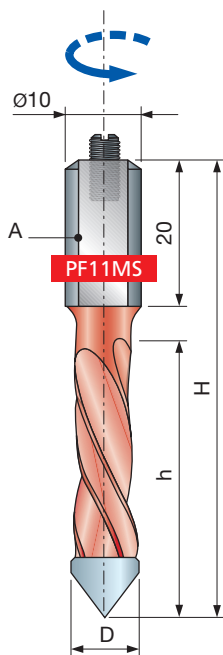
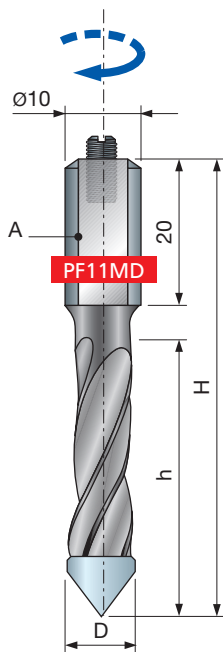
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5	35	70	10x25		PF10MD AC3
6	27	57,5	10x25		PF10MD BA3
6	35	70	10x25		PF10MD BC3
7	27	57,5	10x25		PF10MD CA3
7	35	70	10x25		PF10MD CC3
8	27	57,5	10x25		PF10MD DA3
8	35	70	10x25		PF10MD DC3
10	27	57,5	10x25		PF10MD EA3
10	35	70	10x25		PF10MD EC3
12	27	57,5	10x25		PF10MD GA3
12	35	70	10x25		PF10MD GC3
4	27	57,5	10x25		PF10MS ZA3
5	27	57,5	10x25		PF10MS AA3
5	35	70	10x25		PF10MS AC3
6	27	57,5	10x25		PF10MS BA3
6	35	70	10x25		PF10MS BC3
7	27	57,5	10x25		PF10MS CA3
7	35	70	10x25		PF10MS CC3
8	27	57,5	10x25		PF10MS DA3
8	35	70	10x25		PF10MS DC3
10	27	57,5	10x25		PF10MS EA3
10	35	70	10x25		PF10MS EC3
12	27	57,5	10x25		PF10MS GA3
12	35	70	10x25		PF10MS GC3

Parti di ricambio Spare parts	Dimensioni Dimensions	Codice Code
Vite / Screw	 M5x10	2602M DC9

- Per macchine foratrici con l'uso di mandrini o adattatori. Adatta all'esecuzione di fori passanti su legno massiccio, derivati e laminati. Cuspide in HW e vite di regolazione M5x10 mm. Attacco Ø10x25 mm.
- For multiboring machines with chucks or adapters. Suitable for through holes on solid wood and laminates. HW tip and M5x10 mm adjusting screw. Ø10x25 mm shank.

PF11MD PF11MS

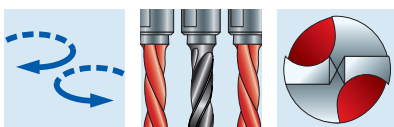
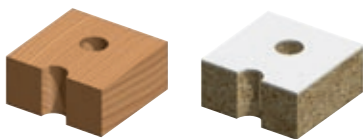
PUNTE PER FORATRICI MULTIPLE - FORI PASSANTI CARBIDE BITS FOR MULTIBORING MACHINES - THROUGH HOLES



D	h	H	A	Z	Codice
mm	mm	mm	mm		Code
5	30	57,5	10x20		PF11MD AA3
5	43	70	10x20		PF11MD AC3
6	30	57,5	10x20		PF11MD BA3
6	43	70	10x20		PF11MD BC3
8	30	57,5	10x20		PF11MD DA3
8	43	70	10x20		PF11MD DC3
10	30	57,5	10x20		PF11MD FA3
10	43	70	10x20		PF11MD FC3
12	30	57,5	10x20		PF11MD GA3
12	43	70	10x20		PF11MD GC3
5	30	57,5	10x20		PF11MS AA3
5	43	70	10x20		PF11MS AC3
6	30	57,5	10x20		PF11MS BA3
6	43	70	10x20		PF11MS BC3
8	30	57,5	10x20		PF11MS DA3
8	43	70	10x20		PF11MS DC3
10	30	57,5	10x20		PF11MS FA3
10	43	70	10x20		PF11MS FC3
12	30	57,5	10x20		PF11MS GA3
12	43	70	10x20		PF11MS GC3

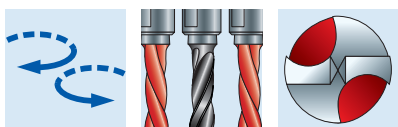
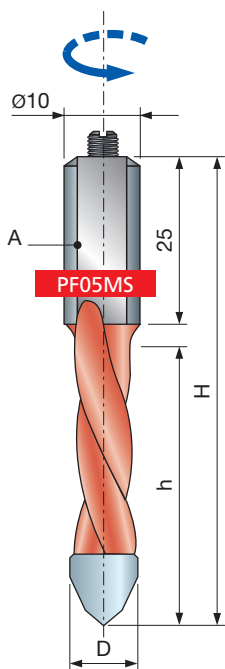
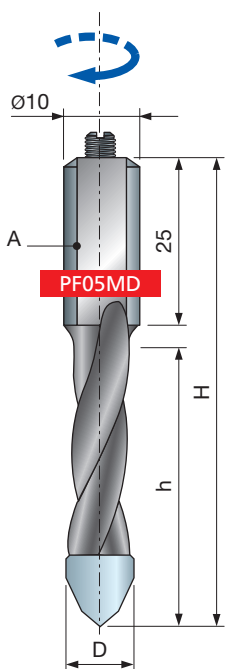
Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Vite / Screw	 M5x10	2602M DC9

- Per macchine foratrici con l'uso di mandrini o adattatori. Adatta all'esecuzione di fori passanti su legno massiccio, derivati e laminati. Cuspide in HW e vite di regolazione M5x10 mm. Attacco Ø10x20 mm.
- For multiboring machines with chucks or adapters. Suitable for through holes on solid wood and laminates. HW tip and M5x10 mm adjusting screw. Ø10x20 mm shank.



PF05MD PF05MS

PUNTE PER FORATRICI MULTIPLE - FORI PASSANTI CARBIDE BITS FOR MULTIBORING MACHINES - THROUGH HOLES



D	h	H	A	Z	Codice
mm	mm	mm	mm		Code
5	32,5	57,5	10x25		PF05MD AA3
5	45	70	10x25		PF05MD AC3
6	32,5	57,5	10x25		PF05MD BA3
6	45	70	10x25		PF05MD BC3
8	32,5	57,5	10x25		PF05MD DA3
8	45	70	10x25		PF05MD DC3
10	32,5	57,5	10x25		PF05MD FA3
10	45	70	10x25		PF05MD FC3
5	32,5	57,5	10x25		PF05MS AA3
5	45	70	10x25		PF05MS AC3
6	32,5	57,5	10x25		PF05MS BA3
6	45	70	10x25		PF05MS BC3
8	32,5	57,5	10x25		PF05MS DA3
8	45	70	10x25		PF05MS DC3
10	32,5	57,5	10x25		PF05MS FA3
10	45	70	10x25		PF05MS FC3

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Vite / Screw	 M5x10	2602M DC9

■ Da montare su macchine foratrici con l'impiego di mandrini o adattatori, per l'esecuzione di fori passanti su laminati e simili. Cuspide in HW a doppia lancia, per ridurre le scheggiature in uscita.

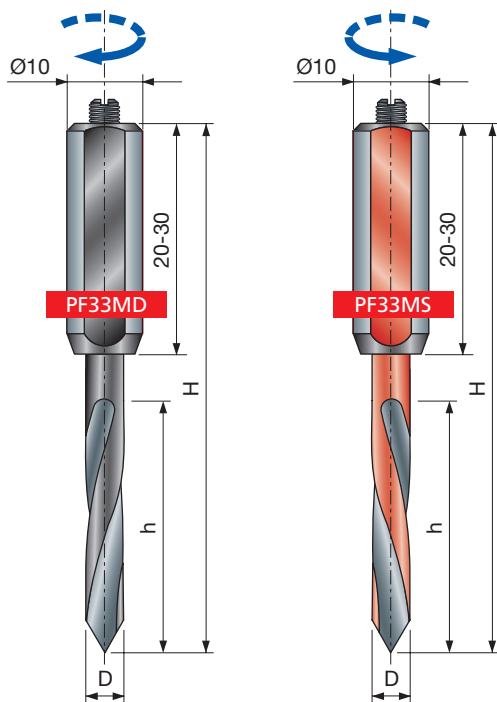
Vite di regolazione M5x10 mm.

■ Use on drilling machines with chucks or adapters to make through holes on laminated and such. Double spear carbide tip, in order to avoid splintering on exit holes.

M5x10 adjusting screw.

PF33MD PF33MS

PUNTE INTEGRALI PER FORATRICI MULTIPLE - FORI PASSANTI SOLID CARBIDE BITS FOR MULTIBORING MACHINES



D	h	H	A	Z	Codice
mm	mm	mm	mm		Code
4	35	70	10x30		PF33MD ZC3
5	35	70	10x30		PF33MD AC3
6	35	70	10x30		PF33MD BC3
8	35	70	10x20		PF33MD DC3
4	35	70	10x30		PF33MS ZC3
5	35	70	10x30		PF33MS AC3
6	35	70	10x30		PF33MS BC3
8	35	70	10x20		PF33MS DC3

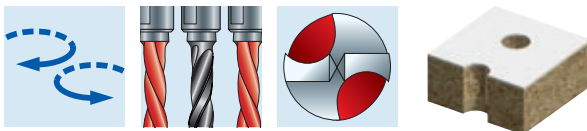
Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Vite / Screw	 M5x10	2602M DC9

■ Per macchine foratrici con l'uso di mandrini o adattatori. Adatta all'esecuzione di fori passanti su laminati. In HW, con vite di regolazione M5x10 mm. Attacco Ø10x20 o Ø10x30.

N.B. Per dimensioni diverse, chiedere preventivo.

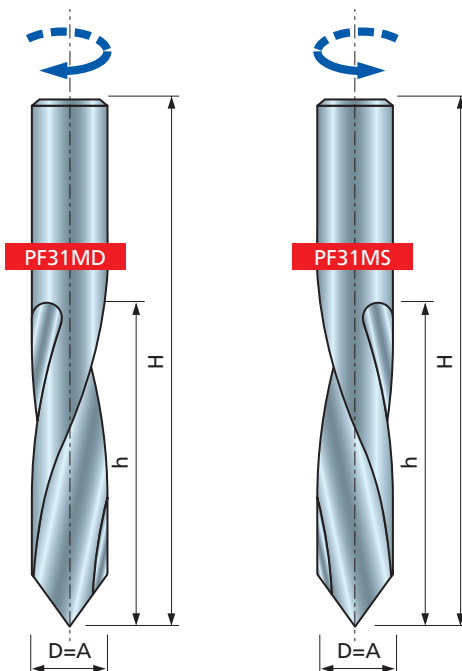
■ For multiboring machines with chucks or adapters. Suitable for through holes on laminates. In HW, with M5x10 adjusting screw. Shank: Ø10x20 or Ø10x30.

Note: for dimensions not included, ask for a quote.



PF31MD PF31MS

PUNTE INTEGRALI PER FORATRICI MULTIPLE - FORI PASSANTI SOLID CARBIDE BITS FOR MULTIBORING MACHINES



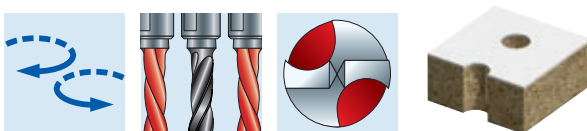
D	h	H	A	Z	Codice
mm	mm	mm	mm		Code
10	43	70	10		PF31MD FC3
10	43	70	10		PF31MS FC3

■ Per macchine foratrici con l'uso di mandrini o adattatori. Adatta all'esecuzione di fori passanti su laminati. Realizzata completamente in HW.

N.B. Per dimensioni diverse, chiedere preventivo.

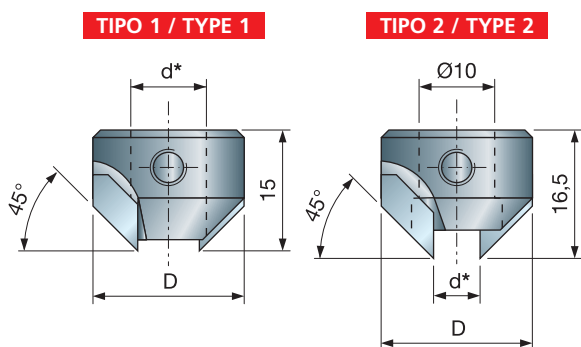
■ For multiboring machines with chucks or adapters. Suitable for through holes on laminates. Made entirely of HW.

Note: for dimensions not included, ask for a quote.



SV05MD SV05MS

SVASATORI COMPONENTI CARBIDE COUNTERSINK CUTTERS



■ *N.B.: "d" indica il diametro della punta sulla quale verrà applicato lo svasatore.

■ *Note: "d" is the diameter of the drill bit.

■ **Tipo 1:** Es. 1 e 2: Da applicare sull'elica delle punte per foratrici (PF07M o PF11M) per l'esecuzione di svasature su legno massiccio, derivati e laminati.

■ **Tipo 2:** Es. 3 e 4: Da applicare sull'attacco delle punte per foratrici (PF06M o PF10M) per l'esecuzione di svasature su legno massiccio, derivati e laminati.

■ **Type 1:** E.g. 1 & 2: For multiboring bits (PF11M or PF07M). Fix to the bits helix to obtain countersinks on solid wood and laminates.

■ **Type 2:** E.g. 3 & 4: For multiboring bits (PF10M or PF06M). Fix to the bits shank to obtain countersinks on solid wood and laminates.

D	d*	H	A	Z	Codice
mm	mm	mm	mm		Code
14	4	15	tipo / type 1	2	SV05MD ZA3
16	5	15	tipo / type 1	2	SV05MD AA3
16	6	15	tipo / type 1	2	SV05MD BA3
18	7	15	tipo / type 1	2	SV05MD CA3
18	8	15	tipo / type 1	2	SV05MD DA3
20	9	15	tipo / type 1	2	SV05MD EA3
20	10	15	tipo / type 1	2	SV05MD FA3
22	12	15	tipo / type 1	2	SV05MD GA3
24	14	15	tipo / type 1	2	SV05MD HA3
20	5÷10	16,5	tipo / type 2	2	SV05MD TA3
22	11÷12	16,5	tipo / type 2	2	SV05MD TB3

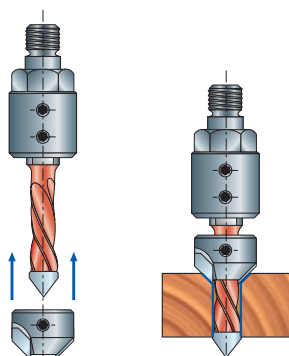
D	d*	H	A	Z	Codice
mm	mm	mm	mm		Code
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16	5	15	tipo / type 1	2	SV05MS AA3
16	6	15	tipo / type 1	2	SV05MS BA3
18	7	15	tipo / type 1	2	SV05MS CA3
18	8	15	tipo / type 1	2	SV05MS DA3
20	9	15	tipo / type 1	2	SV05MS EA3
20	10	15	tipo / type 1	2	SV05MS FA3
22	12	15	tipo / type 1	2	SV05MS GA3
24	14	15	tipo / type 1	2	SV05MS HA3
20	5÷10	16,5	tipo / type 2	2	SV05MS TA3
22	11÷12	16,5	tipo / type 2	2	SV05MS TB3

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Vite / Screw	M5 x 5	2615M CC9
Vite / Screw	M6 x 6	2615M DD9

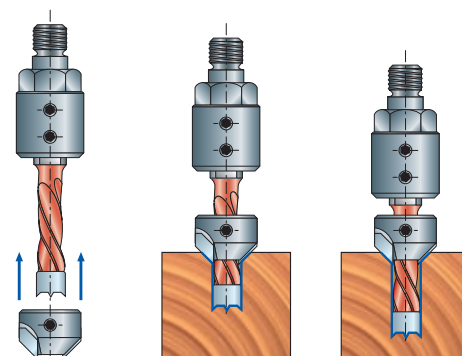
ESEMPI DI ASSEMBLAGGIO

ASSEMBLING EXAMPLES

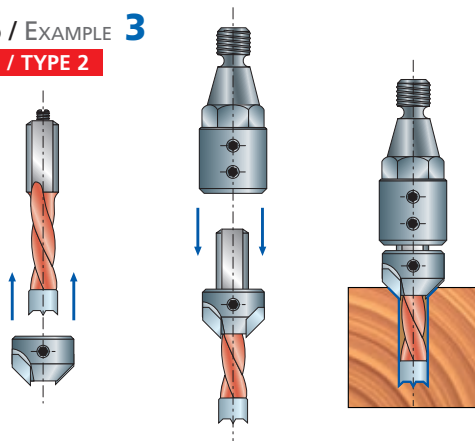
ESEMPIO / EXAMPLE **1**
TIPO 1 / TYPE 1



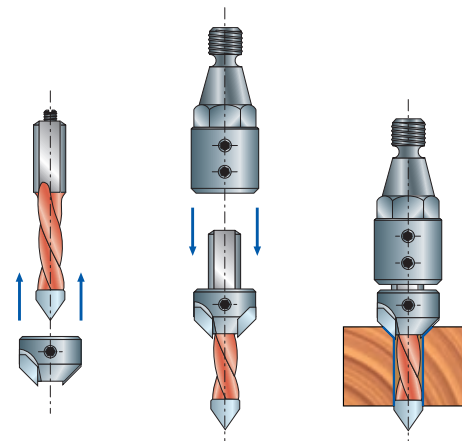
ESEMPIO / EXAMPLE **2**
TIPO 1 / TYPE 1



ESEMPIO / EXAMPLE **3**
TIPO 2 / TYPE 2

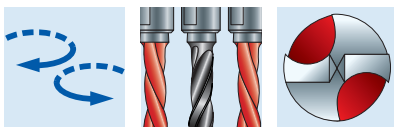
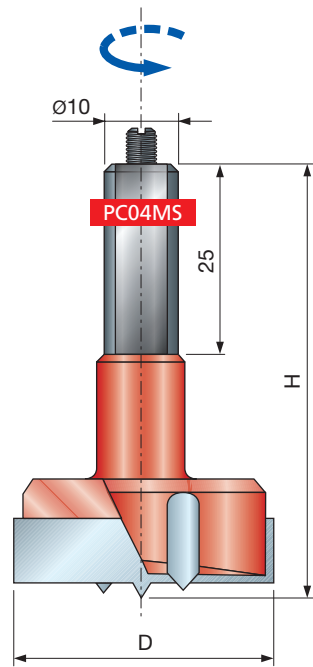
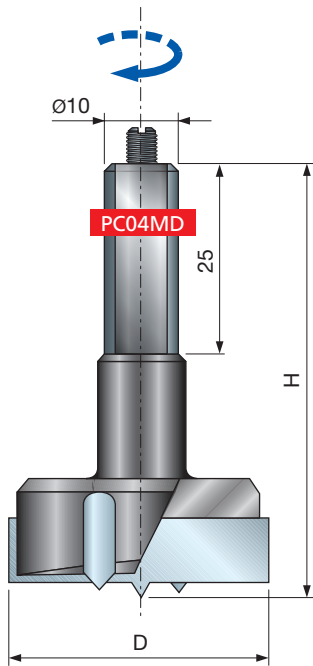


ESEMPIO / EXAMPLE **4**
TIPO 2 / TYPE 2



PC04MD PC04MS

PUNTE PER CERNIERE CARBIDE BORING BITS FOR HINGES



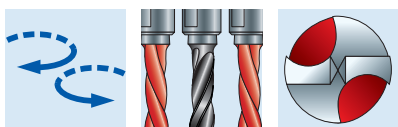
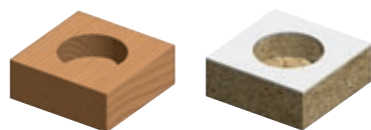
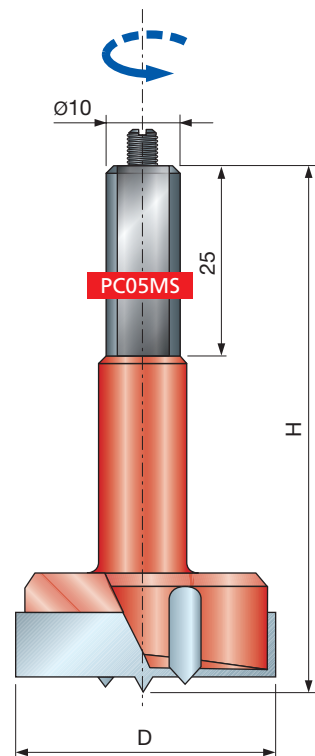
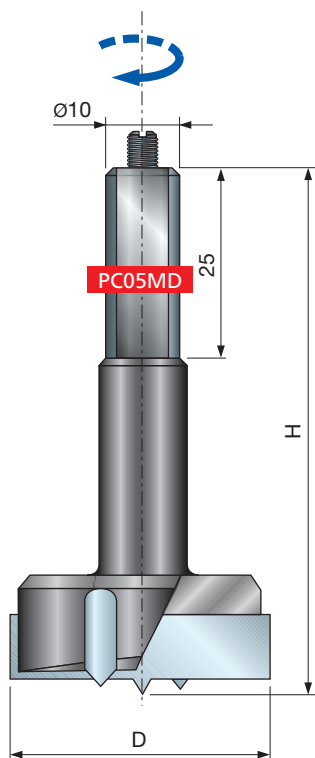
D	h	H	A	Z	Codice
mm	mm	mm	mm		Code
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14		57,5	10x25	2+2	PC04MD 143
15		57,5	10x25	2+2	PC04MD 153
16		57,5	10x25	2+2	PC04MD 163
18		57,5	10x25	2+2	PC04MD 183
20		57,5	10x25	2+2	PC04MD 203
22		57,5	10x25	2+2	PC04MD 223
25		57,5	10x25	2+2	PC04MD 253
26		57,5	10x25	2+2	PC04MD 263
30		57,5	10x25	2+2	PC04MD 303
35		57,5	10x25	2+2	PC04MD 353
38		57,5	10x25	2+2	PC04MD 383
40		57,5	10x25	2+2	PC04MD 403
50		57,5	10x25	2+2	PC04MD 503
60		57,5	10x25	2+2	PC04MD 603
12		57,5	10x25	2+2	PC04MS 123
14		57,5	10x25	2+2	PC04MS 143
15		57,5	10x25	2+2	PC04MS 153
16		57,5	10x25	2+2	PC04MS 163
18		57,5	10x25	2+2	PC04MS 183
20		57,5	10x25	2+2	PC04MS 203
22		57,5	10x25	2+2	PC04MS 223
25		57,5	10x25	2+2	PC04MS 253
26		57,5	10x25	2+2	PC04MS 263
30		57,5	10x25	2+2	PC04MS 303
35		57,5	10x25	2+2	PC04MS 353
38		57,5	10x25	2+2	PC04MS 383
40		57,5	10x25	2+2	PC04MS 403
50		57,5	10x25	2+2	PC04MS 503
60		57,5	10x25	2+2	PC04MS 603

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Vite / Screw	 M5x10	2602M DC9

- Da montare su macchine foratrici con l'impiego di mandrini o adattatori, per l'esecuzione di sedi per cerniere o di fori ciechi su legno, suoi derivati, laminati e simili. Cuspide in HW e vite di regolazione M5x10 mm. Attacco Ø10x25 mm.
- Fit on multiboring machines with the use of chucks or adapters for obtaining hinge pockets or blind holes on solid wood or laminates. HW tip with center point and M5x10 mm adjusting screw. Ø10x25 mm shank.

PC05MD PC05MS

PUNTE PER CERNIERE CARBIDE BORING BITS FOR HINGES



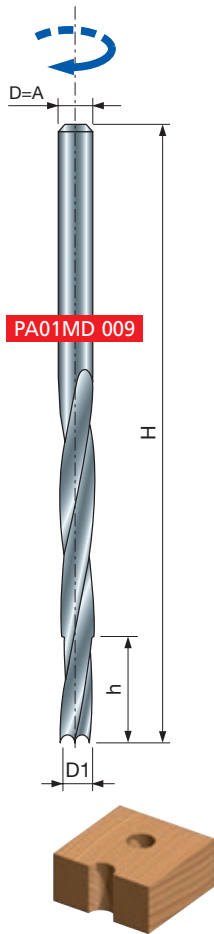
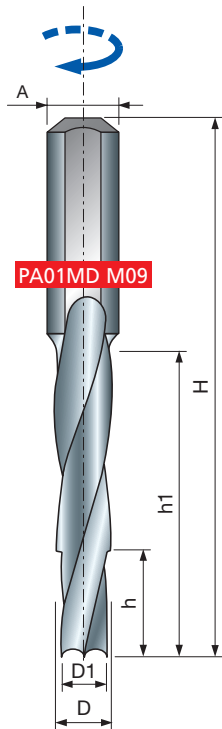
D	h	H	A	Z	Codice
mm	mm	mm	mm		Code
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15		70	10x25	2+2	PC05MD 153
16		70	10x25	2+2	PC05MD 163
18		70	10x25	2+2	PC05MD 183
20		70	10x25	2+2	PC05MD 203
22		70	10x25	2+2	PC05MD 223
25		70	10x25	2+2	PC05MD 253
26		70	10x25	2+2	PC05MD 263
30		70	10x25	2+2	PC05MD 303
35		70	10x25	2+2	PC05MD 353
38		70	10x25	2+2	PC05MD 383
40		70	10x25	2+2	PC05MD 403
12		70	10x25	2+2	PC05MS 123
14		70	10x25	2+2	PC05MS 143
15		70	10x25	2+2	PC05MS 153
16		70	10x25	2+2	PC05MS 163
18		70	10x25	2+2	PC05MS 183
20		70	10x25	2+2	PC05MS 203
22		70	10x25	2+2	PC05MS 223
25		70	10x25	2+2	PC05MS 253
26		70	10x25	2+2	PC05MS 263
30		70	10x25	2+2	PC05MS 303
35		70	10x25	2+2	PC05MS 353
38		70	10x25	2+2	PC05MS 383
40		70	10x25	2+2	PC05MS 403

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Vite / Screw	 M5x10	2602M DC9

- Da montare su macchine foratrici con l'impiego di mandrini o adattatori, per l'esecuzione di sedi per cerniere o di fori ciechi su legno, suoi derivati, laminati e simili. Cuspide in HW e vite di regolazione M5x10 mm. Attacco Ø10x25 mm.
- Fit on multiboring machines with the use of chucks or adapters for obtaining hinge pockets or blind holes on solid wood or laminates. HW tip with center point and M5x10 mm adjusting screw. Ø10x25 mm shank.

PA01MD

PUNTE PER ANUBA HSS HSS BOHRER



D1	D	h	h1	H	A	Anuba	Codice
mm	mm	mm	mm	mm	mm		Code
3,8	5	20	40	75	10	9	PA01MD M09
4,2	5,7	20	45	80	10	11	PA01MD M11
5,2	6,5	15	50	85	10	13	PA01MD M13
5,5	7	15	55	90	10	14	PA01MD M14
6	7,7	15	60	95	10	16	PA01MD M16
6,6	8,2	20	70	105	10	18	PA01MD M18
7,2	8,7	20	80	115	10	20	PA01MD M20

■ Dotate di due diametri, con attacco con pianetto e rotazione destra. Sono punte adatte ad essere montate su macchine Masterwood.

■ Right hand rotation router bits with double diameter and square shank. Suitable for Masterwood machines.

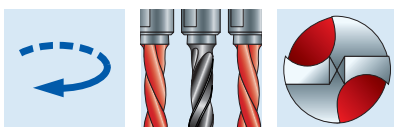
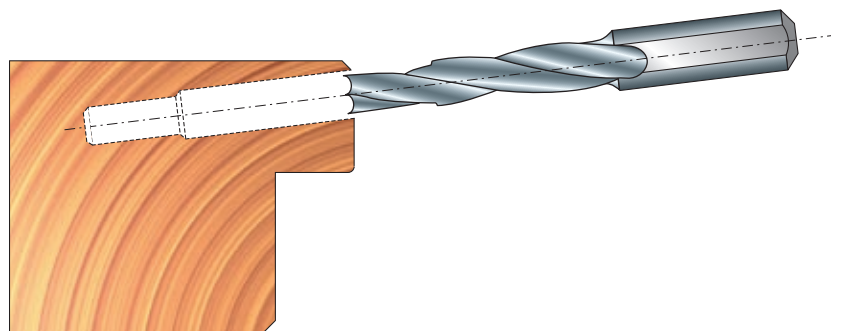
D1	D	h	h1	H	A	Anuba	Codice
mm	mm	mm	mm	mm	mm		Code
4,5	5,25	10		86	5,25	9	PA01MD 009
5	5,75	15		95	5,75	11	PA01MD 011
5,75	6,75	17		108	6,75	13	PA01MD 013
6,25	7,25	20		108	7,25	14	PA01MD 014
6,75	7,75	20		114	7,75	16	PA01MD 016
7,75	8,75	20		125	8,75	18	PA01MD 018

■ Dotate di due diametri con rotazione destra. Z=2

■ Right hand rotation router bits with double diameter. Z=2

ESEMPIO DI LAVORAZIONE

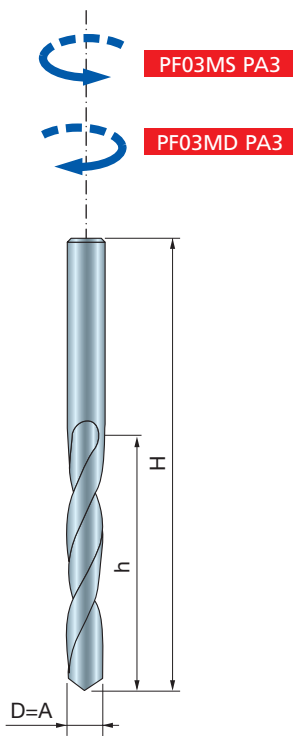
WORKING EXAMPLE



PF03MD PF03MS

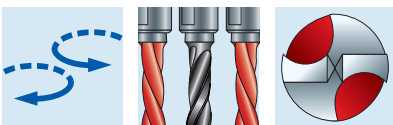
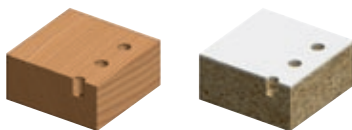
PUNTE INTEGRALI PER FORI VITE

SOLID CARBIDE ROUTER BITS FOR SCREW HOLES



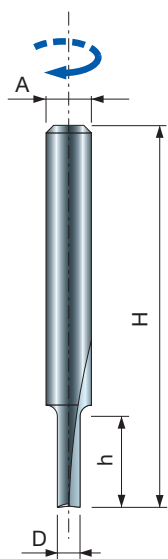
D	h	H	A	Z	Codice
mm	mm	mm	mm		Code
2	24	49	2	2	PF03MD PA3
2,5	24	49	2,5	2	PF03MD QA3
3	25	49	3	2	PF03MD RA3
3,2	25	49	3,2	2	PF03MD SA3
3,5	33	55	3,5	2	PF03MD TA3
4	33	55	4	2	PF03MD ZA3
4,5	33	55	4,5	2	PF03MD UA3
5	33	55	5	2	PF03MD VA3
2	24	49	2	2	PF03MS PA3
2,5	24	49	2,5	2	PF03MS QA3
3	25	49	3	2	PF03MS RA3
3,2	25	49	3,2	2	PF03MS SA3
3,5	33	55	3,5	2	PF03MS TA3
4	33	55	4	2	PF03MS ZA3
4,5	33	55	4,5	2	PF03MS UA3
5	33	55	5	2	PF03MS VA3

- Punta in HW per la foratura di legni teneri e duri, composti di legno e laminati. Costruite con due scarichi elicoidali con spoglia dorsale.
- HW router bits, suitable to make holes on natural soft and hardwood, wood composites and laminated. Constructed with two spirals with back clearance angle.



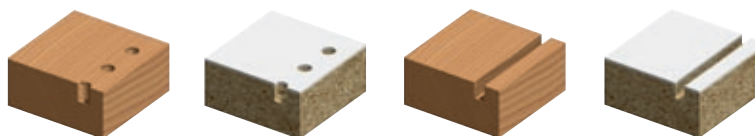
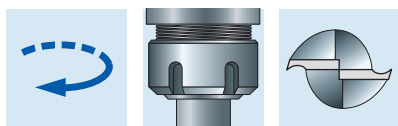
R006M

PUNTA A TAGLIENTI DIRITTI IN HW INTEGRALE SOLID CARBIDE STRAIGHT ROUTER BIT



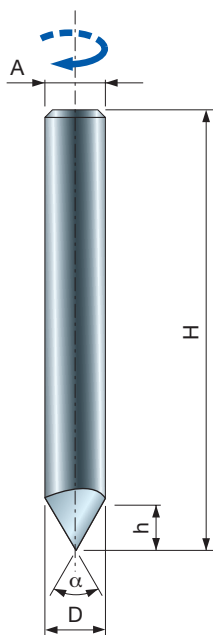
D	h	H	A	Z	Codice
mm	mm	mm	mm		Code
3	12	50	6	2	R006M03006
4	12	49	6	2	R006M05006
5	12	49	6	2	R006M07006
5	16	51	6	2	R006M07406
6	16	57	6	2	R006M09406
6	25	63	6	2	R006M10206

- Per elettrofresatrici o pantografi manuali. Adatte alla contornatura e foratura su legno massiccio, derivati e laminati. Per scanalature profonde si raccomandano più passate.
- For portable routers or overhead machines. Suitable for sizing and drilling solid wood and laminates. For deep grooves, we suggest multiple passages.



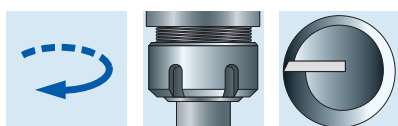
PI01MD

PUNTA IN HW INTEGRALE PER INTAGLI E SCANALATURE SOLID CARBIDE ENGRAVING ROUTER BIT



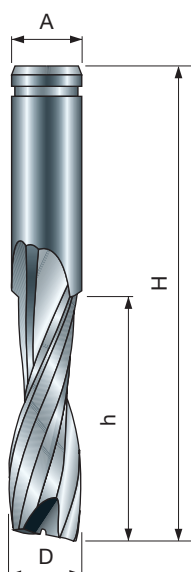
D	h	H	A	α	Z	Codice
mm	mm	mm	mm			Code
8	6	70	8	60°	1	PI01MD6083

- Per elettrofresatrici o pantografi manuali. Ideali per piccoli intagli e scanalature.
- For portable routers or overhead machines. Ideal for engraving and vening work.



PI02MD

PUNTA A TAGLIENTI ELICOIDALI IN HW INTEGRALE SOLID CARBIDE SPIRAL ROUTER BIT



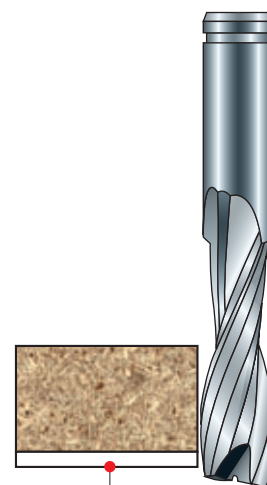
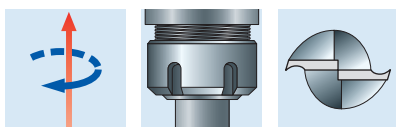
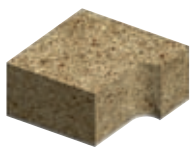
D	h	H	A	Z	Codice Code
mm	mm	mm	mm		
4	15	50	4	2	PI02MD BB3
5	17	50	5	2	PI02MD CC3
6	17	60	6	2	PI02MD DC3
6	22	60	6	2	PI02MD DD3
8	22	70	8	2	PI02MD ED3
10	32	70	10	2	PI02MD FE3
10	42	100	10	2	PI02MD FF3
10	52	100	10	2	PI02MD FG3
12	32	80	12	2	PI02MD GE3
12	42	100	12	2	PI02MD GF3
12	52	100	12	2	PI02MD GG3
14	42	100	14	2	PI02MD HF3
14	52	100	14	2	PI02MD HG3
16	42	100	16	2	PI02MD LF3
16	52	100	16	2	PI02MD LG3
18	52	100	18	2	PI02MD NG3
20	52	100	20	2	PI02MD OG3
20	72	120	20	2	PI02MD OL3

■ Per centri di lavoro con l'uso di mandrini o adattatori e per pantografi CNC. Adatte alla contornatura, foratura e finitura su legno massiccio, derivati e laminati. Garantiscono una elevata velocità di avanzamento su materiale ben fissato al piano di lavoro. La geometria dell'elica porta l'espulsione del truciolo verso l'alto e quindi una miglior finitura sulla parte inferiore del pannello.

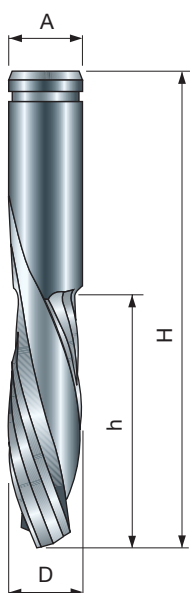
N.B. Per dimensioni diverse o rotazione sinistra, chiedere preventivo.

■ For automatic machining centres and for CNC routers. Suitable for sizing, plunging and finishing solid wood and laminates. Allows high feed rates on materials that are fixed to the machines work table. The tools' helical forces eject the chips upwards, therefore the panels best finish is on the lower side.

Note: for dimensions not included or for left-hand rotation ask for a quote.



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BETTER FINISH



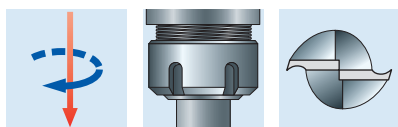
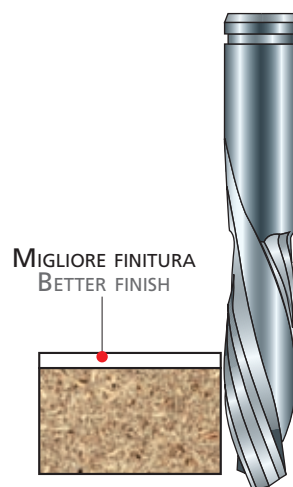
D	h	H	A	Z	Codice
mm	mm	mm	mm		Code
4	15	50	4	2	PI02ME BB3
5	17	50	5	2	PI02ME CC3
6	17	60	6	2	PI02ME DC3
6	22	60	6	2	PI02ME DD3
8	22	70	8	2	PI02ME ED3
10	32	70	10	2	PI02ME FE3
10	42	100	10	2	PI02ME FF3
11	37	80	11	2	PI02ME YI3
12	32	80	12	2	PI02ME GE3
12	42	100	12	2	PI02ME GF3
14	52	100	14	2	PI02ME HG3
16	42	100	16	2	PI02ME LF3
20	52	100	20	2	PI02ME OG3
20	72	120	20	2	PI02ME OL3

■ Per centri di lavoro con l'uso di mandrini o adattatori e per pantografi CNC. Adatte alla contornatura, foratura e finitura su legno massiccio, derivati e laminati. Garantiscono una elevata velocità di avanzamento su materiale ben fissato al piano di lavoro. La geometria dell'elica porta l'espulsione del truciolo verso il basso e quindi una miglior finitura sulla parte superiore del pannello.

N.B. Per dimensioni diverse o rotazione sinistra, chiedere preventivo.

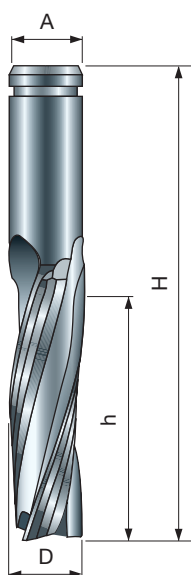
■ For automatic machining centres and for CNC routers. Suitable for sizing, plunging and finishing solid wood and laminates. Allows high feed rates on materials that are fixed to the machines work table. The tools' helical forces eject the chips downwards, therefore the panels best finish is on the upper side.

Note: for dimensions not included or for left-hand rotation ask for a quote.



PI03MD

PUNTA A TAGLIENTI ELICOIDALI IN HW INTEGRALE SOLID CARBIDE SPIRAL ROUTER BIT



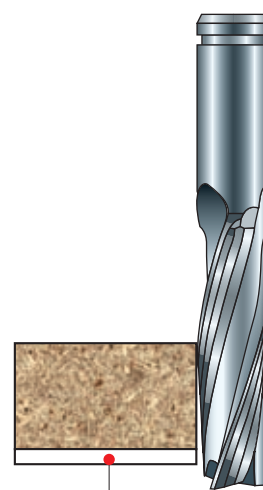
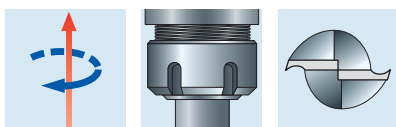
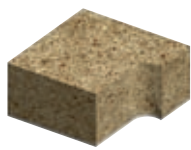
D	h	H	A	Z	Codice
mm	mm	mm	mm		Code
8	22	70	8	3	PI03MD ED3
8	32	70	8	3	PI03MD EE3
10	32	70	10	3	PI03MD FE3
10	42	100	10	3	PI03MD FF3
10	52	100	10	3	PI03MD FG3
12	32	80	12	3	PI03MD GE3
12	42	100	12	3	PI03MD GF3
12	52	100	12	3	PI03MD GG3
14	42	100	14	3	PI03MD HF3
14	52	100	14	3	PI03MD HG3
16	42	100	16	3	PI03MD LF3
16	52	100	16	3	PI03MD LG3
16	62	120	16	3	PI03MD LH3
18	52	100	18	3	PI03MD NG3
18	72	120	18	3	PI03MD NL3
20	52	100	20	3	PI03MD OG3
20	72	120	20	3	PI03MD OL3
20	102	150	20	3	PI03MD OO3

■ Per centri di lavoro con l'uso di mandrini o adattatori e per pantografi CNC. Adatte alla contornatura, foratura e finitura su legno massiccio, derivati e laminati. Garantiscono una elevata velocità di avanzamento su materiale ben fissato al piano di lavoro. La geometria dell'elica porta l'espulsione del truciolo verso l'alto e quindi una miglior finitura sulla parte inferiore del pannello.

N.B. Per dimensioni diverse o rotazione sinistra, chiedere preventivo.

■ For automatic machining centres and for CNC routers. Suitable for sizing, plunging and finishing solid wood and laminates. Allows high feed rates on materials that are fixed to the machines work table. The tools' helical forces eject the chips upwards, therefore the panels best finish is on the lower side.

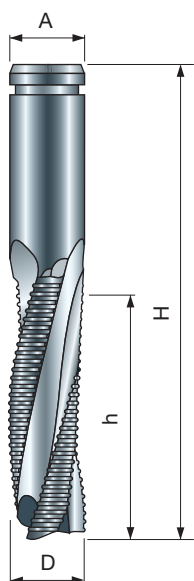
Note: for dimensions not included or for left-hand rotation ask for a quote.



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BETTER FINISH

PI04MD

PUNTA A TAGLIANTI ELICOIDALI IN HW INTEGRALE SOLID CARBIDE SPIRAL ROUTER BIT



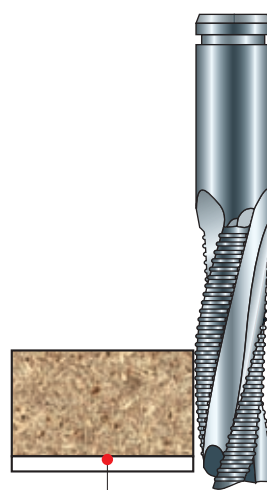
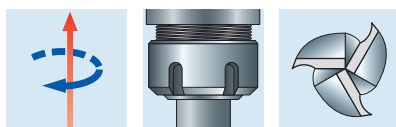
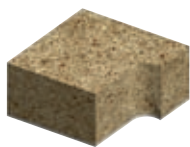
D	h	H	A	Z	Codice
mm	mm	mm	mm		Code
8	22	70	8	3	PI04MD ED3
8	32	70	8	3	PI04MD EE3
10	32	70	10	3	PI04MD FE3
10	42	100	10	3	PI04MD FF3
12	32	80	12	3	PI04MD GE3
12	42	100	12	3	PI04MD GF3
12	52	100	12	3	PI04MD GG3
14	42	100	14	3	PI04MD HF3
14	52	100	14	3	PI04MD HG3
16	42	100	16	3	PI04MD LF3
16	52	100	16	3	PI04MD LG3
16	62	120	16	3	PI04MD LH3
18	52	100	18	3	PI04MD NG3
18	72	120	18	3	PI04MD NL3
20	52	100	20	3	PI04MD OG3
20	72	120	20	3	PI04MD OL3
20	85	150	20	3	PI04MD ON3
20	102	150	20	3	PI04MD OO3

■ Punta con rompitruciolo. Per centri di lavoro con l'uso di mandrini o adattatori e per pantografi CNC. Adatte alla contornatura, foratura e sgrossatura su legno massiccio, derivati e laminati. Garantiscono una elevata velocità di avanzamento su materiale ben fissato al piano di lavoro. La geometria dell'elica porta l'espulsione del truciolo verso l'alto e quindi una miglior finitura sulla parte inferiore del pannello.

N.B. Per dimensioni diverse o rotazione sinistra, chiedere preventivo.

■ Router bits with chip breaker. For automatic machining centres and for CNC routers. Suitable for sizing, plunging and roughing solid wood and laminates. Allows high feed rates on materials that are fixed to the machines work table. The tools' helical forces eject the chips upwards, therefore the panels best finish is on the lower side.

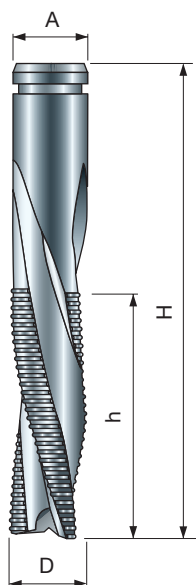
Note: for dimensions not included or for left-hand rotation ask for a quote.



MIGLIORE FINITURA
BETTER FINISH

PI04ME

PUNTA A TAGLIENTI ELICOIDALI IN HW INTEGRALE SOLID CARBIDE SPIRAL ROUTER BIT



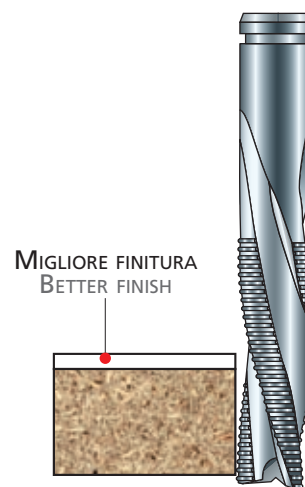
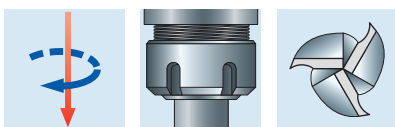
D	h	H	A	Z	Codice
mm	mm	mm	mm		Code
10	32	70	10	3	PI04ME FE3
12	32	80	12	3	PI04ME GE3
12	42	100	12	3	PI04ME GF3
14	42	100	14	3	PI04ME HF3
20	52	100	20	3	PI04ME OG3

■ **Punte con rompitruciolo.** Per centri di lavoro con l'uso di mandrini o adattatori e per pantografi CNC. Adatte alla contornatura, foratura e sgrossatura su legno massiccio, derivati e laminati. Garantiscono una elevata velocità di avanzamento su materiale ben fissato al piano di lavoro. La geometria dell'elica porta l'espulsione del truciolo verso il basso e quindi una miglior finitura sulla parte superiore del pannello.

N.B. Per dimensioni diverse o rotazione sinistra, chiedere preventivo.

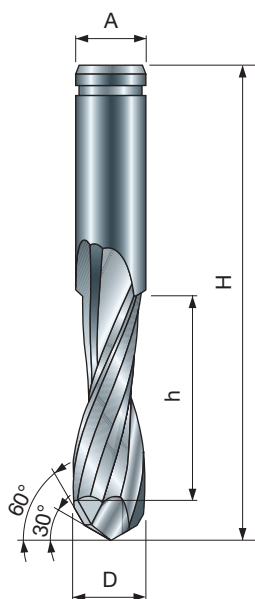
■ Router bits with chip breaker. For automatic machining centres and for CNC routers. Suitable for sizing, plunging and roughing solid wood and laminates. Allows high feed rates on materials that are fixed to the machines work table. The tools' helical forces eject the chips downwards, therefore the panels best finish is on the upper side.

Note: for dimensions not included or for left-hand rotation ask for a quote.



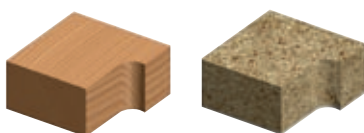
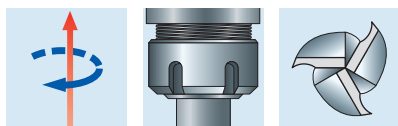
PI09MD

PUNTA A TAGLIANTI ELICOIDALI IN HW INTEGRALE SOLID CARBIDE SPIRAL ROUTER BIT



D	h	H	A	Z	Codice
mm	mm	mm	mm		Code
12	52	110	12	2	PI09MD GG3
14	52	110	14	3	PI09MD HG3
16	62	130	16	3	PI09MD LH3
18	62	130	18	3	PI09MD NH3
20	85	150	20	3	PI09MD ON3

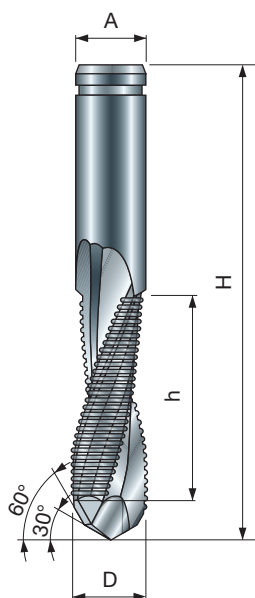
- Per centri di lavoro con l'uso di mandrini o adattatori e per pantografi CNC. Adatte alla realizzazione di fori per spioncini, cave per serrature e per sfinestrare legni massicci, derivati e laminati. Garantiscono una elevata velocità di avanzamento su materiale ben fissato al piano di lavoro. La geometria dell'elica porta l'espulsione del truciolo verso l'alto e quindi una miglior finitura sulla parte inferiore del pannello.
- For automatic machining centres and for CNC routers. Suitable to make inspection holes, seat for locks and to rout opening in doors (to install glass) on solid wood, wood composites and laminates. Allows high feed rates on materials that are fixed to the machines work table. The tools' helical forces eject the chips upwards, therefore the panels best finish is on the lower side.



- **N.B.** Per dimensioni diverse o rotazione sinistra, chiedere preventivo.
- **Note:** for other dimensions or for left-hand rotation ask for a quote.

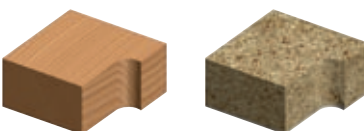
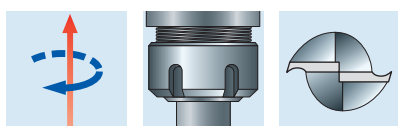
PI10MD

PUNTA A TAGLIANTI ELICOIDALI IN HW INTEGRALE SOLID CARBIDE SPIRAL ROUTER BIT



D	h	H	A	Z	Codice
mm	mm	mm	mm		Code
12	52	110	12	2	PI10MD GG3
14	52	110	14	3	PI10MD HG3
16	62	130	16	3	PI10MD LH3
18	62	130	18	3	PI10MD NH3
20	85	150	20	3	PI10MD ON3

- Punta con rompitruciolo. Per centri di lavoro con l'uso di mandrini o adattatori e per pantografi CNC. Adatte alla realizzazione di fori per spioncini, cave per serrature e per sfinestrare legni massicci, derivati e laminati. Garantiscono una elevata velocità di avanzamento su materiale ben fissato al piano di lavoro. La geometria dell'elica porta l'espulsione del truciolo verso l'alto e quindi una miglior finitura sulla parte inferiore del pannello.
- Router bits with chip breaker. For automatic machining centres and for CNC routers. Suitable to make inspection holes, seat for locks and to rout opening in doors (to install glass) on solid wood, wood composites and laminates. Allows high feed rates on materials that are fixed to the machines work table. The tools' helical forces eject the chips upwards, therefore the panels best finish is on the lower side.

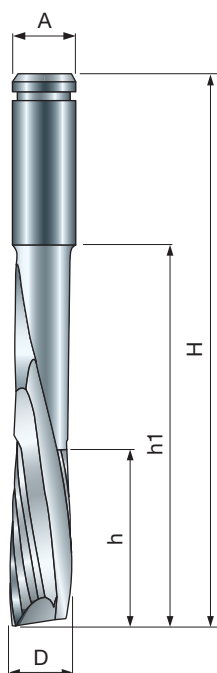


- **N.B.** Per dimensioni diverse o rotazione sinistra, chiedere preventivo.
- **Note:** for other dimensions or for left-hand rotation ask for a quote.

PI05MD

PUNTA IN HW INTEGRALE PER SEDI DI SERRATURE

SOLID CARBIDE SPIRAL ROUTER BIT FOR HARDWARE SLOTS



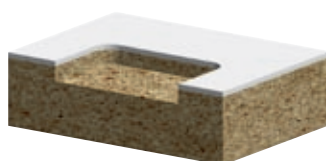
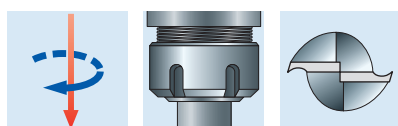
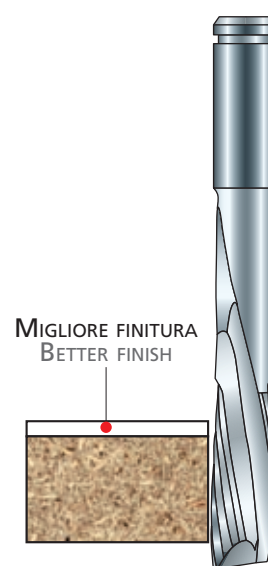
D	h	H	h1	A	Z	Codice
mm	mm	mm	mm	mm		Code
14	45	116	75	14	2	PI05MD AA3
14	45	136,5	95	14	2	PI05MD AB3
16	45	150	95	16	2	PI05MD CC3

■ Per pantografi CNC, adatte all'esecuzione, su pannelli rivestiti, di sedi per serrature e cerniere su porte e finestre. La geometria dell'elica porta l'espulsione del truciolo verso il basso e quindi una miglior finitura sulla parte superiore del pannello.

N.B. Per dimensioni diverse o rotazione sinistra, chiedere preventivo.

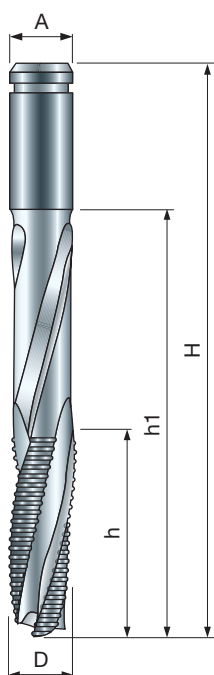
■ For CNC machining centres. Suitable for windows, shutters and all hardware slots laminates. The tools' helical forces eject the chips downwards, therefore the panels best finish is on the upper side.

Note: for dimensions not included or for left-hand rotation ask for a quote.



PI06MD

PUNTA IN HW INTEGRALE PER SEDI DI SERRATURE SOLID CARBIDE SPIRAL ROUTER BIT FOR HARDWARE SLOTS



D	h	H	h1	A	Z	Codice Code
16	45	150	95	16	2	PI06MD BC3*
16	45	150	95	16	3	PI06MD CC3
18	45	150	95	18	3	PI06MD DC3
20	45	150	95	20	3	PI06MD EC3

■ Punta con rompitruciolo per pantografi CNC. Adatte all'esecuzione, su legno massiccio, di sedi per serrature e cerniere su porte e finestre. La geometria dell'elica porta l'espulsione del truciolo verso l'alto e quindi un miglior avanzamento.

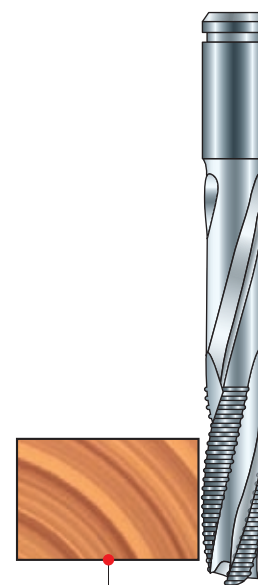
* La punta **PI06MD BC3** ha solo 2 denti.

N.B. Per dimensioni diverse o rotazione sinistra, chiedere preventivo.

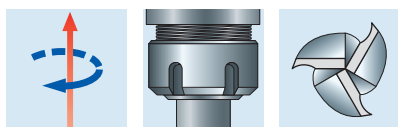
■ Router bits with chip breaker. For CNC machining centres. Suitable for windows, shutters and all hardware slots on solid wood. The tools' helical forces eject the chips upwards, for a higher feeding rate.

* Router bit **PI06MD BC3** has 2 teeth only.

Note: for dimensions not included or for left-hand rotation ask for a quote.

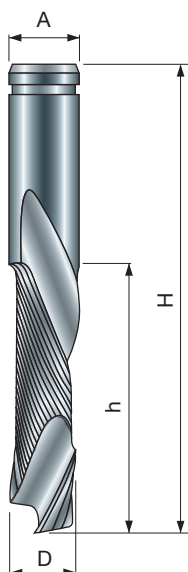


MIGLIORE FINITURA
BETTER FINISH



PI07MD

PUNTA A TAGLIANTI ELICOIDALI IN HW INTEGRALE SOLID CARBIDE SPIRAL ROUTER BIT



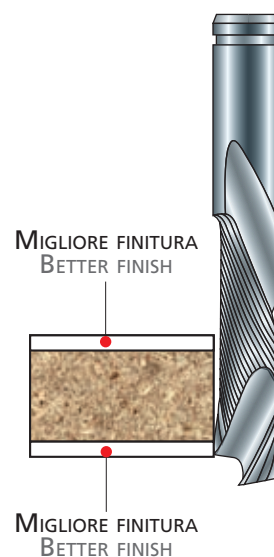
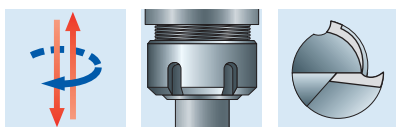
D	h	H	A	Z	Codice Code
mm	mm	mm	mm		
8	32	70	8	1+1	PI07MD EE3
10	32	70	10	1+1	PI07MD FE3
12	32	80	12	1+1	PI07MD GE3
12	42	100	12	1+1	PI07MD GF3
12	52	100	12	1+1	PI07MD GG3

■ Per centri di lavoro con l'uso di mandrini o adattatori e per pantografi a CNC. Particolarmente adatte alla contornatura e alla foratura di pannelli impiallacciati o bilaminati. Garantiscono una elevata velocità di avanzamento su materiale ben fissato al piano di lavoro. La particolare geometria delle eliche negativa e positiva permette la fresatura in un'unica passata di contornatura senza strappare i rivestimenti di riporto su ambo i lati.

N.B. Per dimensioni diverse o rotazione sinistra, chiedere preventivo.

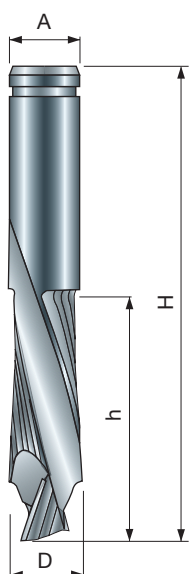
■ For automatic machining centres and for CNC routers. Suitable for sizing, plunging bilaminates. Allows high feed rates on materials that are fixed to the machines work table. The special geometry of the double spiral (1 right spiral and 1 left spiral) generates a squeezing action on both the top and bottom side of the panel: in this way we obtain an excellent finish on both sides of the panel.

Note: for dimensions not included or for left-hand rotation ask for a quote.



PI08MD

PUNTA A TAGLIANTI ELICOIDALI IN HW INTEGRALE SOLID CARBIDE SPIRAL ROUTER BIT



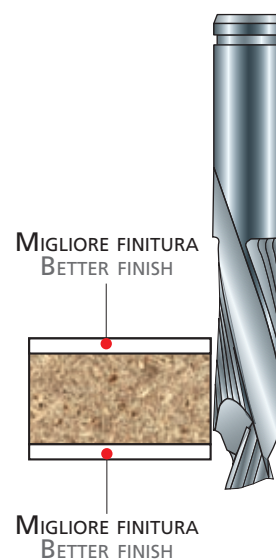
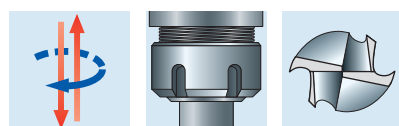
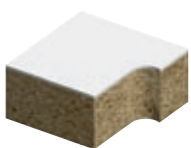
D	h	H	A	Z	Codice
mm	mm	mm	mm		Code
10	32	80	10	2+2	PI08MD FE3
12	42	100	12	2+2	PI08MD GF3
16	52	100	16	2+2	PI08MD LG3
18	52	100	18	2+2	PI08MD NG3
20	52	100	20	2+2	PI08MD OG3

■ Per centri di lavoro con l'uso di mandrini o adattatori e per pantografi a CNC. Particolarmente adatte alla contornatura e alla foratura di pannelli impiallacciati o bilaminati. Garantiscono una elevata velocità di avanzamento su materiale ben fissato al piano di lavoro. La particolare geometria delle eliche negativa e positiva permette la fresatura in un'unica passata di contornatura senza strappare i rivestimenti di riporto su ambo i lati.

N.B. Per dimensioni diverse o rotazione sinistra, chiedere preventivo.

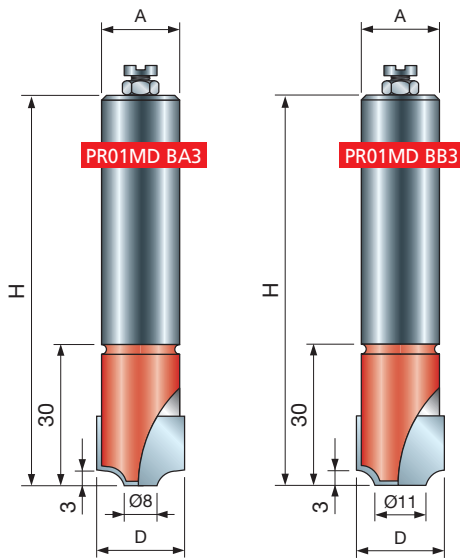
■ For automatic machining centres and for CNC routers. Suitable for sizing, plunging bilaminates. Allows high feed rates on materials that are fixed to the machines work table. The special geometry of the double spiral (1 right spiral and 1 left spiral) generates a squeezing action either on both the top and bottom side of the panel: in this way we obtain an excellent finish on both sides of the panel.

Note: for dimensions not included or for left-hand rotation ask for a quote.



PR01MD

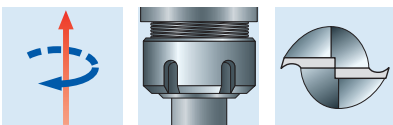
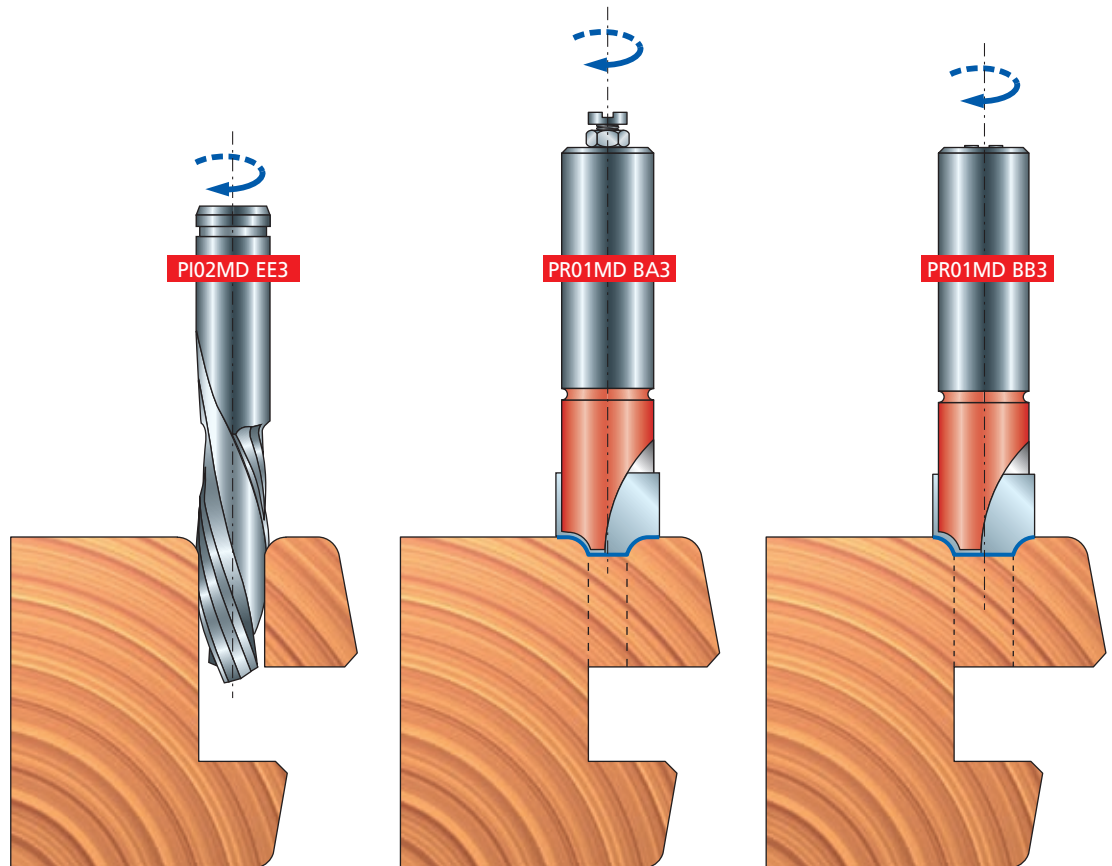
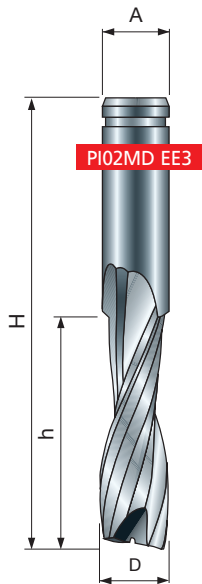
PUNTE PER RECUPERO LISTELLO BEAD RECOVERING ROUTER BITS

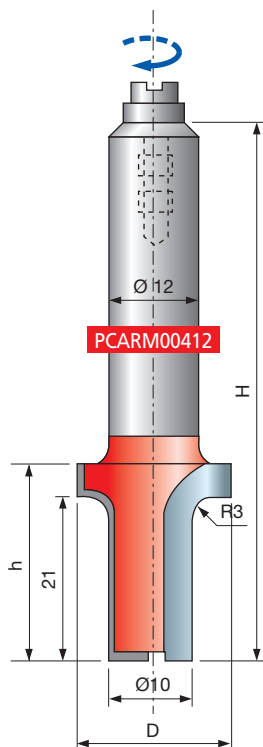
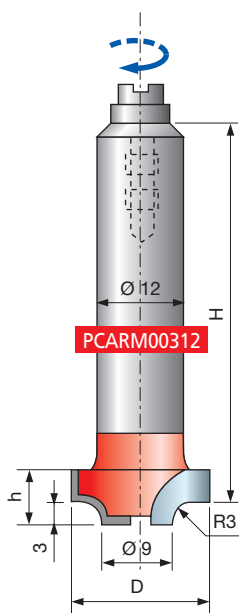
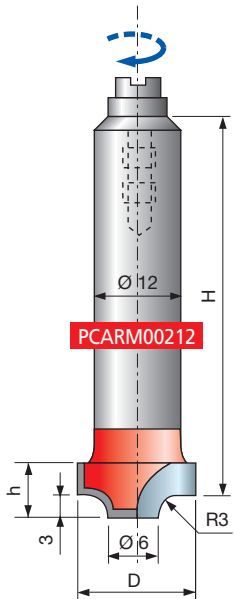
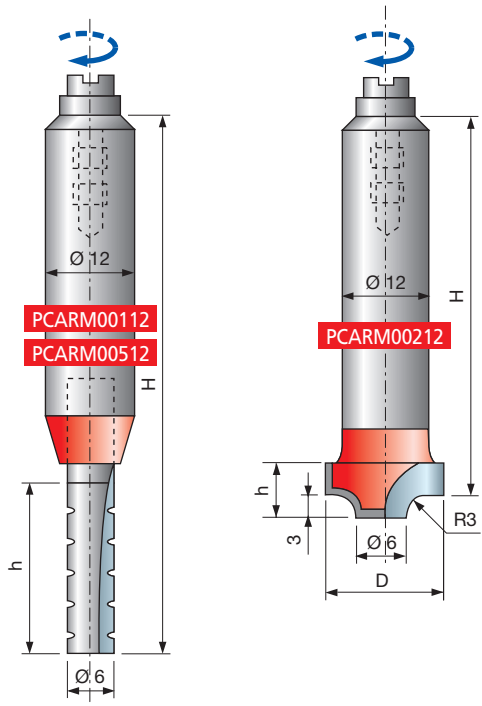


D	h	H	A	Z	Codice Code
8	32	70	8	2	PI02MD EE3
20		80	20	2	PR01MD BA3
20		80	20	2	PR01MD BB3

■ Per pantografi CNC. Adatte all'esecuzione del recupero listello su infissi. La punta PI02MD EE3, in HW integrale, con elica positiva e rompitruciolo di finitura porta l'espulsione del truciolo verso l'alto e garantisce un'ottima finitura. Le punte sagomate PR01MD BA3 e PR01MD BB3 vengono costruite con riporti in HW.

■ For overhead CNC machines. Suitable for window bead recovery operations. Solid Carbide router bit PI02MD EE3 has a helix that ejects the chips upwards to guarantee optimum finish. The profiled router bits PR01MD BA3 and PR01MD BB3 are manufactured with brazed HW tips.





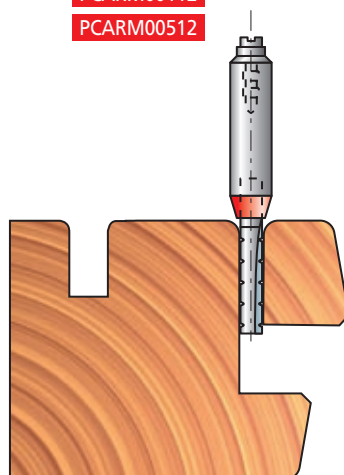
D	h	H	A	Z	Codice Code
6	23,5	71	12	1	PCARC00112
6	30	80	12	1	PCARC00512
16	8	56	12	2	PCARC00212
19	8	56	12	2	PCARC00312
20	26	71	12	2	PCARC00412

■ **PCARM00112:** Taglio per listello 20 mm
20 mm bead recovery bit

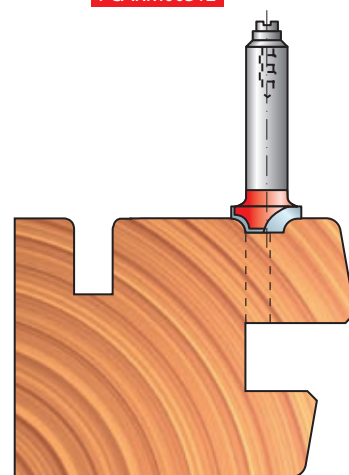
PCARM00512: Taglio per listello 28 mm
28 mm bead recovery bit

PCARM00212: Raggiatura del listello
Bead profiling bit

PCARM00112
PCARM00512



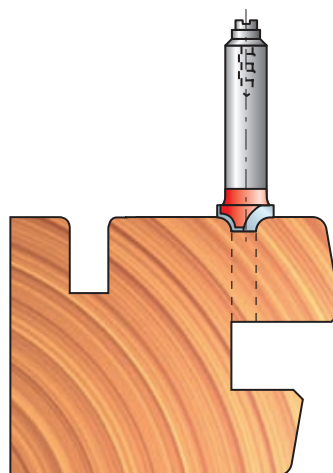
PCARM00312



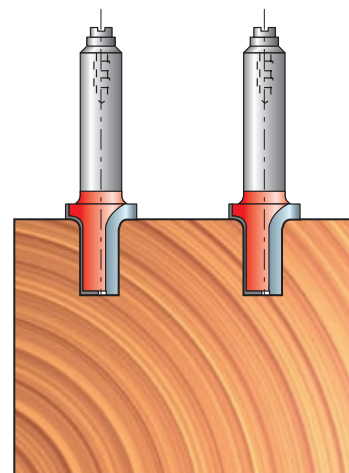
■ **PCARM00312:** Raggiatura del listello
Bead profiling bit

PCARM00412: Tracciatura dell'arco
Arch tracing bit

PCARM00212



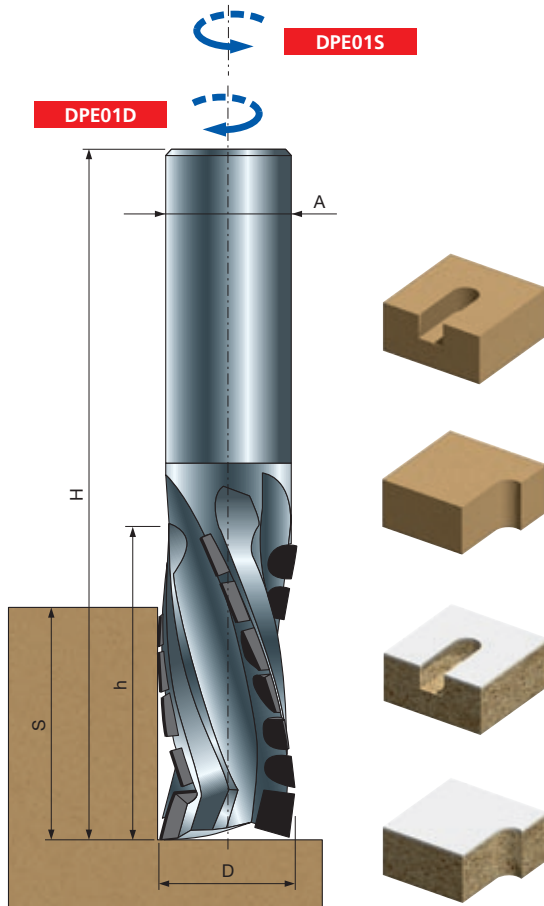
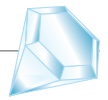
PCARM00412



DPE01D DPE01S

DESTRA
RIGHT
SINISTRA
LEFT

PCD - PUNTE MULTITAGLIENTI ELICOIDALI PCD - MULTICUTTING HELICAL ROUTER BITS



■ Per centri di lavoro con l'uso di mandrini o adattatori e per pantografi CNC. Particolarmente adatte alla contornatura e alla foratura di pannelli impiallacciati o bilaminati. Garantiscono una notevole velocità di avanzamento su materiale ben fissato al piano di lavoro. La particolare geometria dell'elica permette la fresatura in un'unica passata di contornatura senza strappare i rivestimenti di riporto su ambo i lati del pannello.

Velocità di avanzamento: max 20 m/min.

Considerata la vastissima gamma di macchine e di applicazioni possibili, nonché la natura speciale del prodotto, per l'ordinazione pregasi indicare Diametro (D), Spessore di taglio (S), Attacco (A) e tipologia del materiale lavorato. Indicare inoltre la macchina e le condizioni di utilizzo (n° giri e avanzamento).

■ For automatic machining centres and for CNC routers. Suitable for sizing, plunging bilaminates. Allows high feed rates on materials that are fixed to the machines work table. The special geometry of the spiral generates a squeezing action on both the top and bottom side of the panel.

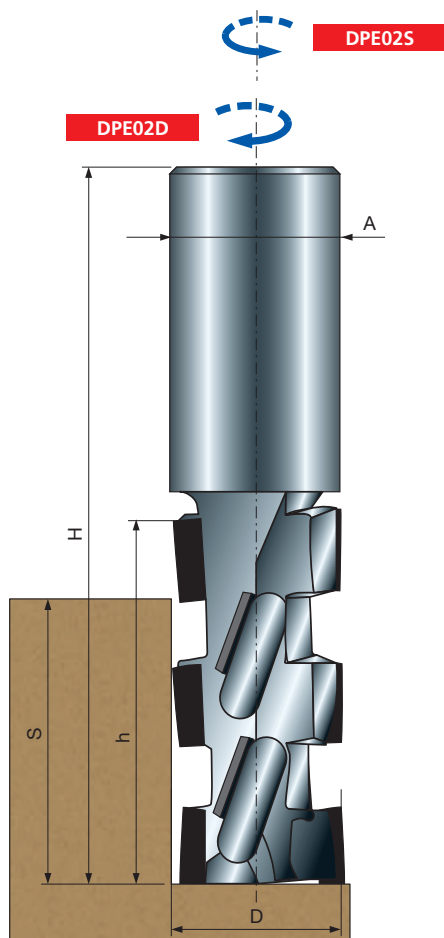
Feed rate: max 20 m/min.

Considering the wide range of machines and possible applications, and the special nature of the product, when ordering please specify Diameter (D), Thickness of cut (S), Shank (A) and type of material to be worked. Also specify the machine and the conditions of use (RPM and feed rate).

D	h	S	H	A	Z	Placchette	Codice
mm	mm	mm	mm	mm		Tips	Code
• 22	30	20	90	20x50	3	9+3	DPE01DRPE5
	30	20	90	25x50	3	9+3	DPE01DTPE5
• 22	35	25	95	20x50	3	12+3	DPE01DRPF5
	35	25	95	25x50	3	12+3	DPE01DTPF5
• 22	40	30	100	20x50	3	15+3	DPE01DRPG5
	40	30	100	25x50	3	15+3	DPE01DTPG5
	45	35	105	20x50	3	17+3	DPE01DRPH5
	45	35	105	25x50	3	17+3	DPE01DTPH5
• 22	50	40	110	20x50	3	18+3	DPE01DRPI5
	50	40	110	25x50	3	18+3	DPE01DTPI5
	55	45	115	20x50	3	21+3	DPE01DRPJ5
	55	45	115	25x50	3	21+3	DPE01DTPJ5
• 22	60	50	120	20x50	3	24+3	DPE01DRPK5
	60	50	120	25x50	3	24+3	DPE01DTPK5
	65	55	125	20x50	3	26+3	DPE01DRPL5
	65	55	125	25x50	3	26+3	DPE01DTPL5
	30	20	90	20x50	3	9+3	DPE01SRPE5
	30	20	90	25x50	3	9+3	DPE01STPE5
	35	25	95	20x50	3	12+3	DPE01SRPF5
	35	25	95	25x50	3	12+3	DPE01STPF5
	40	30	100	20x50	3	15+3	DPE01SRPG5
	40	30	100	25x50	3	15+3	DPE01STPG5
	45	35	105	20x50	3	17+3	DPE01SRPH5
	45	35	105	25x50	3	17+3	DPE01STPH5
	50	40	110	20x50	3	18+3	DPE01SRPI5
	50	40	110	25x50	3	18+3	DPE01STPI5
	55	45	115	20x50	3	21+3	DPE01SRPJ5
	55	45	115	25x50	3	21+3	DPE01STPJ5
	60	50	120	20x50	3	24+3	DPE01SRPK5
	60	50	120	25x50	3	24+3	DPE01STPK5
	65	55	125	20x50	3	26+3	DPE01SRPL5
	65	55	125	25x50	3	26+3	DPE01STPL5

Punte speciali - Special router bits

D	h	S	H	A	Z	Placchette	Codice
mm	mm	mm	mm	mm		Tips	Code
18-25	30	20	90	20x50	3	9+3	DPE01DRQE5
18-25	35	25	95	20x50	3	12+3	DPE01DRQF5
18-25	40	30	100	20x50	3	15+3	DPE01DRQG5
18-25	45	35	105	20x50	3	17+3	DPE01DRQH5
18-25	50	40	110	20x50	3	18+3	DPE01DRQI5
22-25	55	45	115	20x50	3	21+3	DPE01DRQJ5
22-25	60	50	120	20x50	3	24+3	DPE01DRQK5
22-25	65	55	125	20x50	3	26+3	DPE01DRQL5
22-25	70	60	130	25x50	3	27+3	DPE01DTQM5
22-25	75	65	135	25x50	3	30+3	DPE01DTQN5
22-25	80	70	140	25x50	3	33+3	DPE01DTQO5
18-25	30	20	90	20x50	3	9+3	DPE01SRQE5
18-25	35	25	95	20x50	3	12+3	DPE01SRQF5
18-25	40	30	100	20x50	3	15+3	DPE01SRQG5
18-25	45	35	105	20x50	3	17+3	DPE01SRQH5
18-25	50	40	110	20x50	3	18+3	DPE01SRQI5
22-25	55	45	115	20x50	3	21+3	DPE01SRQJ5
22-25	60	50	120	20x50	3	24+3	DPE01SRQK5
22-25	65	55	125	20x50	3	26+3	DPE01SRQL5
22-25	70	60	130	25x50	3	27+3	DPE01STQM5
22-25	75	65	135	25x50	3	30+3	DPE01STQN5
22-25	80	70	140	25x50	3	33+3	DPE01STQO5



D	h	S	H	A	Z	Placchette	Codice
mm	mm	mm	mm	mm		Tips	Code
20	27,5	22	87,5	20x50	4	6+1 HW	DPE02DROD5
20	36	31	96	20x50	4	8+1 HW	DPE02DROF5
20	44,5	40	104,5	20x50	4	10+1 HW	DPE02DROH5
20	53	49	113	20x50	4	12+1 HW	DPE02DROI5
20	61,5	57	121,5	20x50	4	14+1 HW	DPE02DROK5
20	27,5	22	87,5	25x50	4	6+1 HW	DPE02DTOD5
20	36	31	96	25x50	4	8+1 HW	DPE02DTOF5
20	44,5	40	104,5	25x50	4	10+1 HW	DPE02DTOH5
20	53	49	113	25x50	4	12+1 HW	DPE02DTOI5
20	61,5	57	121,5	25x50	4	14+1 HW	DPE02DTOK5
22	70	66	130	20x50	4	16+1 HW	DPE02DRPL5
22	70	66	130	25x50	4	16+1 HW	DPE02DTPL5
20	27,5	22	87,5	20x50	4	6+1 HW	DPE02SROD5
20	36	31	96	20x50	4	8+1 HW	DPE02SROF5
20	44,5	40	104,5	20x50	4	10+1 HW	DPE02SROH5
20	53	49	113	20x50	4	12+1 HW	DPE02SROI5
20	61,5	57	121,5	20x50	4	14+1 HW	DPE02SROK5
20	27,5	22	87,5	25x50	4	6+1 HW	DPE02STOD5
20	36	31	96	25x50	4	8+1 HW	DPE02STOF5
20	44,5	40	104,5	25x50	4	10+1 HW	DPE02STOH5
20	53	49	113	25x50	4	12+1 HW	DPE02STOI5
20	61,5	57	121,5	25x50	4	14+1 HW	DPE02STOK5
22	70	66	130	20x50	4	16+1 HW	DPE02SRPL5
22	70	66	130	25x50	4	16+1 HW	DPE02STPL5

■ Punta in PCD con placchetta frontale in HW, a 4 principi e 2 taglienti su tutti i punti di lavoro per la foratura e la contornatura (a medie velocità) di legno duro massello (privo di nodi), MDF impiallacciato o nobilitato. Queste punte lavorano il materiale fino allo spessore massimo di 66 mm. Velocità di avanzamento: 8 -10 m/min.

■ Router bits in PCD with HW tip, with 4 principles and 2 cutting edges on all working points for drilling and edging (at medium speed) of hard solid wood (without knots), veneered or coated MDF. These bits work with material with a thickness of up to 66 mm. Feed rate: 8 -10 m/min.

Punte speciali - Special router bits

D	h	S	H	A	Z	Placchette	Codice
mm	mm	mm	mm	mm		Tips	Code
20-25	27,5	22	87,5	20x50		6+1 HW	DPE02DRQD5
20-25	36	31	96	20x50		8+1 HW	DPE02DRQF5
20-25	44,5	40	104,5	20x50		10+1 HW	DPE02DRQH5
20-25	53	49	113	20x50		12+1 HW	DPE02DRQI5
20-25	61,5	57	121,5	20x50		14+1 HW	DPE02DRQK5
20-25	70	66	130	20x50		16+1 HW	DPE02DRQM5
20-25	27,5	22	87,5	20x50		6+1 HW	DPE02SRQD5
20-25	36	31	96	20x50		8+1 HW	DPE02SRQF5
20-25	44,5	40	104,5	20x50		10+1 HW	DPE02SRQH5
20-25	53	49	113	20x50		12+1 HW	DPE02SRQI5
20-25	61,5	57	121,5	20x50		14+1 HW	DPE02SRQK5
20-25	70	66	130	20x50		16+1 HW	DPE02SRQM5

■ Considerata la vastissima gamma di macchine e di applicazioni possibili, nonché la natura speciale del prodotto, per l'ordinazione preghi indicare **Diametro (D)**, **Spessore di taglio (S)**, **Attacco (A)** e **tipologia del materiale lavorato**. Indicare inoltre la **macchina** e le condizioni di utilizzo (**n° giri e avanzamento**).

■ Considering the wide range of machines and possible applications, and the special nature of the product, when ordering please specify **Diameter (D)**, **Thickness of cut (S)**, **type of material to be worked**. Also specify the **machine** and the conditions of use (**RPM and feed rate**).

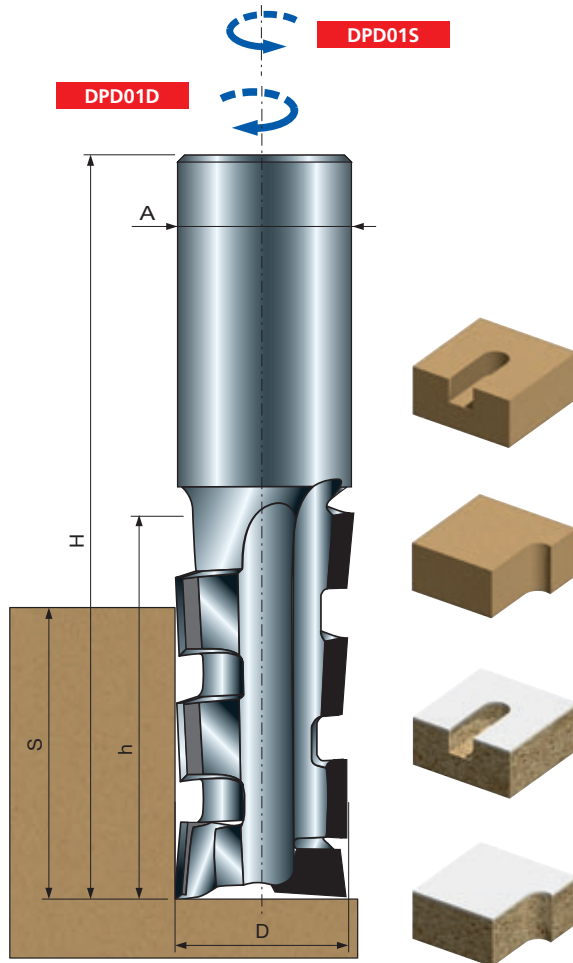


DPD01D DESTRA RIGHT

DPD01S SINISTRA LEFT

PCD - PUNTE A 2 PRINCIPI - 1 TAGLIENTE PER PUNTO

PCD - ROUTER BITS WITH 2 PRINCIPLES, 1 CUTTING EDGE FOR POINT



D	h	S	H	A	Z	Placchette	Codice
mm	mm	mm	mm	mm		Tips	Code
• 12	25	18	83,5	12x50	2	3	DPD01DNGD5
• 12	25	18	83,5	20x50	2	3	DPD01DRGD5
• 12	36	31	81	12x35	2	4	DPD01DNGF5
• 12,7	25	18	83,5	12,7x50	2	3	DPD01DMJD5
• 12,7	36	31	81	12,7x3,5	2	4	DPD01DMJF5
• 14	27,5	22	87,5	20x50	2	3+1 HW	DPD01DRHD5
• 16	27,5	22	87,5	16x50	2	3+1 HW	DPD01DPLD5
• 16	36	31	96	16x50	2	4+1 HW	DPD01DPLF5
• 16	27,5	22	87,5	20x50	2	3+1 HW	DPD01DRLD5
• 16	36	31	96	20x50	2	4+1 HW	DPD01DRLF5
• 18	27,5	22	87,5	16x50	2	3+1 HW	DPD01DPND5
• 18	36	31	96	16x50	2	4+1 HW	DPD01DPNF5
• 18	44,5	40	104,5	16x50	2	5+1 HW	DPD01DPNH5
• 18	27,5	22	87,5	20x50	2	3+1 HW	DPD01DRND5
• 18	36	31	96	20x50	2	4+1 HW	DPD01DRNF5
• 18	44,5	40	104,5	20x50	2	5+1 HW	DPD01DRNH5
• 18	27,5	22	87,5	25x50	2	3+1 HW	DPD01DSND5
• 20	27,5	22	87,5	20x50	2	3+1 HW	DPD01DROD5
• 20	36	31	96	20x50	2	4+1 HW	DPD01DROF5
• 20	44,5	40	104,5	20x50	2	5+1 HW	DPD01DROH5
• 20	53	49	113	20x50	2	6+1 HW	DPD01DROI5
• 12	25	18	83,5	12x50	2	3	DPD01SNGD5
• 12	25	18	83,5	20x50	2	3	DPD01SRGD5
• 12	36	31	81	12x35	2	4	DPD01SNGF5
• 12,7	25	18	83,5	12,7x50	2	3	DPD01SMJD5
• 12,7	36	31	81	12,7x3,5	2	4	DPD01SMJF5
• 14	27,5	22	87,5	20x50	2	3+1 HW	DPD01SRHD5
• 16	27,5	22	87,5	16x50	2	3+1 HW	DPD01SPLD5
• 16	36	31	96	16x50	2	4+1 HW	DPD01SPLF5
• 16	27,5	22	87,5	20x50	2	3+1 HW	DPD01SRLD5
• 16	36	31	96	20x50	2	4+1 HW	DPD01SRLF5
• 18	27,5	22	87,5	16x50	2	3+1 HW	DPD01SPND5
• 18	36	31	96	16x50	2	4+1 HW	DPD01SPNF5
• 18	44,5	40	104,5	16x50	2	5+1 HW	DPD01SPNH5
• 18	27,5	22	87,5	20x50	2	3+1 HW	DPD01SRND5
• 18	36	31	96	20x50	2	4+1 HW	DPD01SRNF5
• 18	44,5	40	104,5	20x50	2	5+1 HW	DPD01SRNH5
• 18	27,5	22	87,5	25x50	2	3+1 HW	DPD01SSND5
• 20	27,5	22	87,5	20x50	2	3+1 HW	DPD01SROD5
• 20	36	31	96	20x50	2	4+1 HW	DPD01SROF5
• 20	44,5	40	104,5	20x50	2	5+1 HW	DPD01SROH5

■ Punta in PCD con placchetta frontale in HW, a 2 principi e 1 tagliente su tutti i punti di lavoro per la foratura e la contornatura di legno duro massello (privo di nodi), MDF impiallacciato o nobilitato. Queste punte lavorano il materiale fino allo spessore massimo di 49 mm.

Velocità di avanzamento: 3 - 4 m/min.

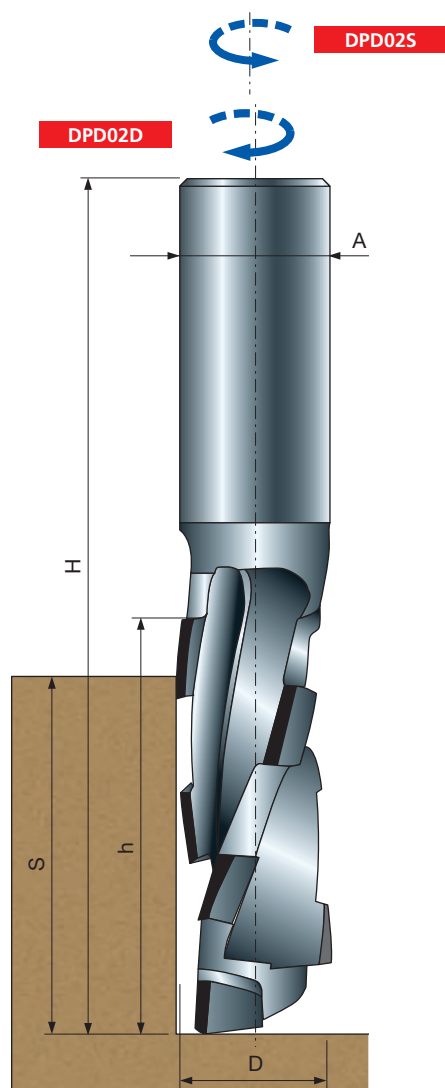
Considerata la vastissima gamma di macchine e di applicazioni possibili, nonché la natura speciale del prodotto, per l'ordinazione pregasi indicare Diametro (D), Spessore di taglio (S), Attacco (A) e tipologia del materiale lavorato. Indicare inoltre la macchina e le condizioni di utilizzo (n° giri e avanzamento).

■ Router bits in PCD with HW, with 2 principles and 1 cutting edge on all working points for drilling and edging of hard solid wood (without knots), veneered or coated MDF. These bits work with material with a thickness of up to 49 mm. Feed rate: 3 - 4 m/min.

Considering the wide range of machines and possible applications, and the special nature of the product, when ordering please specify Diameter (D), Thickness of cut (S), Shank (A) and type of material to be worked. Also specify the machine and the conditions of use (RPM and feed rate).

Punte speciali - Special router bits

D	h	S	H	A	Z	Placchette	Codice
mm	mm	mm	mm	mm		Tips	Code
< 13	25	18	83,5	12-20x50	2	3	DPD01DRXD5
• 14-25	27,5	22	87,5	12-25x50	2	3+1 HW	DPD01DSQD5
• 14-25	36	31	96	12-25x50	2	4+1 HW	DPD01DSQF5
• 18-25	44,5	40	104,5	16-25x50	2	5+1 HW	DPD01DSQH5
• 18-25	53	49	113	16-25x50	2	6+1 HW	DPD01DSQI5
• 20-25	61,5	57	121,5	20-25x50	2	7+1 HW	DPD01DSQK5
• 20-25	70	66	130	20-25x50	2	8+1 HW	DPD01DSQM5
• < 13	25	18	83,5	12-20x50	2	3	DPD01SRXD5
• 14-25	27,5	22	87,5	12-25x50	2	3+1 HW	DPD01SSQD5
• 14-25	36	31	96	12-25x50	2	4+1 HW	DPD01SSQF5
• 18-25	44,5	40	104,5	16-25x50	2	5+1 HW	DPD01SSQH5
• 18-25	53	49	113	16-25x50	2	6+1 HW	DPD01SSQI5
• 20-25	61,5	57	121,5	20-25x50	2	7+1 HW	DPD01SSQK5
• 20-25	70	66	130	20-25x50	2	8+1 HW	DPD01SSQM5



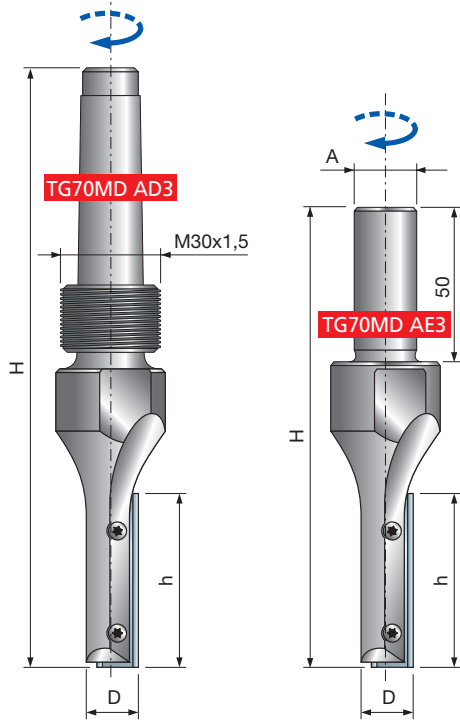
D	h	S	H	A	Z	Placchette	Codice
mm	mm	mm	mm	mm		Tips	Code
12	25	18	83,5	12x50	3	3	DPD02DNGD5
12	36	31	81	12x35	3	4	DPD02DNGF5
12	25	18	83,5	20x50	3	3	DPD02DRGD5
16	27,5	22	87,5	16x50	3	3+1 HW	DPD02DPLD5
16	27,5	22	87,5	20x50	3	3+1	DPD02DRLD5
16	36	31	96	20x50	3	4+1	DPD02DRLF5
16	44,5	40	104,5	20x50	3	5+1	DPD02DRLH5
18	36	31	96	16x50	3	4+1 HW	DPD02DPNF5
18	36	31	96	20x50	3	4+1	DPD02DRNF5
18	44,5	40	104,5	20x50	3	5+1	DPD02DRNH5
• 20	27,5	22	87,5	20x50	3	3+1 HW	DPD02DROD5
• 20	36	31	96	20x50	3	4+1 HW	DPD02DROF5
• 20	44,5	40	104,5	20x50	3	5+1 HW	DPD02DROH5
20	53	49	113	20x50	3	6+1 HW	DPD02DROI5
20	44,5	40	104,5	25x50	3	5+1 HW	DPD02DTOG5
20	53	49	113	25x50	3	6+1 HW	DPD02DIOI5
22	53	49	113	20x50	3	6+1 HW	DPD02DRPI5
22	61,5	57	121,5	20x50	3	7+1 HW	DPD02DRPK5
22	70	66	130	20x50	3	8+1 HW	DPD02DRPM5
22	44,5	40	104,5	25x50	3	5+1 HW	DPD02DTPG5
22	53	49	113	25x50	3	6+1 HW	DPD02DTPI5
22	61,5	57	121,5	25x50	3	7+1 HW	DPD02DTPK5
22	70	66	130	25x50	3	8+1 HW	DPD02DTPM5
12	25	18	83,5	12x50	3	3	DPD02SNGD5
12	36	31	81	12x35	3	4	DPD02SNGF5
12	25	18	83,5	20x50	3	3	DPD02SRGD5
16	27,5	22	87,5	16x50	3	3+1 HW	DPD02SPLD5
16	27,5	22	87,5	20x50	3	3+1	DPD02SRLD5
16	36	31	96	20x50	3	4+1	DPD02SRLF5
16	44,5	40	104,5	20x50	3	5+1	DPD02SRLH5
18	36	31	96	16x50	3	4+1 HW	DPD02SPNF5
18	36	31	96	20x50	3	4+1	DPD02SRNF5
18	44,5	40	104,5	20x50	3	5+1	DPD02SRNH5
20	27,5	22	87,5	20x50	3	3+1 HW	DPD02SROD5
20	36	31	96	20x50	3	4+1 HW	DPD02SROF5
20	44,5	40	104,5	20x50	3	5+1 HW	DPD02SROH5
20	53	49	113	20x50	3	6+1 HW	DPD02SROI5
20	44,5	40	104,5	25x50	3	5+1 HW	DPD02STOG5
20	53	49	113	25x50	3	6+1 HW	DPD02STOI5
22	53	49	113	20x50	3	6+1 HW	DPD02SRPI5
22	61,5	57	121,5	20x50	3	7+1 HW	DPD02SRPK5
22	70	66	130	20x50	3	8+1 HW	DPD02SRPM5
22	44,5	40	104,5	25x50	3	5+1 HW	DPD02STPG5
22	53	49	113	25x50	3	6+1 HW	DPD02STPI5
22	61,5	57	121,5	25x50	3	7+1 HW	DPD02STPK5
22	70	66	130	25x50	3	8+1 HW	DPD02STPM5

■ Punta elicoidali in PCD per la lavorazione, con ottima finitura (con medie velocità di avanzamento), di MDF, truciolare melaminico, truciolare grezzo, MDF e truciolare melaminico laccati, laminati plastici. È possibile costruire le punte con la placchetta frontale in diamante. Velocità di avanzamento consentita: da 3 a 4 m/min, in base allo spessore del materiale da lavorare.

■ Spiral router bits in PCD for working, with excellent finishing (at medium feed rates), of MDF, melamine chipboard, unfinished chipboard, lacquered melamine chipboard and MDF, plastic laminates. It is possible to construct the router bits with the front tip in PCD. Allowable feed rate: 3 to 4 m/min, depending on the thickness of material to be worked.

TG70MD

PUNTA CON COLTELLO REVERSIBILE A GETTARE DISPOSABLE KNIFE STRAIGHT ROUTER BITS

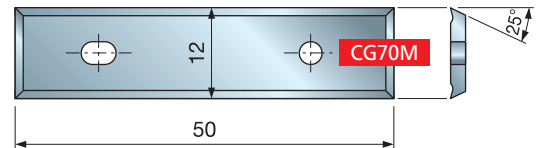
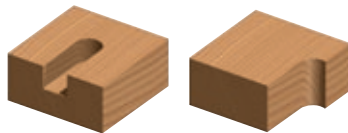
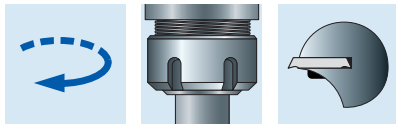


D	h	H	A	Z	Codice Code
16	50	179	CM2	1	TG70MD AD3
16	50	137	20	1	TG70MD AE3

Parti di ricambio Spare parts	Dimensioni Dimensions	Codice Code
Coltello / Knife	50 x 12 x 2	CG70M AA3
Vite / Screw	M4 x 8 x 6	VT70M AA9
Rondella / Ring	16 x 2 x 4	VT18M AB9
Chiave Torx / Torx key	T15	CB03M DA9

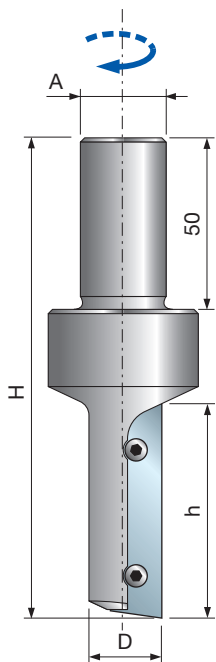
■ Per pantografi normali o CNC. Adatta per forare e contornare su legno tenero e duro. La presenza del coltello a gettare garantisce un diametro ed una finitura sempre costanti. Si consiglia l'entrata graduale nel pezzo anziché a tuffo.

■ For normal or CNC overhead machines. Suitable for plunging and sizing soft and hard solid wood. The disposable knife guarantees a constant finish and cutting diameter. We suggest a gradual feed rate when entering into the workpiece.



TG71MD

PUNTA CON COLTELLO REVERSIBILE A GETTARE DISPOSABLE KNIFE STRAIGHT ROUTER BITS

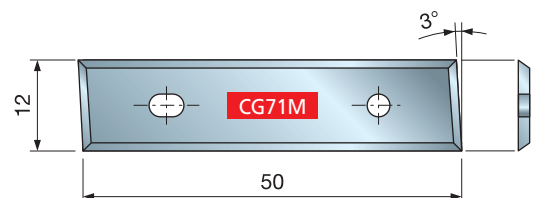
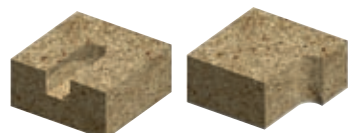
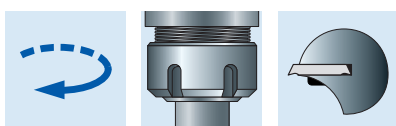


D	h	H	A	Z	Codice Code
16	50	120	20	1	TG71MD AD3
18	50	120	20	1	TG71MD BD3
20	50	120	20	1	TG71MD CD3

Parti di ricambio Spare parts	Dimensioni Dimensions	Codice Code
Coltello / Knife	50 x 12 x 1,5	CG71M AA3
Vite / Screw	M4 x 10 x 9	VT71M AA9
Chiave Torx / Torx key	T15	CB03M DA9

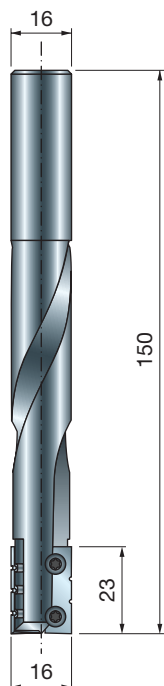
■ Per pantografi normali o CNC. Adatta per forare e contornare su truciolare, MDF, laminati e simili. La presenza del coltello a gettare garantisce un diametro ed una finitura sempre costanti. Si consiglia l'entrata graduale nel pezzo anziché a tuffo.

■ For normal or CNC overhead machines. Suitable for plunging and sizing chipboard, MDF, laminates and similar materials. The disposable knife guarantees a constant finish and cutting diameter. We suggest a gradual feed rate when entering into the workpiece.







TG72MD

PUNTA IN METALLO PESANTE HEAVY METAL BIT

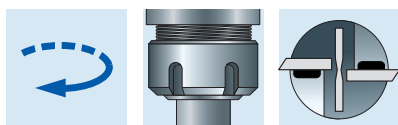


D	h	H	A	Z	Codice
mm	mm	mm	mm		Code
16	23	150	16	2	TG72MD AA3

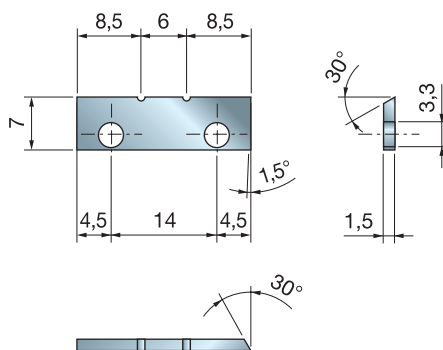
Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Colt. a 2 intagli / Knife with 2 carvings	 23 x 7 x 1,5	CG72M AB3
Colt. a 3 intagli / Knife with 3 carvings	 23 x 7 x 1,5	CG72M AA3
Vite / Screw	 M3 x 6 x 5	VT72M AA9
Chiave Torx / Torx key	 T9	CB03M CA9

■ Per pantografi CNC, adatte all'esecuzione di sedi per serrature e cerniere su porte e finestre. La particolare geometria della punta ed il materiale di cui è composta garantiscono un'ottima qualità di taglio, grazie alla bassissima quantità di vibrazioni durante la lavorazione.

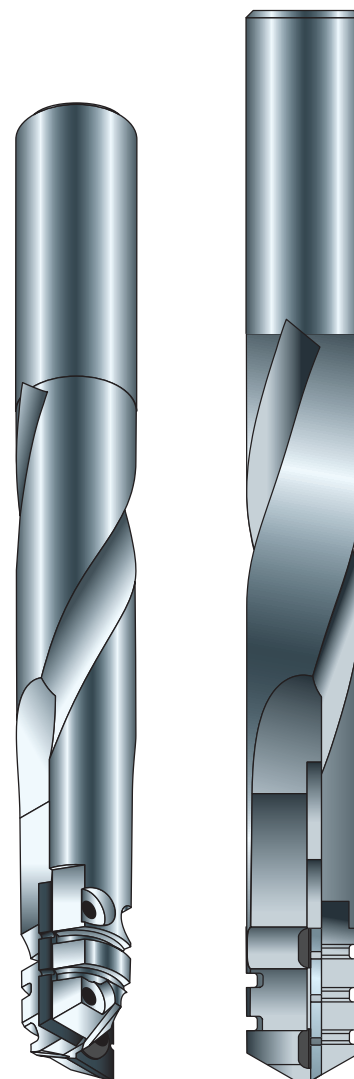
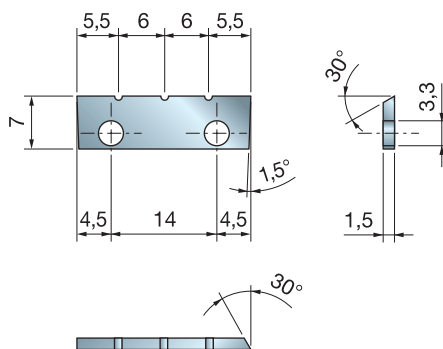
■ To use on CNC routers. Suitable for lock and hinge seats on windows and doors. The bit's design and construction material allow great vibration reductions when the tool is working while guaranteeing a high quality cutting performance.



CG72M AB3



CG72M AA3







TM10MD

PUNTA MULTITAGLIANTI CON COLTELLI REVERSIBILI A GETTARE DISPOSABLE KNIVES STRAIGHT ROUTER CUTTER

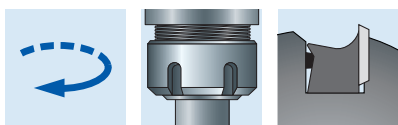


D	h	H	A	Z	Codice
mm	mm	mm	mm		Code
50	56	108	20	10	TM10MD AA3
50	78	130	20	14	TM10MD AC3

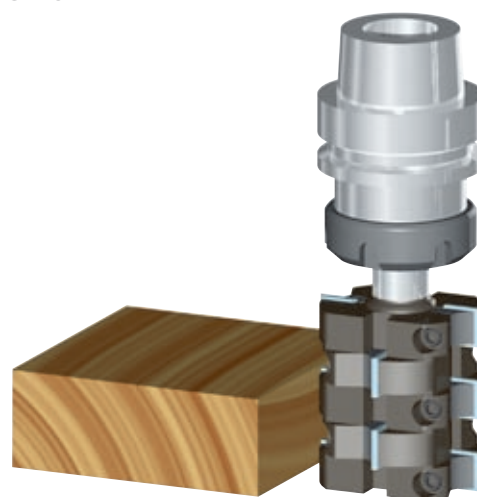
Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Coltello / Knife 	12 x 12 x 1,5	CG01M BA3
Cuneo / Wedge 	15 x 10 x 8	CN01M BA9
Vite / Screw 	M6 x 12	VT03M DL9
Chiave / Allen key 	3 x 110	CB03M AA9

■ Per pantografi a CNC. Ideale per la sgrossatura e la contornatura su legno e suoi derivati. Adatta anche all'esecuzione di battute. La geometria dei taglienti sfalsati garantisce una riduzione della rumorosità ed una migliore fuoriuscita del truciolo.

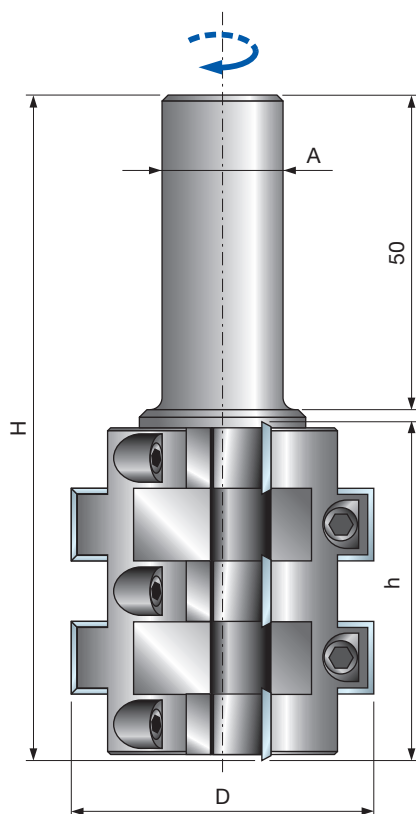
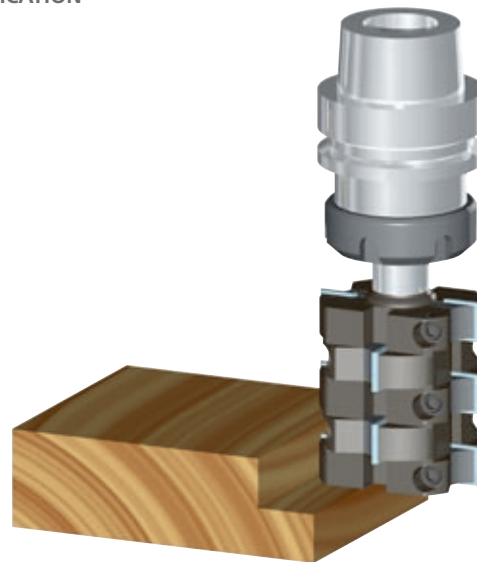
■ For overhead CNC machines. Ideal for roughing and sizing on wood and similar materials. Also suitable for cutting rebates. The multiple edge guarantees low noise running and optimum chip discharge.



1 ESEMPIO DI APPLICAZIONE EXAMPLE OF APPLICATION

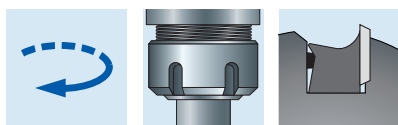


2 ESEMPIO DI APPLICAZIONE EXAMPLE OF APPLICATION



NC10M-A

PUNTA CON COLTELLI A GETTARE, INCLINAZIONE REGOLABILE ADJUSTABLE BEVEL ROUTER CUTTER WITH DISPOSABLE KNIVES



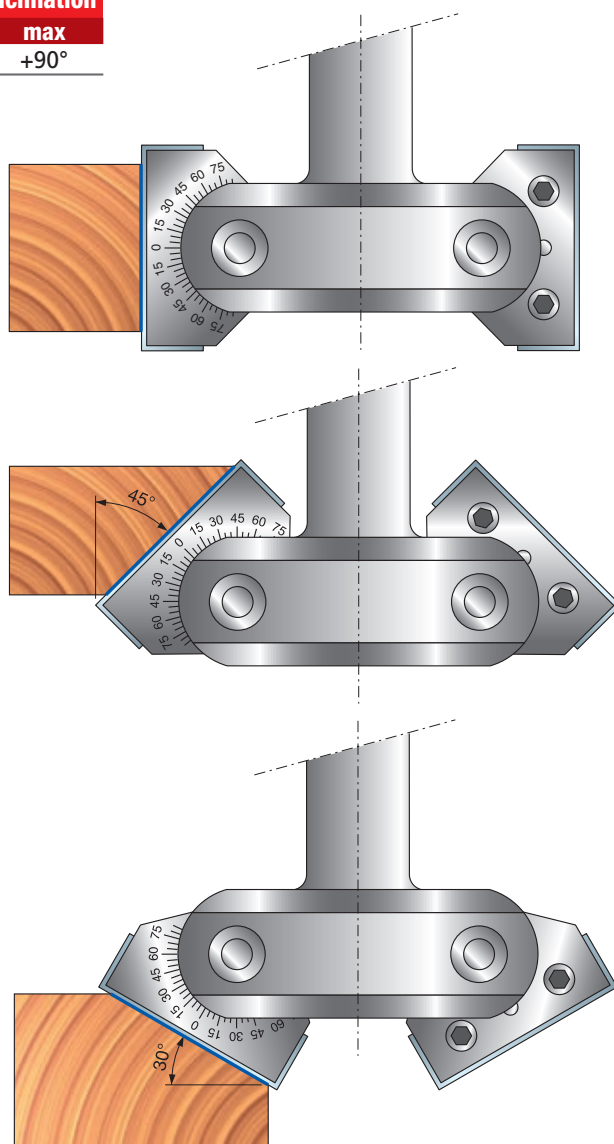
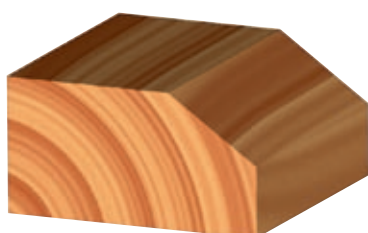
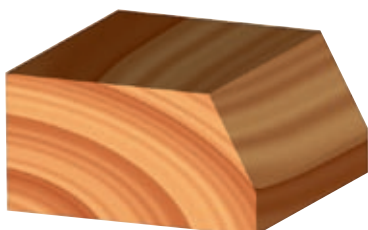
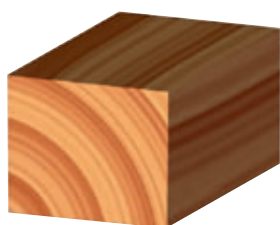
D	h	H	A	Z	Codice
mm	mm	mm	mm		Code
85		40	20	2	NC10M-A

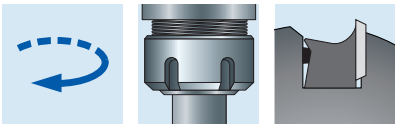
Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Tassello completo / Support with knife		NC10M-A010
Coltello / Knife	40 x 12 x 1,5	CG01M LA3
Cuneo / Wedge	38 x 11,5 x 6	CN03M DA9
Vite / Screw	M5 x 16	2607M CF9
Vite / Screw	M6 x 8	VT03M DE9
Ogiva / Nut	12 x 12 x 6	VT20M DC9
Ogiva / Nut	12 x 50 x M5	VT20M DB9
Chiave a "L" / Allen key	3	2619M DA9
Chiave / Allen key	4 x 110	CB03M BA9

- Per pantografi a CNC. Ideale per la smussatura su legno e suoi derivati. Il particolare sistema di bloccaggio dei taglienti garantisce l'esecuzione di smussi con una regolazione dell'angolo di oltre 90°.
- For overhead CNC machines. Ideal for bevelling on wood and similar materials. The special locking system of the cutting edges allows to accomplish bevels with angle adjustment over 90°

Inclinaz. / Inclination









min.	max
-45°	+90°





D	L	A	Codice
mm	mm	mm	Code
16	70	12x50	NC01MCA*
16	70	12x50	NC01M-A**

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Chiave Torx / Torx key 	T15	CB03M DA9

Coltelli di ricambio	Dimensioni	Codice
Spare knives	Dimensions	Code
1 	12x19 R=4	CC01M T01
2 	12x19 R=4	CC01M T02
3 	12x19 R=2,5	CC01M T03
4 	12x19 $\alpha=90^\circ$	CC01M T04
5 	12x19 R=5	CC01M T05
6 	12x19 R=4	CC01M T06
7 	12x19 R=2,5	CC01M T07
8 	12x19 R=2,25	CC01M T08
9 	12x19 R=5	CC01M T09
10 	12x19 R=3	CC01M T10

■ Ideale per la pantografatura su legni naturali teneri e duri, legni esotici, truciolari e MDF con pantografi normali o CNC.

*L'articolo **NC01MCA** è composto dal corpo punta e da n. 10 coltelli (1 per ogni tipo di profilo illustrato).

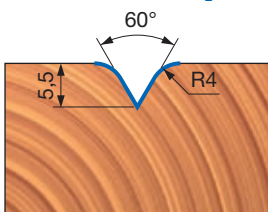
Per eseguire un solo tipo di profilo è sufficiente ordinare il corpo punta **NC01M-A e n.1 coltello del profilo desiderato.

■ For profiling soft and hard solid woods, exotic woods, chipboard and MDF on normal and CNC overhead routing machines.

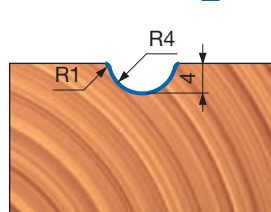
*Item **NC01MCA** includes the router bit body and 10 knives (1 for each profile).

For making one profile only, please order the router bit body **NC01M-A and 1 knife with the desired profile.

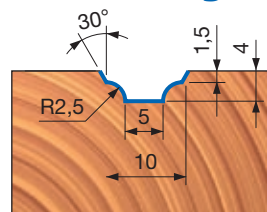
PROFILO / PROFILE 1



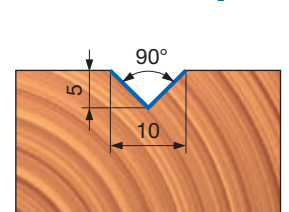
PROFILO / PROFILE 2



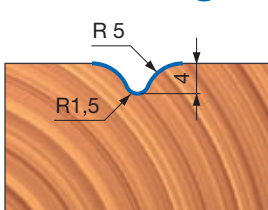
PROFILO / PROFILE 3



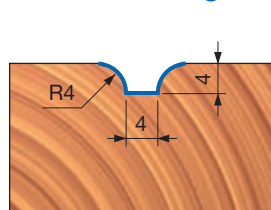
PROFILO / PROFILE 4



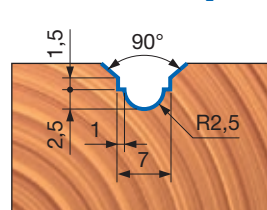
PROFILO / PROFILE 5



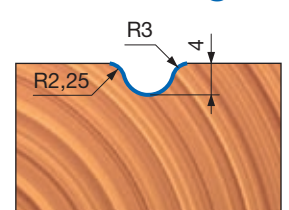
PROFILO / PROFILE 6



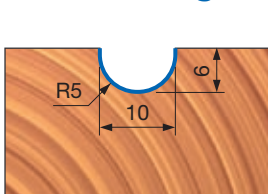
PROFILO / PROFILE 7



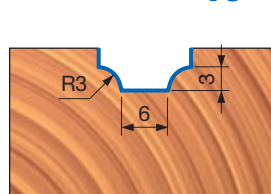
PROFILO / PROFILE 8



PROFILO / PROFILE 9



PROFILO / PROFILE 10



NC02M

PUNTA PORTACOLTELLI PROFILATI

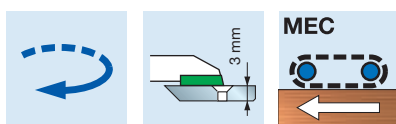
CNC ROUTER CUTTER WITH PROFILED KNIVES



D	B	A	Max RPM	Codice
mm	mm	mm	U/min.	Code
50	35	vedi / see (1)	25.000	NC02M...(1)

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Vite / Screw	M6 x 12	2622M CC9
Vite / Screw	M5 x 5	2615M CC9
Rondella / Ring	14 x 2 x 6	VT18M AL9
Chiave / Allen key	4 x 110	CB03M BA9
Chiave esag. a "L" / Allen key	2,5	2619M CA9

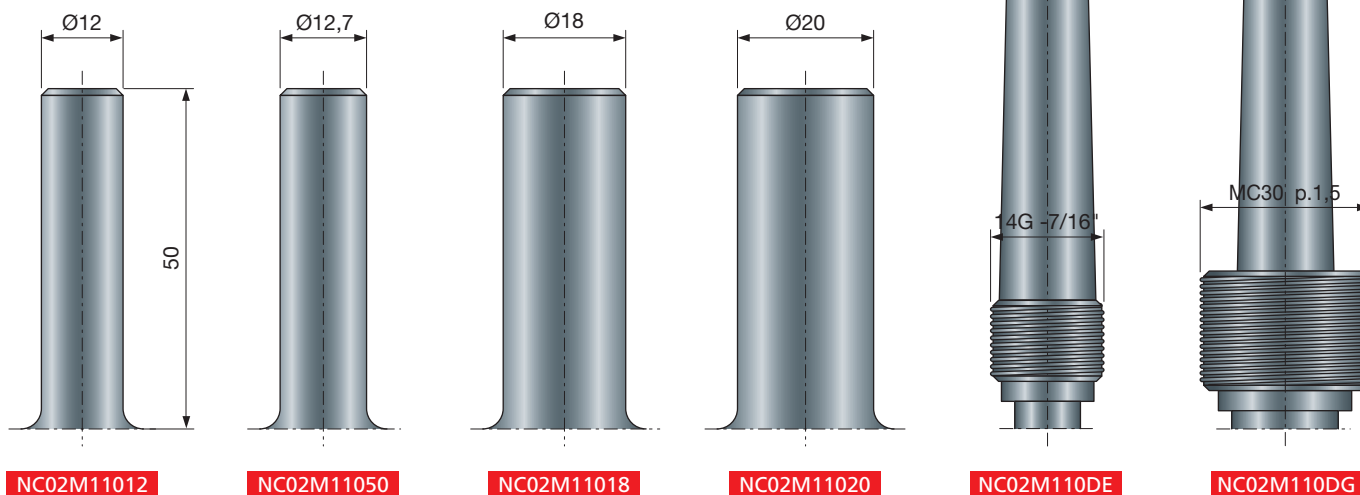
Coltelli di ricambio	Dimensioni	Codice
Spare knives	Dimensions	Code
1	17,5 x 35 x 3	CC02M 110A
2	17,5 x 35 x 3	CC02M 110B
3	17,5 x 35 x 3	CC02M 110C
4	17,5 x 35 x 3	CC02M 110D
5	17,5 x 35 x 3	CC02M 110E
6	17,5 x 35 x 3	CC02M 110F



PERFORMANCE
Coltelli Riaffilabili
SYSTEM
Resharpenable Knives

- Ideale per la profilatura su legni naturali teneri e duri, legni esotici, truciolari e MDF con pantografi normali o CNC. L'articolo **NC02M110...** è composto dal corpo punta e da n.12 coltelli (2 per ogni tipo di profilo illustrato)..
- For profiling soft and hard solid woods, exotic woods, chipboard and MDF on normal and CNC overhead routing machines. Item **NC02M110...** includes the router bit body and 12 knives (2 for each profile).

- (1) Le punte **NC02M** sono disponibili con i seguenti attacchi e rispettivi codici, che andranno riportati sull'ordine.
- (1) Router Bits **NC02M** are available with the following shanks. Please use the indicated shank code numbers when ordering.



NC02M11012

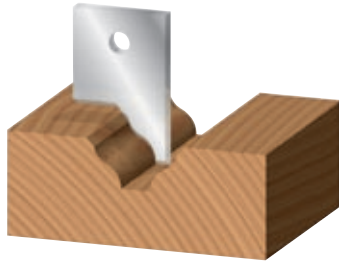
NC02M11050

NC02M11018

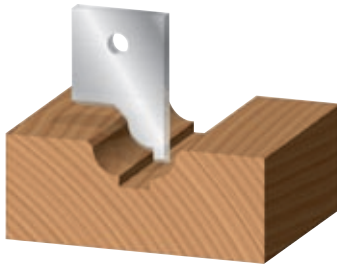
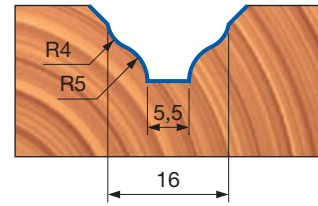
NC02M11020

NC02M110DE

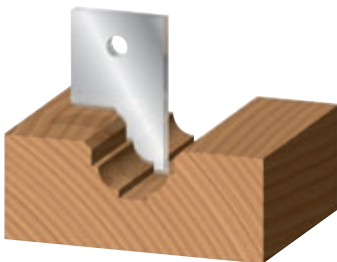
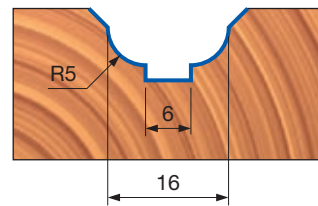
NC02M110DG



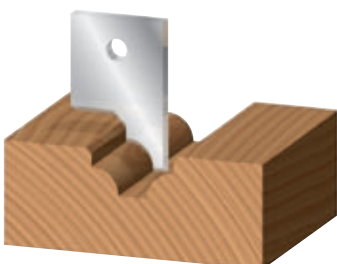
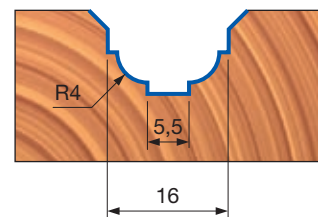
PROFILO / PROFILE 1



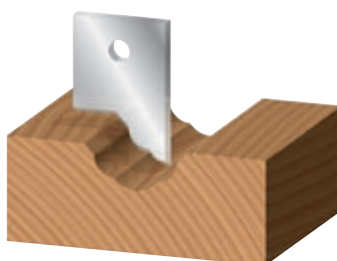
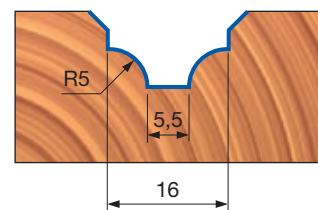
PROFILO / PROFILE 2



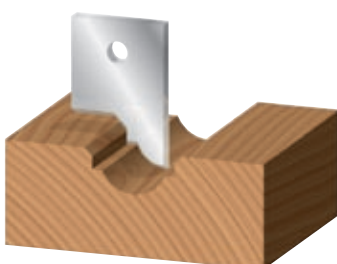
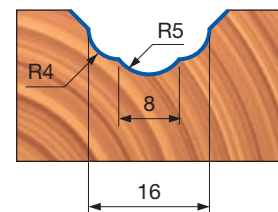
PROFILO / PROFILE 3



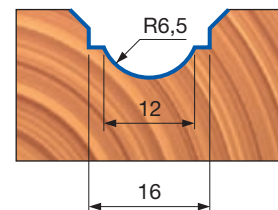
PROFILO / PROFILE 4



PROFILO / PROFILE 5



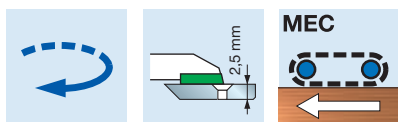
PROFILO / PROFILE 6



NC21MCA

PUNTA PORTACOLTELLI PROFILATI

CNC ROUTER CUTTER WITH PROFILED KNIVES



PERFORMANCE
Coltelli Riaffilabili
SYSTEM
Resharpenable Knives

D	B	A	Max RPM	Codice
mm	mm	mm	U/min.	Code
48	34	20x50	18.000	NC21MCA*
48	34	20x50	18.000	NC21M-A**

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Vite / Screw	M4 x 10	2622M AB9
Vite / Screw	M8 x 18	2622M DF9
Rondella / Ring	9 x 1,5 x 4	VT18M AH9
Chiave esag. a "L" / Allen key	2,5	2619M CA9

Coltelli di ricambio	Dimensioni	Codice
Spare knives	Dimensions	Code
1	24 x 34 x 2,5 R=8	CC21M T01
2	24 x 34 x 2,5 R=10	CC21M T02
3	24 x 34 x 2,5 R=12	CC21M T03

■ Ideale per l'esecuzione di raggi concavi su legni naturali teneri e duri, legni esotici, truciolari e MDF con pantografi normali o CNC.

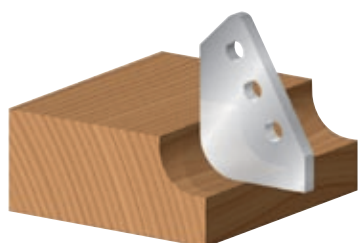
*L'articolo **NC21MCA** è composto dal corpo punta e da n. 6 coltelli (2 per ogni tipo di profilo illustrato).

Per eseguire un solo tipo di profilo è sufficiente ordinare il corpo punta **NC21M-A e 2 coltelli del profilo desiderato.

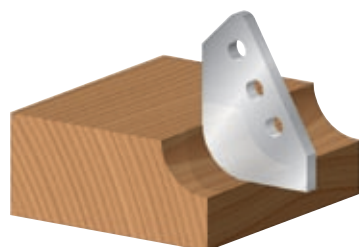
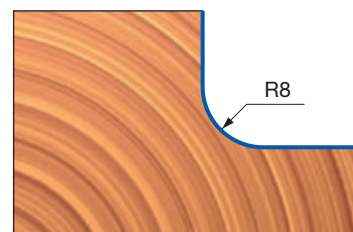
■ For profiling soft and hard solid woods, exotic woods, chipboard and MDF on normal and CNC overhead routing machines.

*Item **NC21MCA** includes the router bit body and 6 knives (2 for each profile).

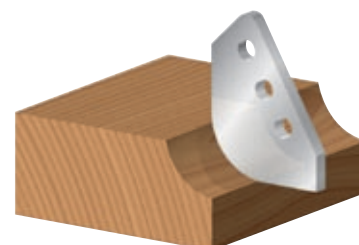
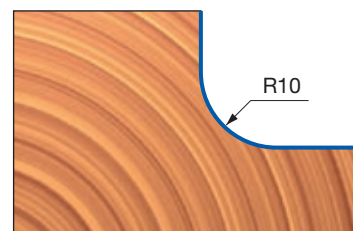
For making one profile only, please order the router bit body **NC21M-A and 2 knives with the desired profile.



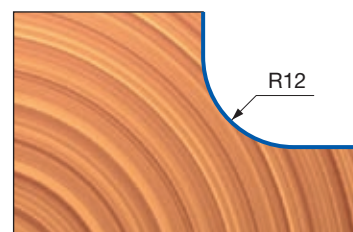
PROFILO / PROFILE **1**



PROFILO / PROFILE **2**



PROFILO / PROFILE **3**







NC23MCA




PUNTA PORTACOLTELLI PROFILATI

CNC ROUTER CUTTER WITH PROFILED KNIVES



D	B	A	Max RPM	Codice
mm	mm	mm	U/min.	Code
48	34	20x50	18.000	NC23MCA*
48	34	20x50	18.000	NC23M-A**

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Vite / Screw	 M4 x 10	2622M AB9
Vite / Screw	 M8 x 18	2622M DF9
Rondella / Ring	 9 x 1,5 x 4	VT18M AH9
Chiave esag. a "L" / Allen key	 2,5	2619M CA9

Coltelli di ricambio	Dimensioni	Codice
Spare knives	Dimensions	Code
1 	24 x 34 x 2,5 R=15	CC23M T01
2 	24 x 34 x 2,5 R=17,5	CC23M T02
3 	24 x 34 x 2,5 R=20	CC23M T03

■ Ideale per l'esecuzione di raggi concavi su legni naturali teneri e duri, legni esotici, truciolari e MDF con pantografi normali o CNC.

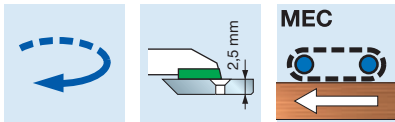
*L'articolo **NC23MCA** è composto dal corpo punta e da n. 6 coltelli (2 per ogni tipo di profilo illustrato).

Per eseguire un solo tipo di profilo è sufficiente ordinare il corpo punta **NC23M-A e 2 coltelli del profilo desiderato.

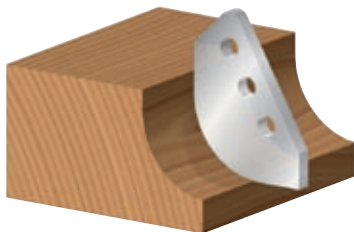
■ For profiling soft and hard solid woods, exotic woods, chipboard and MDF on normal and CNC overhead routing machines.

*Item **NC23MCA** includes the router bit body and 6 knives (2 for each profile).

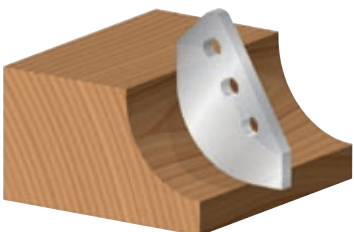
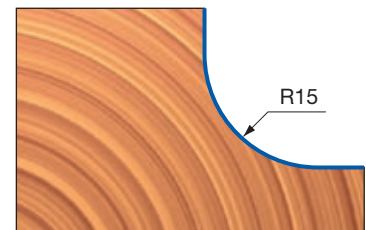
For making one profile only, please order the router bit body **NC23M-A and 2 knives with the desired profile.



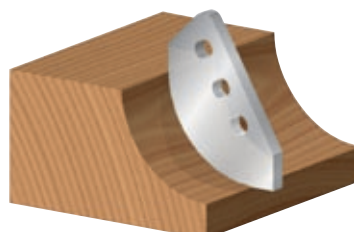
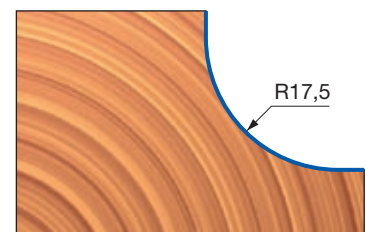
PERFORMANCE
Coltelli Riaffilabili
SYSTEM
Resharpenable Knives



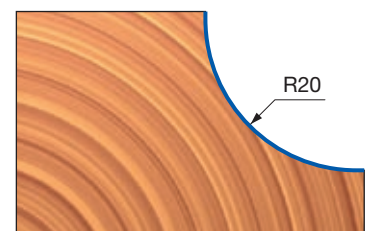
PROFILO / PROFILE **1**



PROFILO / PROFILE **2**



PROFILO / PROFILE **3**



NC30MCA







PUNTA PORTACOLTELLI MULTIRAGGIO

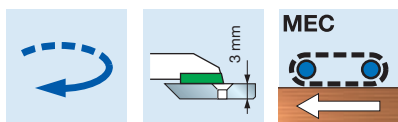
CNC ROUTER CUTTER WITH MULTIRADIUS KNIVES



D	B	A	Max RPM	Codice
mm	mm	mm	U/min.	Code
96	55	20	11.000	NC30MCA*
96	55	20	11.000	NC30M-A**

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Chiave / Allen key	 4 x 110	CB03M BA9

Coltelli di ricambio	Dimensioni	Codice
Spare knives	Dimensions	Code
1	 55 x 35 x 3 R=2	CC30M T02
2	 55 x 35 x 3 R=3	CC30M T03
3	 55 x 35 x 3 R=4	CC30M T04
4	 55 x 35 x 3 R=5	CC30M T05
5	 55 x 35 x 3 R=6	CC30M T06
6	 55 x 35 x 3 R=7	CC30M T07



PERFORMANCE SYSTEM
Coltelli Riaffilabili
Resharpenable Knives

■ Ideale per eseguire oltre al raggio degli spigoli, anche la contornatura del pezzo fino ad uno spessore di 42/48 mm su legni naturali teneri e duri, legni esotici, truciolari e MDF con pantografi normali o CNC.

*L'articolo **NC30MCA** è composto dal corpo punta e da n. 12 coltelli (2 per ogni tipo di profilo illustrato).

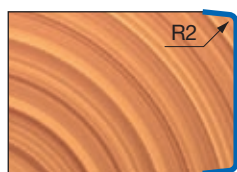
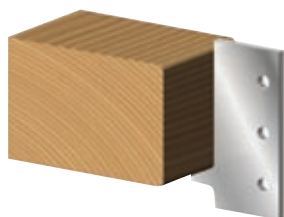
Per eseguire un solo tipo di profilo è sufficiente ordinare il corpo punta **NC30M-A e 2 coltelli del profilo desiderato.

■ For normal and CNC router machines. Suitable for rounding, bevelling and sizing on pieces up to a kerf of 42/48 mm on soft, hard and exotic wood, chipboard and MDF.

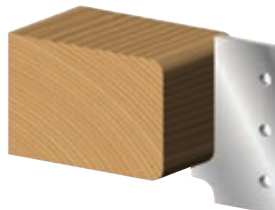
*Item **NC30MCA** includes the router bit body and 12 knives (2 for each profile).

For making one profile only, please order the router bit body **NC30M-A and 2 knives with the desired profile.

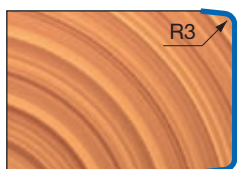
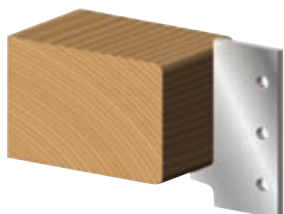
PROFILO / PROFILE **1**



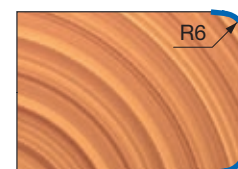
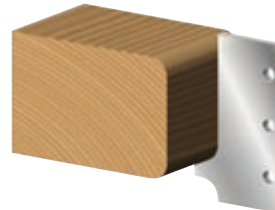
PROFILO / PROFILE **4**



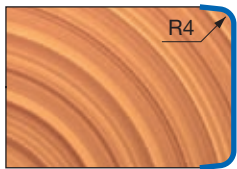
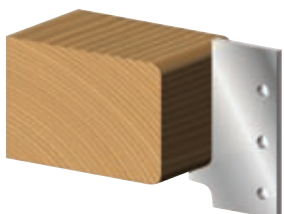
PROFILO / PROFILE **2**



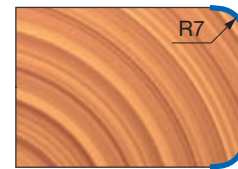
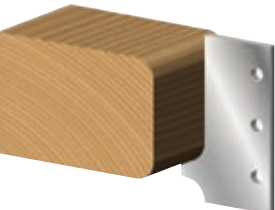
PROFILO / PROFILE **5**



PROFILO / PROFILE **3**



PROFILO / PROFILE **6**



NC30MCB






PUNTA PORTACOLTELLI MULTIRAGGIO

CNC ROUTER CUTTER WITH MULTIRADIUS KNIVES



D	B	A	Max RPM	Codice
mm	mm	mm	U/min.	Code
96	55	20	11.000	NC30MCB*
96	55	20	11.000	NC30M-B**

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Chiave / Allen key	 4 x 110	CB03M BA9

Coltelli di ricambio	Dimensioni	Codice
Spare knives	Dimensions	Code
1	 55 x 35 x 3 R=8	CC30M T08
2	 55 x 35 x 3 R=9	CC30M T09
3	 55 x 35 x 3 R=10	CC30M T10
4	 55 x 35 x 3 R=11	CC30M T11
5	 55 x 35 x 3 R=12	CC30M T12
6	 55 x 35 x 3 R=13	CC30M T13

■ Ideale per eseguire oltre al raggio degli spigoli, anche la contornatura del pezzo fino ad uno spessore di 42/48 mm su legni naturali teneri e duri, legni esotici, truciolari e MDF con pantografi normali o CNC.

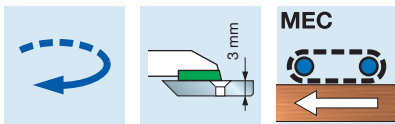
*L'articolo **NC30MCB** è composto dal corpo punta e da n. 12 coltelli (2 per ogni tipo di profilo illustrato).

Per eseguire un solo tipo di profilo è sufficiente ordinare il corpo punta **NC30M-B e 2 coltelli del profilo desiderato.

■ For normal and CNC router machines. Suitable for rounding, bevelling and sizing on pieces up to a kerf of 42/48 mm on soft, hard and exotic wood, chipboard and MDF.

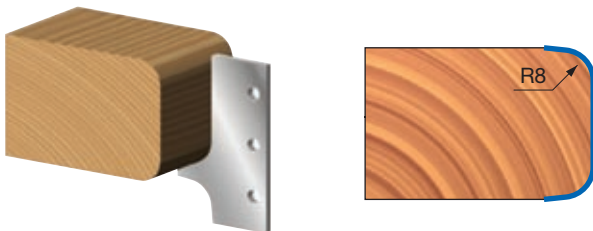
*Item **NC30MCB** includes the router bit body and 12 knives (2 for each profile).

For making one profile only, please order the router bit body **NC30M-B and 2 knives with the desired profile.

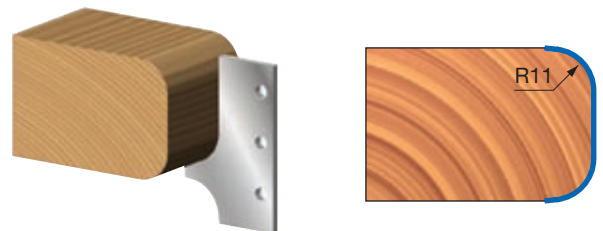


PERFORMANCE SYSTEM
Coltelli Riaffilabili
Resharpenable Knives

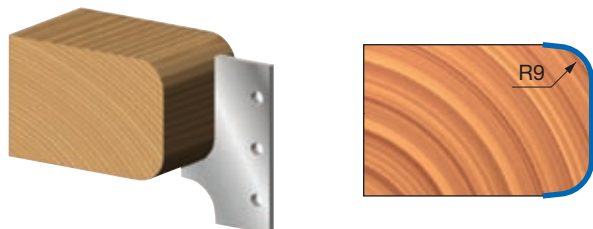
PROFILO / PROFILE **1**



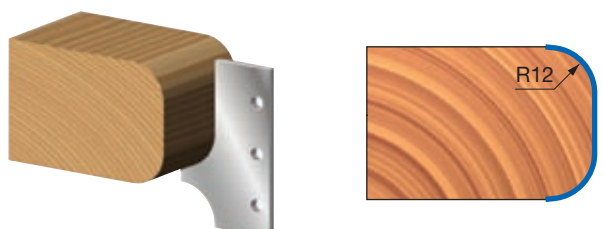
PROFILO / PROFILE **4**



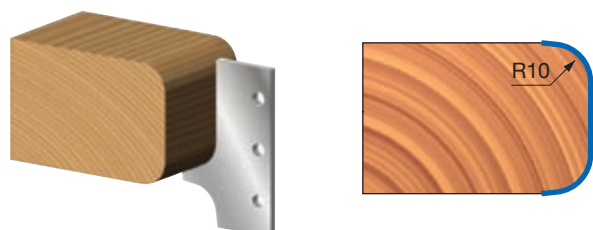
PROFILO / PROFILE **2**



PROFILO / PROFILE **5**



PROFILO / PROFILE **3**



PROFILO / PROFILE **6**



NC33MCA

PUNTA PORTACOLTELLI PROFILATI

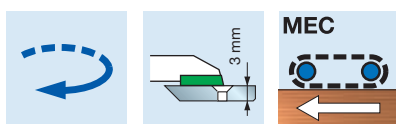
CNC ROUTER CUTTER WITH PROFILED KNIVES



D	B	A	Max RPM	Codice
mm	mm	mm	U/min.	Code
87	35	20x50	12.000	NC33MCA*
87	35	20x50	12.000	NC33M-A**

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Vite / Screw	M6 x 12	2622M CC9
Vite / Screw	M10 x 25	2622M EH9
Rondella / Ring	14 x 2 x 6	VT18M AL9
Chiave / Allen key	4 x 110	CB03M BA9

Coltelli di ricambio	Dimensioni	Codice
Spare knives	Dimensions	Code
1	35 x 34 x 3 3x45°	CC33M T01
2	35 x 34 x 3 R=2	CC33M T02
3	35 x 34 x 3 R=3	CC33M T03
4	35 x 34 x 3 R=4	CC33M T04
5	35 x 34 x 3 R=5	CC33M T05



PERFORMANCE
Coltelli Riaffilabili
SYSTEM
Resharpenable Knives

■ Ideale per l'esecuzione di smussi e raccordi su legni naturali teneri e duri, legni esotici, truciolari e MDF con pantografi normali o CNC.

*L'articolo **NC33MCA** è composto dal corpo punta e da n. 10 coltelli (2 per ogni tipo di profilo illustrato).

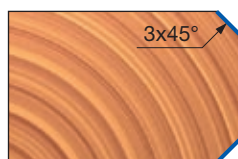
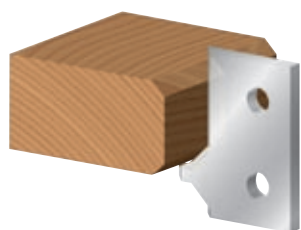
Per eseguire un solo tipo di profilo è sufficiente ordinare il corpo punta **NC33M-A e 2 coltelli del profilo desiderato.

■ For profiling soft and hard solid woods, exotic woods, chipboard and MDF on normal and CNC overhead routing machines.

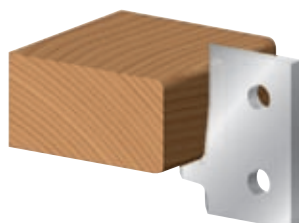
*Item **NC33MCA** includes the router bit body and 10 knives (2 for each profile).

For making one profile only, please order the router bit body **NC33M-A and 2 knives with the desired profile.

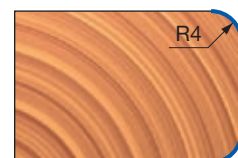
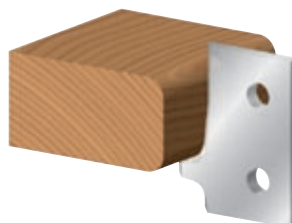
PROFILO / PROFILE **1**



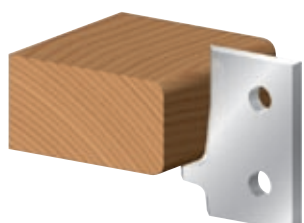
PROFILO / PROFILE **2**



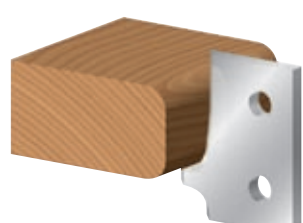
PROFILO / PROFILE **4**



PROFILO / PROFILE **3**



PROFILO / PROFILE **5**



NC40MCA

PUNTA PORTACOLTELLI PROFILATI

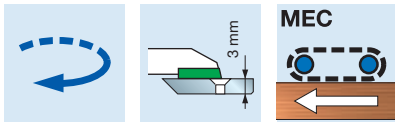
CNC ROUTER CUTTER WITH PROFILED KNIVES



D	B	A	Max RPM	Codice
mm	mm	mm	U/min.	Code
76	58	20x50	12.000	NC40MCA*
76	58	20x50	12.000	NC40M-A**

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Vite / Screw	M6 x 12	2622M CC9
Vite / Screw	M10 x 25	2622M EH9
Rondella / Ring	14 x 2 x 6	VT18M AL9
Chiave / Allen key	4 x 110	CB03M BA9

Coltelli di ricambio	Dimensioni	Codice
Spare knives	Dimensions	Code
1	48 x 53 x 3 R=8	CC40M T01
2	48 x 53 x 3 R=10	CC40M T02
3	48 x 53 x 3 R=12	CC40M T03
4	48 x 53 x 3 R=15	CC40M T04



PERFORMANCE SYSTEM
Coltelli Riaffilabili
Resharpenable Knives

■ Ideale per l'esecuzione di raggi convessi su legni naturali teneri e duri, legni esotici, truciolari e MDF con pantografi normali o CNC.

*L'articolo **NC40MCA** è composto dal corpo punta e da n. 8 coltelli (2 per ogni tipo di profilo illustrato).

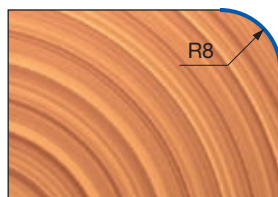
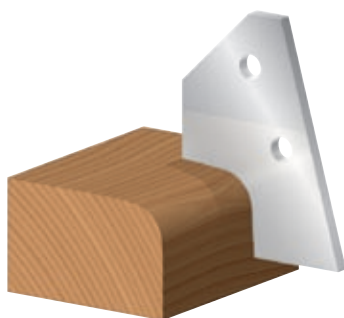
Per eseguire un solo tipo di profilo è sufficiente ordinare il corpo punta **NC40M-A e 2 coltelli del profilo desiderato.

■ For profiling soft and hard solid woods, exotic woods, chipboard and MDF on normal and CNC overhead routing machines.

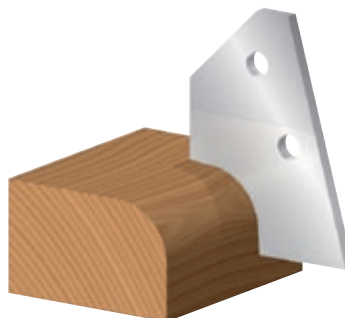
*Item **NC40MCA** includes the router bit body and 8 knives (2 for each profile).

For making one profile only, please order the router bit body **NC40M-A and 2 knives with the desired profile.

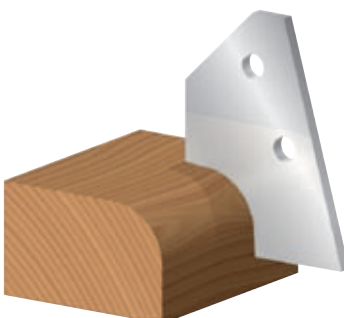
PROFILO / PROFILE **1**



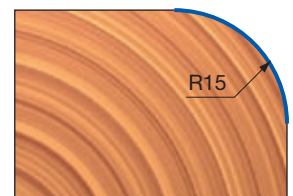
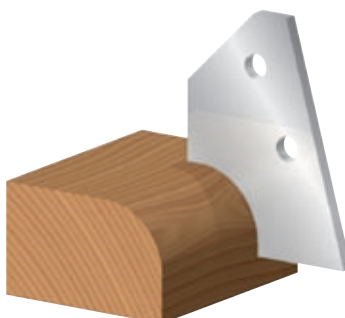
PROFILO / PROFILE **3**



PROFILO / PROFILE **2**



PROFILO / PROFILE **4**



NC50MCA

PUNTA PORTACOLTELLI PROFILATI

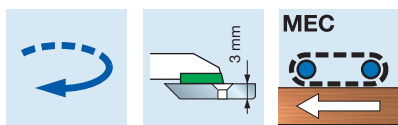
CNC ROUTER CUTTER WITH PROFILED KNIVES



D	B	A	Max RPM	Codice
mm	mm	mm	U/min.	Code
72	59	20x50	12.000	NC50MCA*
72	59	20x50	12.000	NC50M-A**

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Vite / Screw	M6 x 12	2622M CC9
Vite / Screw	M10 x 25	2622M EH9
Rondella / Ring	14 x 2 x 6	VT18M AL9
Chiave / Allen key	4 x 110	CB03M BA9

Coltelli di ricambio	Dimensioni	Codice
Spare knives	Dimensions	Code
1	47 x 53 x 3 R=15	CC50M T01
2	47 x 53 x 3 R=17,5	CC50M T02
3	47 x 53 x 3 R=20	CC50M T03



PERFORMANCE
Coltelli Riaffilabili
SYSTEM
Resharpenable Knives

■ Ideale per l'esecuzione di raggi convessi su legni naturali teneri e duri, legni esotici, truciolari e MDF con pantografi normali o CNC.

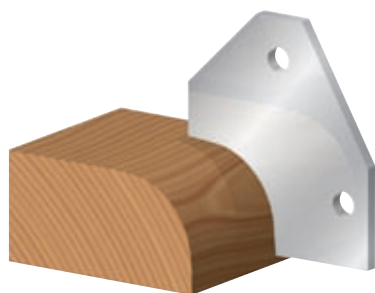
*L'articolo **NC50MCA** è composto dal corpo punta e da n. 6 coltelli (2 per ogni tipo di profilo illustrato).

Per eseguire un solo tipo di profilo è sufficiente ordinare il corpo punta **NC50M-A e 2 coltelli del profilo desiderato.

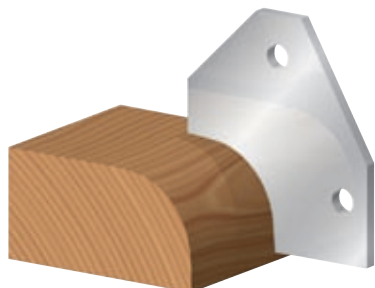
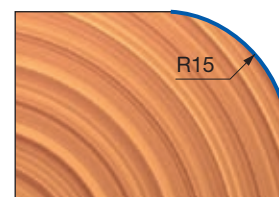
■ For profiling soft and hard solid woods, exotic woods, chipboard and MDF on normal and CNC overhead routing machines.

*Item **NC50MCA** includes the router bit body and 6 knives (2 for each profile).

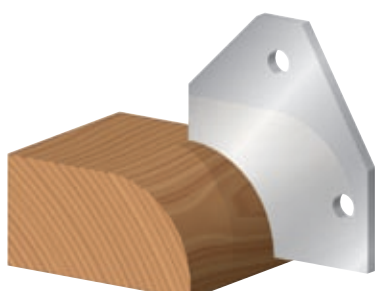
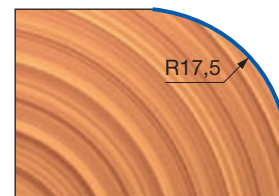
For making one profile only, please order the router bit body **NC50M-A and 2 knives with the desired profile.



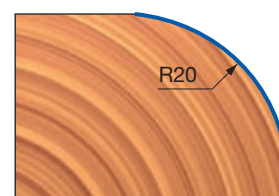
PROFILO / PROFILE **1**



PROFILO / PROFILE **2**



PROFILO / PROFILE **3**









NC60MCA

PUNTA PER SPECCHIETTI DI ANTINA

CNC RAISED PANEL ROUTER CUTTER



D	B	A	Max RPM	Codice
mm	mm	mm	U/min.	Code
114	54	20x50	9.000	NC60MCA*

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Vite / Screw	 M5 x 8	VT05M AA9
Vite / Screw	 M6 x 12	2622M CC9
Vite / Screw	 M10 x 25	2622M EH9
Piastra di riscontro / Positioning plate	 20 x 11,6 x 2,2	VT18M AS9
Rondella / Ring	 14 x 2 x 6	VT18M AL9
Chiave / Allen key	 4 x 110	CB03M BA9

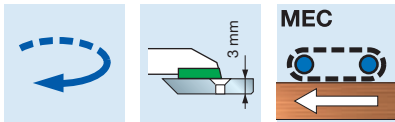
Coltelli di ricambio	Dimensioni	Codice
Spare knives	Dimensions	Code
	60 x 36 x 3	CC60M T01

■ Ideale per l'esecuzione di specchietti per antine su legni naturali teneri, duri ed esotici. Utilizzabile su pantografi normali o CNC.

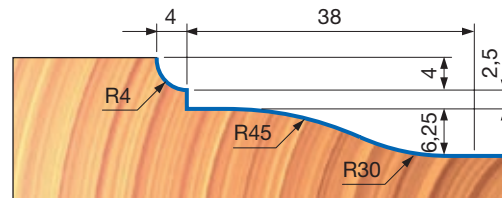
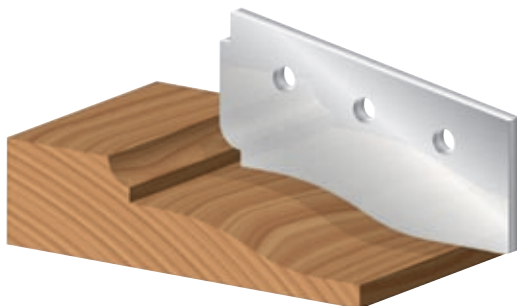
*L'articolo **NC60MCA** è composto dal corpo punta e da n. 2 coltelli.

■ For profiling soft, hard and exotic solid woods, on normal and CNC overhead routing machines.

*Item **NC60MCA** includes the router bit body and 2 knives.



PERFORMANCE
Coltelli Riaffilabili
SYSTEM
Resharpenable Knives









NC62MCA

PUNTA PER SPECCHIETTI DI ANTINA CNC RAISED PANEL ROUTER CUTTER



D	B	A	Max RPM	Codice
mm	mm	mm	U/min.	Code
114	54	20x50	9.000	NC62MCA*

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Vite / Screw	 M5 x 8	VT05M AA9
Vite / Screw	 M6 x 12	2622M CC9
Vite / Screw	 M10 x 25	2622M EH9
Piastra di riscontro / Positioning plate	 20 x 11,6 x 2,2	VT18M AS9
Rondella / Ring	 14 x 2 x 6	VT18M AL9
Chiave / Allen key	 4 x 110	CB03M BA9

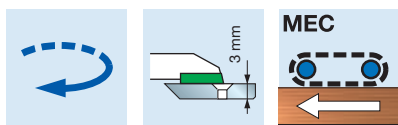
Coltelli di ricambio	Dimensioni	Codice
Spare knives	Dimensions	Code
	60 x 36 x 3	CC62M T01

■ Ideale per l'esecuzione di specchietti per antine su legni naturali teneri, duri ed esotici. Utilizzabile su pantografi normali o CNC.

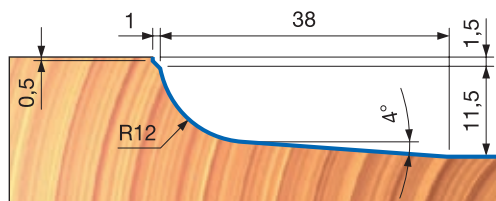
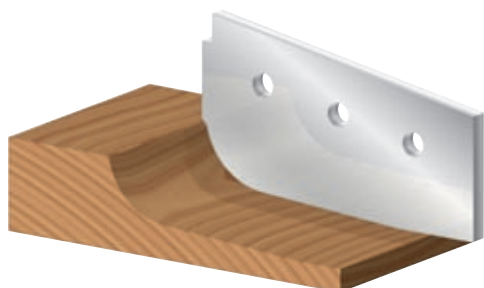
*L'articolo **NC62MCA** è composto dal corpo punta e da n. 2 coltelli.

■ For profiling soft, hard and exotic solid woods, on normal and CNC overhead routing machines.

*Item **NC62MCA** includes the router bit body and 2 knives.



PERFORMANCE
Coltelli Riaffilabili
SYSTEM
Resharpenable Knives



NC64MCA

PUNTA PER SPECCHIETTI DI ANTINA

CNC RAISED PANEL ROUTER CUTTER



D	B	A	Max RPM	Codice
mm	mm	mm	U/min.	Code
114	54	20x50	9.000	NC64MCA*
114	54	20x50	9.000	NC64M-A**

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Vite / Screw	M6 x 12	2622M CC9
Vite / Screw	M10 x 25	2622M EH9
Rondella / Ring	14 x 2 x 6	VT18M AL9
Chiave / Allen key	4 x 110	CB03M BA9

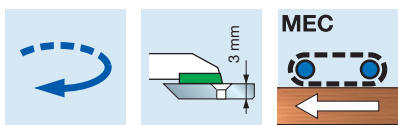
Coltelli di ricambio	Dimensioni	Codice
Spare knives	Dimensions	Code
1	60 x 36 x 3	CC64M D01
2	60 x 36 x 3	CC64M D02
3	60 x 36 x 3	CC64M D03
4	60 x 36 x 3	CC64M D04
5	60 x 36 x 3	CC64M D05

■ Ideale per l'esecuzione di specchietti per antine su legno duro, truciolari e MDF. Utilizzabile su pantografi normali o CNC. *L'articolo NC64MCA è composto dal corpo punta e da n. 10 coltelli (2 per ogni tipo di profilo illustrato). **Per eseguire un solo tipo di profilo è sufficiente ordinare il corpo punta NC64M-A e 2 coltelli del profilo desiderato.

■ For profiling hard wood, chipboard and MDF on normal and CNC overhead routing machines.

*Item NC64MCA includes the router bit body and 10 knives (2 for each profile).

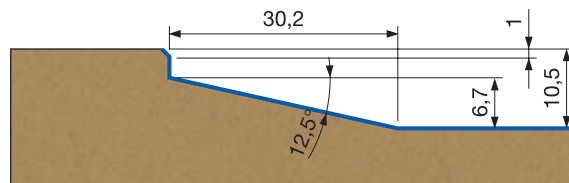
**For making one profile only, please order the router bit body NC64M-A and 2 knives with the desired profile.



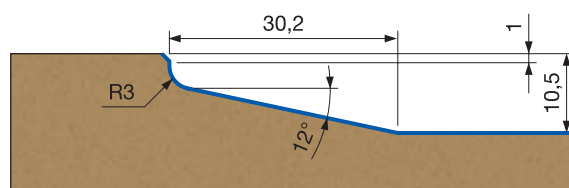
PERFORMANCE
Coltelli Riaffilabili
SYSTEM
Resharpenable Knives



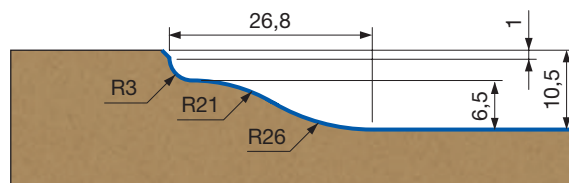
PROFILO / PROFILE **1**



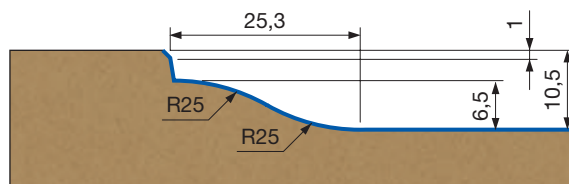
PROFILO / PROFILE **2**



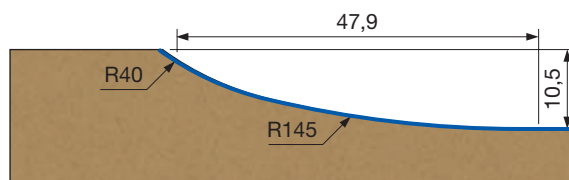
PROFILO / PROFILE **3**



PROFILO / PROFILE **4**



PROFILO / PROFILE **5**

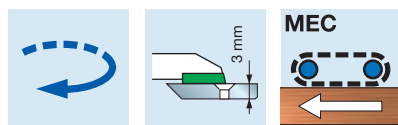


TD54MD

PIATTABANDE MULTIPROFILO PER SPECCHIETTI DI ANTINA CNC MULTIPROFILE RAISED PANEL ROUTER CUTTER



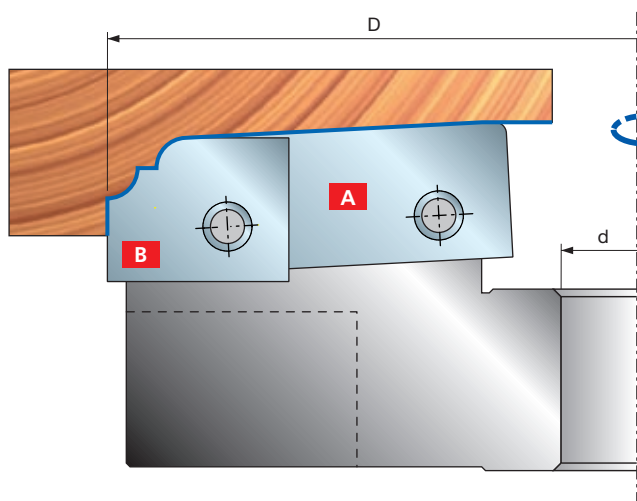
AP08M DA9
ATTACCO / SHANK
20x50mm



PERFORMANCE SYSTEM
Coltelli Riaffilabili
Resharpenable Knives

- I COLTELLI NON SONO INCLUSI.
- KNIVES ARE NOT INCLUDED.

- Corpo in lega leggera (Ergal). Per la pulizia non utilizzare prodotti contenenti soda caustica.
- Light alloy body (Ergal). For cleaning do not use products containing caustic soda.



D	B	d	Z	R	Codice
mm	mm	mm			Code
140		20	2+2		TD54MD AA3
140		20	2+2		TD54MD BA3

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
AA3	Cuneo / Wedge	42,9 x 18 x 7,8 CN54M AA9
	Cuneo / Wedge	16,6 x 21,3 x 8,5 CN54M AB9
BA3	Cuneo / Wedge	42,8 x 16,7 x 7,8 CN54M BA9
	Cuneo / Wedge	16,5 x 21,8 x 8,5 CN54M BB9
Vite / Screw	M10 x 18	VT03M CC9
Vite / Screw	M8 x 10 x 22	VT08M AD9
Vite / Screw	M5 x 7 x 18	VT08M AE9
Chiave / Allen key	5 x 110	CB03M EA9
Mandrino / Chuck	20 x 33 x 93	AP08M DA9

Coltelli per TD54MD AA3 / Knives for TD54MD AA3

Profilo	Dimensioni	Codice
Profile	Dimensions	Code
1	Colt. / knife A 64 x 20 x 3	CT54MD BA3
	Colt. / knife B 19 x 24 x 3	CT54MD AA3
2	Colt. / knife A 64 x 20 x 3	CT54MD BB3
	Colt. / knife B 19 x 24 x 3	CT54MD AA3
3	Colt. / knife A 64 x 20 x 3	CT54MD BC3
	Colt. / knife B 19 x 24 x 3	CT54MD AC3
4	Colt. / knife A 64 x 20 x 3	CT54MD BD3
	Colt. / knife B 19 x 24 x 3	CT54MD AD3
5	Colt. / knife A 64 x 20 x 3	CT54MD BE3
	Colt. / knife B 19 x 24 x 3	CT54MD AE3

Coltelli per TD54MD BA3 / Knives for TD54MD BA3

Profilo	Dimensioni	Codice
Profile	Dimensions	Code
6	Colt. / knife A 64 x 20 x 3	CT54MD BF3
	Colt. / knife B 19 x 24 x 3	CT54MD AF3
7	Colt. / knife A 64 x 20 x 3	CT54MD BG3
	Colt. / knife B 19 x 24 x 3	CT54MD AG3
8	Colt. / knife A 64 x 20 x 3	CT54MD BH3
	Colt. / knife B 19 x 24 x 3	CT54MD AH3
9	Colt. / knife A 64 x 20 x 3	CT54MD BL3
	Colt. / knife B 19 x 24 x 3	CT54MD AL3

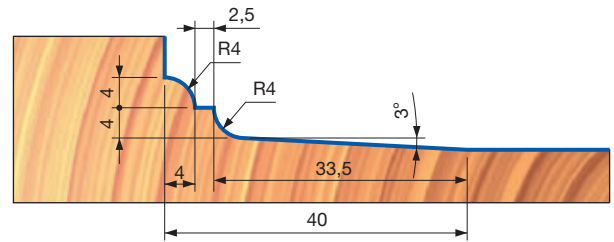
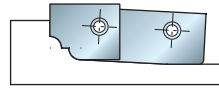
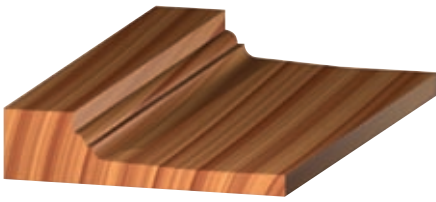
- Le nuove TD54MD per specchietti permettono, grazie alla presenza del doppio coltello, super finiture con tutti i tipi di legno, da quello più duro a quello più tenero, indipendentemente dalla condizione di lavoro, sia lungo che trasverso vena. Le dimensioni ridotte e la possibilità di montare gli utensili su pantografi CNC permettono di creare specchietti con gli stessi profili delle TD55M, ma con l'utilizzo di macchine meno ingombranti. Con questa nuova gamma di piattabande TD54MD è possibile realizzare specchietti lunghi anche oltre la dimensione utile del tagliente.

- The new TD54MD small panel cutterheads, thanks to their double-knives, allow for an excellent finish on all kinds of wood, from the hardest to the softest, working both with and perpendicular to the grain, regardless of the operating conditions. Their reduced size, along with the possibility of installing tools upon the CNC pantograph, allow for the realization of small panels with the same profiles as those for the code TD55M cutterheads, but with less cumbersome machinery. The new TD54MD series of cutterheads allows for the production of long small panels, even longer than the cutters' usable length.

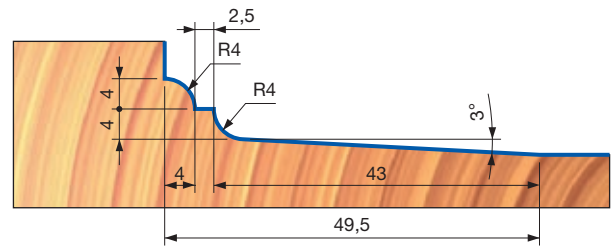
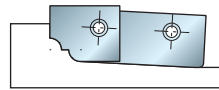
ESEMPI DI PROFILI REALIZZABILI

EXAMPLE OF PROFILES

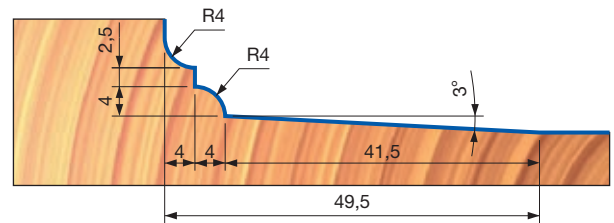
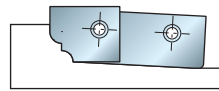
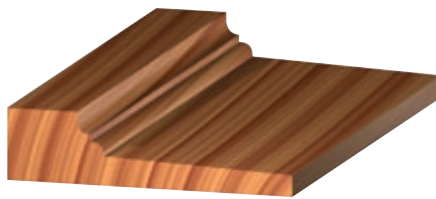
PROFILO / PROFILE 1



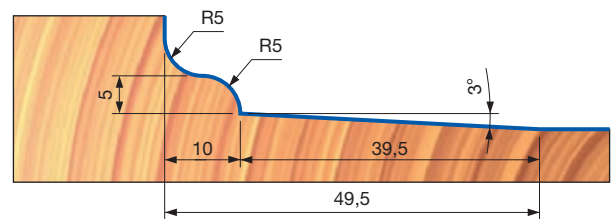
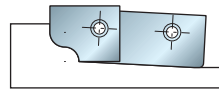
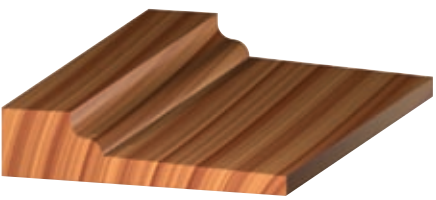
PROFILO / PROFILE 2



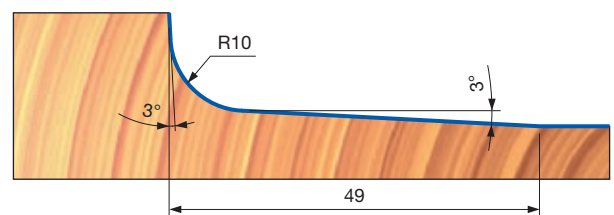
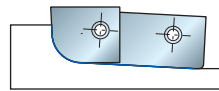
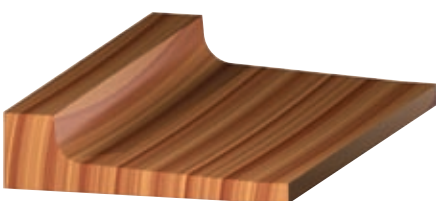
PROFILO / PROFILE 3



PROFILO / PROFILE 4



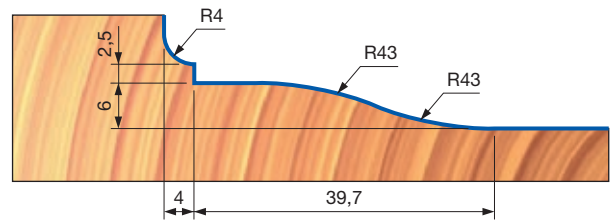
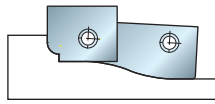
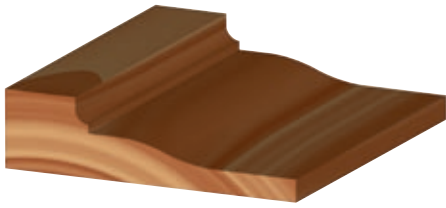
PROFILO / PROFILE 5



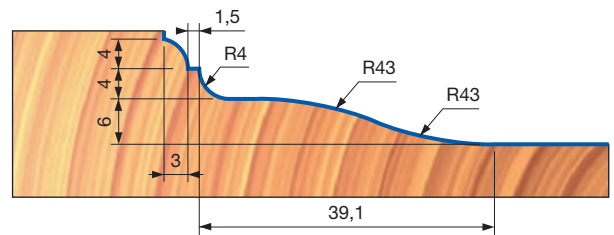
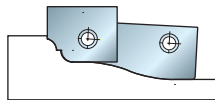
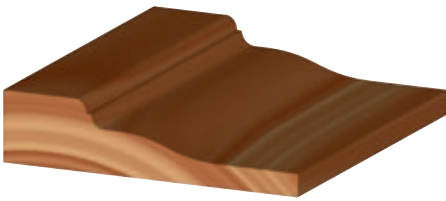
ESEMPI DI PROFILI REALIZZABILI

EXAMPLE OF PROFILES

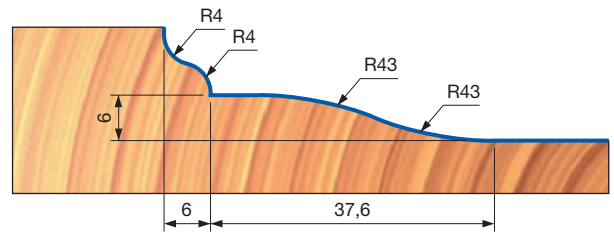
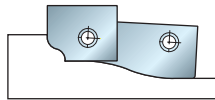
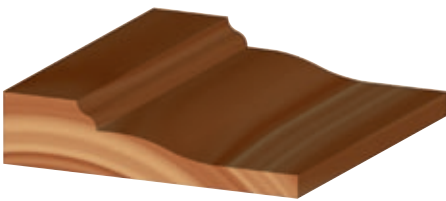
PROFILO / PROFILE 6



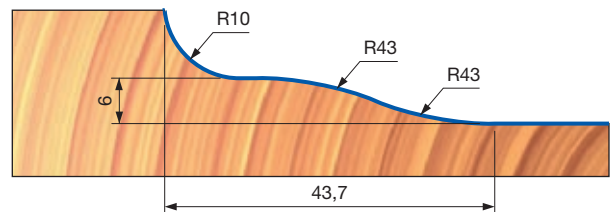
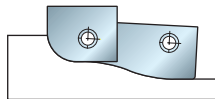
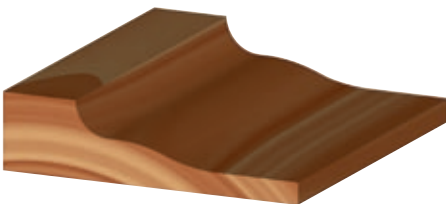
PROFILO / PROFILE 7



PROFILO / PROFILE 8



PROFILO / PROFILE 9



NC90MCA

PUNTA PER PROFILO TELAIO ANTINA

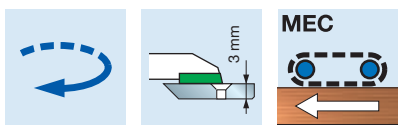
CNC CABINET DOOR ROUTER CUTTER - PROFILE



D	B	A	Max RPM	Codice
mm	mm	mm	U/min.	Code
102	35	20x50	10.500	NC90MCA*
102	35	20x50	10.500	NC90M-A**

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Cuneo / Wedge	31 x 17 x 8	CN11M B310
Vite / Screw	M10 x 18	VT03M CC9
Vite / Screw	M6 x 14,5	VT16M AA9
Vite / Screw	16 x 7 x M5	VT08M AE9
Insero per incastri / Grooving insert	34 x 4	SR06MD AG3
Insero per incastri / Grooving insert	34 x 7	SR06MD AH3
Chiave / Allen key	5 x 110	CB03M EA9

Coltelli di ricambio	Dimensioni	Codice
Spare knives	Dimensions	Code
1/1A	35 x 30 x 3	CC90M T01
2/2A	35 x 30 x 3	CC90M T02
3/3A	35 x 30 x 3	CC90M T03
4/4A	35 x 30 x 3	CC90M T04
5/5A	35 x 30 x 3	CC90M T05



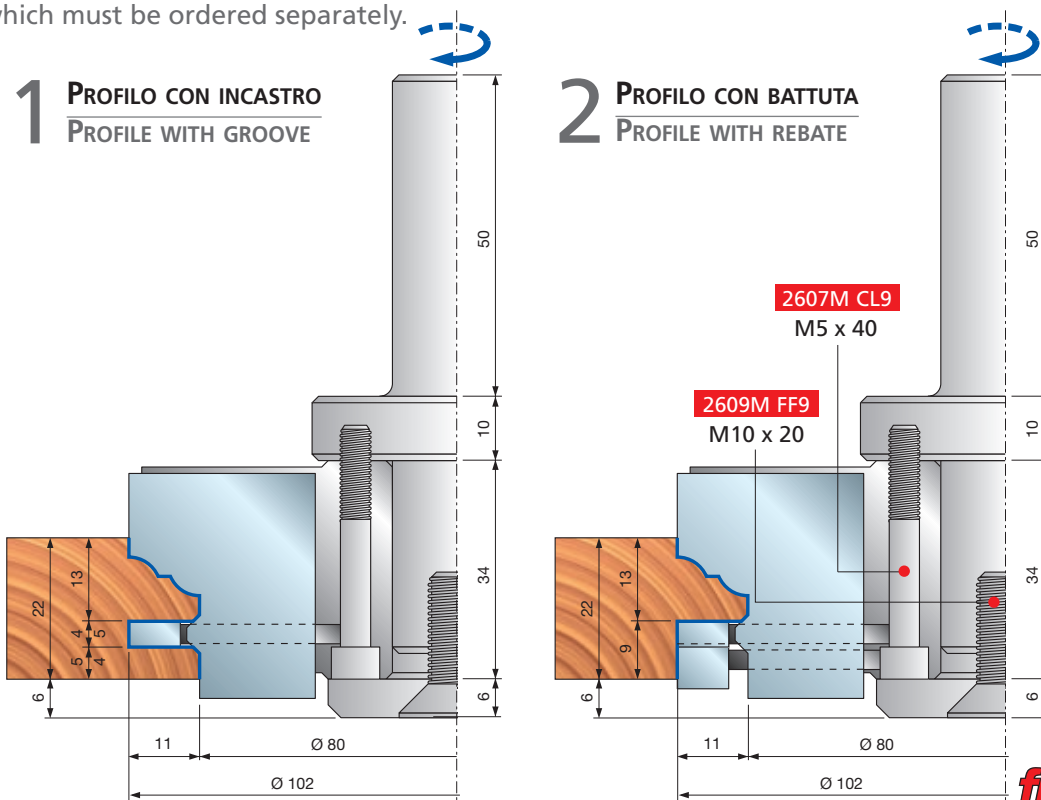
PERFORMANCE SYSTEM

Coltelli Riaffilabili
Resharpenable Knives

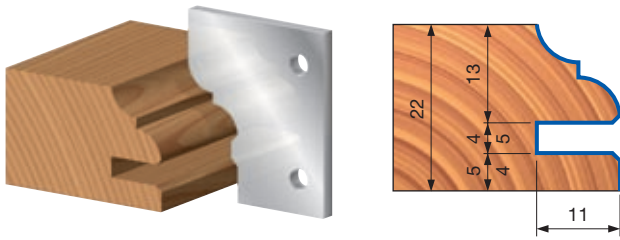
- Per eseguire il canale da 5 mm è necessario sostituire gli inserti SR06MD AG3 (Sp. 4 mm) con gli inserti SR06MD AI3 (Sp. 5 mm) ordinabili separatamente.
- To obtain a 5 mm groove, it is necessary to replace the SR06MD AG3 (4 mm thick) inserts with the SR06MD AI3 (5 mm thick) inserts which must be ordered separately.

- Ideale per l'esecuzione di specchietti per antine su legno. Ideale per l'esecuzione di profili di antine su legni naturali teneri e duri, legni esotici, truciolari e MDF con pantografi normali o CNC. *L'articolo NC90MCA è composto dal corpo punta e da n. 10 coltelli (2 per ogni tipo di profilo illustrato). **Per eseguire un solo tipo di profilo è sufficiente ordinare il corpo punta NC90M-A e 2 coltelli del profilo desiderato. Per l'esecuzione del controprofilo, si veda la punta NC91MCA.

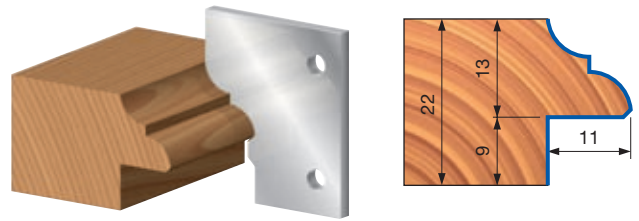
- For profiling hard wood, chipboard and MDF on normal and CNC overhead routing machines. *Item NC64MCA includes the router bit body and 10 knives (2 for each profile). **For making one profile only, please order the router bit body NC64M-A and 2 knives with the desired profile. For making the scribe, please refer to item NC91MCA.



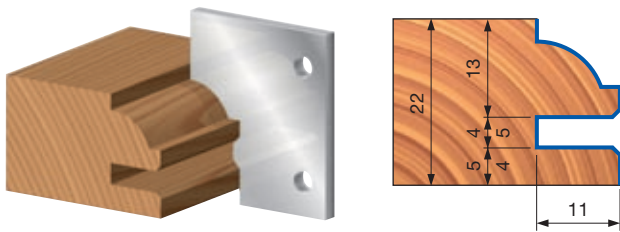
PROFILO / PROFILE **1**



PROFILO / PROFILE **1A**



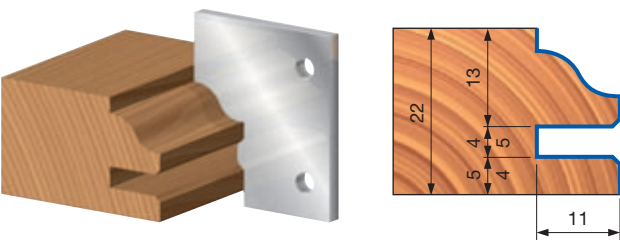
PROFILO / PROFILE **2**



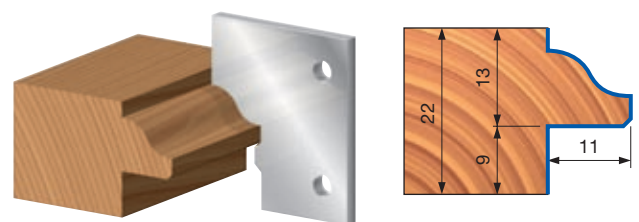
PROFILO / PROFILE **2A**



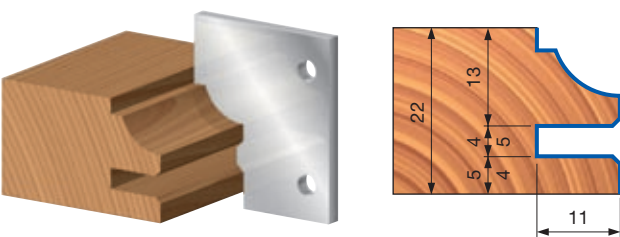
PROFILO / PROFILE **3**



PROFILO / PROFILE **3A**



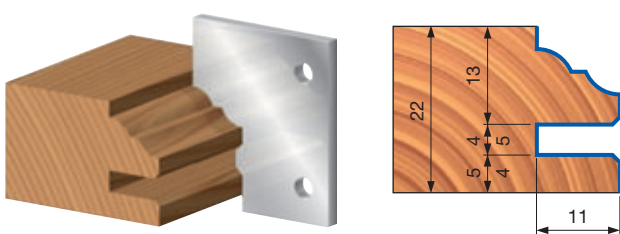
PROFILO / PROFILE **4**



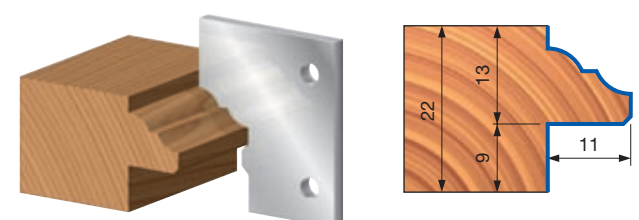
PROFILO / PROFILE **4A**



PROFILO / PROFILE **5**



PROFILO / PROFILE **5A**



NC91MCA

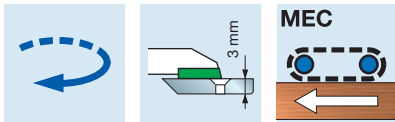
PUNTA PER CONTROPROFILO TELAIO ANTINA CNC CABINET DOOR ROUTER CUTTER - SCRIBE



D	B	A	Max RPM	Codice
mm	mm	mm	U/min.	Code
102	35	20x50	10.500	NC91MCA*
102	35	20x50	10.500	NC91M-A**

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Cuneo / Wedge	31 x 17 x 8	CN11M B310
Vite / Screw	M10 x 18	VT03M CC9
Vite / Screw	M6 x 14,5	VT16M AA9
Vite / Screw	16 x 7 x M5	VT08M AE9
Insero per incastri / Grooving insert	34 x 7	SR06MD AH3
Chiave / Allen key	5 x 110	CB03M EA9

Coltelli di ricambio	Dimensioni	Codice
Spare knives	Dimensions	Code
1/1A	35 x 30 x 3	CC91M T01
2/2A	35 x 30 x 3	CC91M T02
3/3A	35 x 30 x 3	CC91M T03
4/4A	35 x 30 x 3	CC91M T04
5/5A	35 x 30 x 3	CC91M T05



PERFORMANCE Coltelli Riaffilabili SYSTEM Resharpenable Knives

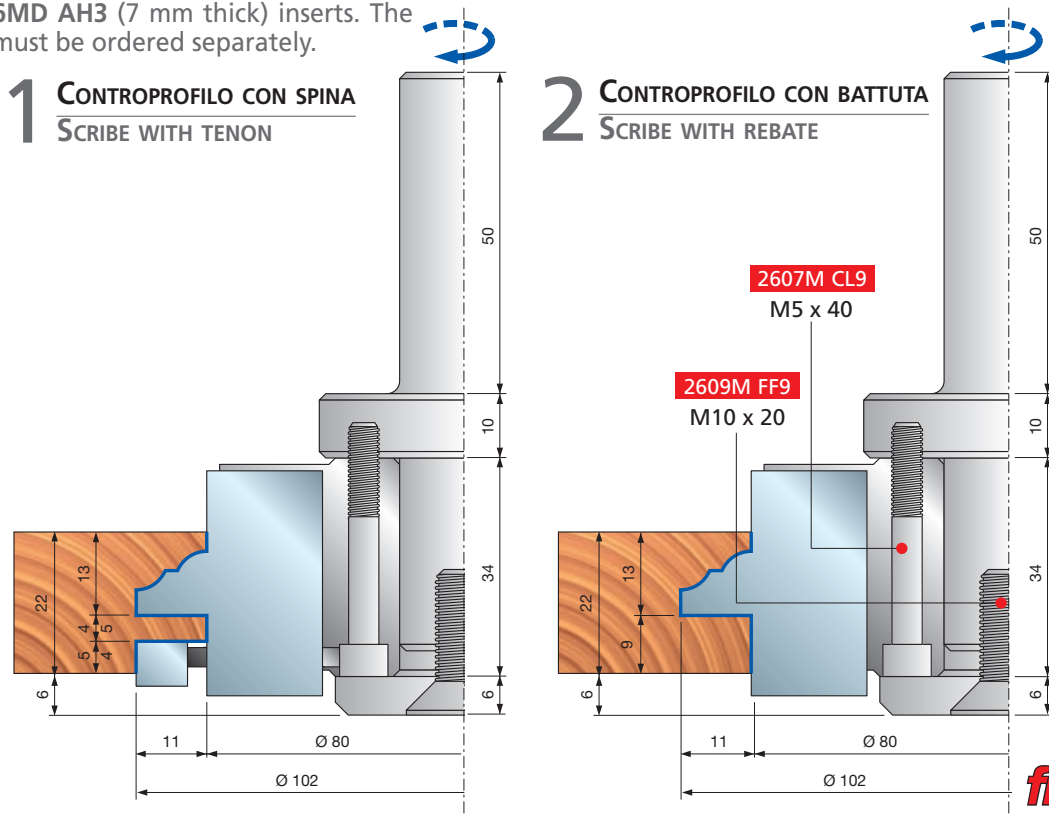
- Per eseguire la spina da 5 mm è necessario inserire sotto gli inserti **SR06MD AH3** (Sp. 7 mm) un anello distanziale **ST07M-109** (Sp. 1 mm) ordinabile separatamente.
- To obtain a 5 mm tenon, it is necessary to use a washer **ST07M-109** (1 mm thick) under the **SR06MD AH3** (7 mm thick) inserts. The washer must be ordered separately.

- Ideale per l'esecuzione di controprofili di antine su legni naturali teneri e duri, legni esotici, truciolari e MDF con pantografi normali o CNC. *L'articolo **NC91MCA** è composto dal corpo punta e da n. 10 coltelli (2 per ogni tipo di profilo illustrato). **Per eseguire un solo tipo di profilo è sufficiente ordinare il corpo punta **NC91M-A** e 2 coltelli del profilo desiderato.

Per l'esecuzione del profilo, si veda la punta **NC90MCA**.

- For profiling soft and hard solid woods, exotic woods, chipboard and MDF on normal and CNC overhead routing machines. *Item **NC91MCA** includes the router bit body and 10 knives (2 for each profile). **For making one profile only, please order the router bit body **NC91M-A** and 2 knives with the desired profile.

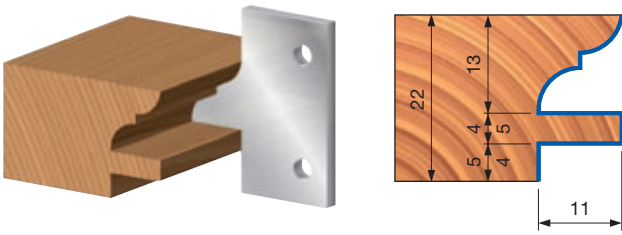
For making the profile, please refer to item **NC90MCA**.



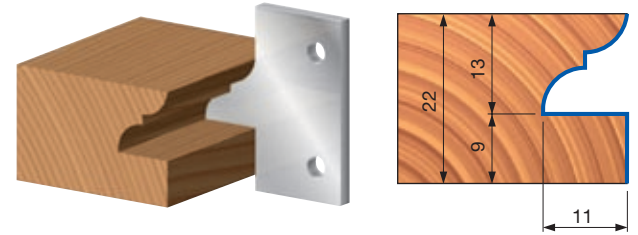
1 CONTROPROFILO CON SPINA
SCRIBE WITH TENON

2 CONTROPROFILO CON BATTUTA
SCRIBE WITH REBATE

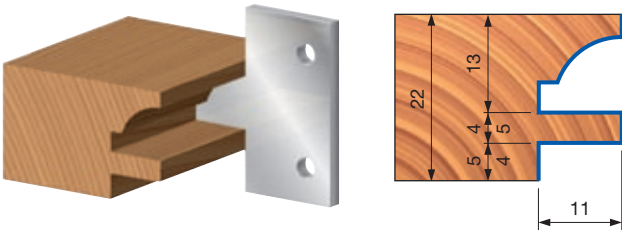
CONTROPROFILO / SCRIBE **1**



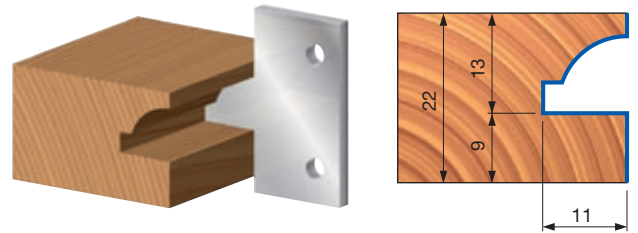
CONTROPROFILO / SCRIBE **1A**



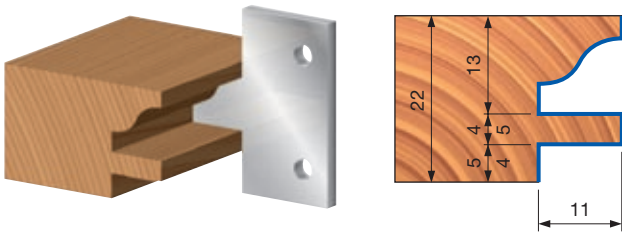
CONTROPROFILO / SCRIBE **2**



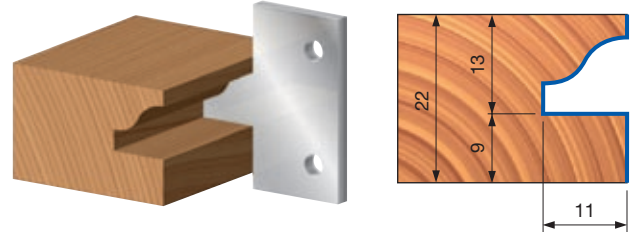
CONTROPROFILO / SCRIBE **2A**



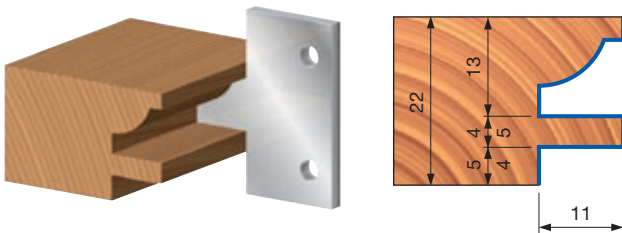
CONTROPROFILO / SCRIBE **3**



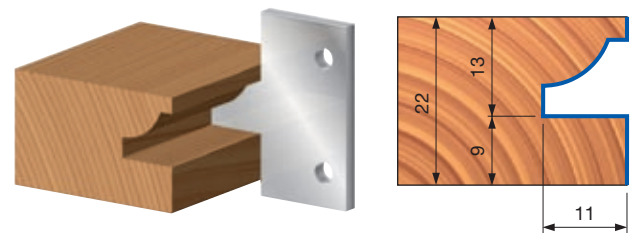
CONTROPROFILO / SCRIBE **3A**



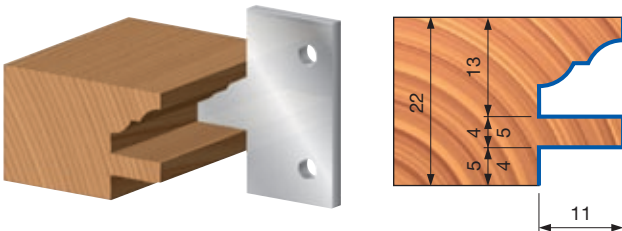
CONTROPROFILO / SCRIBE **4**



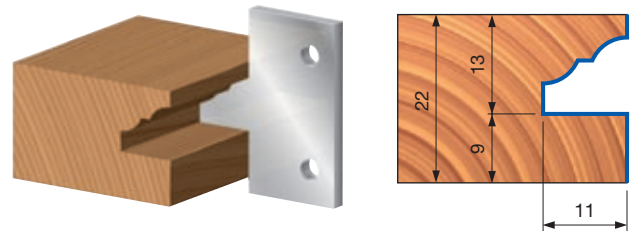
CONTROPROFILO / SCRIBE **4A**



CONTROPROFILO / SCRIBE **5**



CONTROPROFILO / SCRIBE **5A**



NCSEM22 GRUPPI PER PANTOGRAFO PER PROFILO TELAIO ANTINA - 22 mm

CNC TOOLS FOR CABINET DOOR FRAME PROFILE - 22 mm

ISOprofil®

**BREVETTO
REGISTRATO**

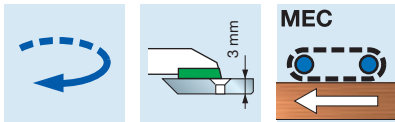
**REGISTERED
PATENT**

Utensili per gruppi NCSEM22A01 e NCSEM22A03
Tools for NCSEM22A01 and NCSEM22A03 sets



D	B	d	Z	R	Codice
mm	mm	mm			Code
112	20	30	2	2	NCSEM AE3
112,5	19	30	2	4	NCSEM AB3
120	22	30	2	2	NCSEM AF3

	Parti di ricambio	Dimensioni	Codice
	Spare parts	Dimensions	Code
AB3	Coltello / Knife	14,6 x 12 x 1,5	CG06M BA3
	Cuneo / Wedge	13	CN01M CA9
	Vite / Screw	8 x 16	VT03M AA9
	Insero smussatore / Beveling insert	22 x 16 x 5	IG51M BA3
	Vite / Screw	6 x 14,5	VT16M AA9
	Insero per incastro / Grooving insert	27 x 4 x 16	IG04MS AA3T
AE3	Coltello / Knife	20 x 12 x 1,5	CG06M CA3
	Cuneo / Wedge	15 x 16 x 8	CN09MS AC9
	Ogiva / Nut	10 x 11,5 x 6	VT20M AA9
	Vite / Screw	6 x 22	VT19M AB9
	Rasante / Spur	22,86 x 2,5	RG02M AA3
	Vite / Screw	5 x 8	VT05M AA9
AF3	Piastra di riscontro / Positioning plate	22 x 1,7 x 6,5	VT18M GA9
	Cuneo / Wedge	35 x 21 x 9	CNRDM DB9
	Vite / Screw	10 x 16	2616M EE9
	Insero per incastro / Grooving insert	27 x 4 x 16	IG04MD AA3T
	Vite / Screw	6 x 14,5	VT16M AA9
	Vite / Screw	5 x 8	VT05M AA9



PERFORMANCE SYSTEM

Coltelli Riaffilabili
Resharpenable Knives

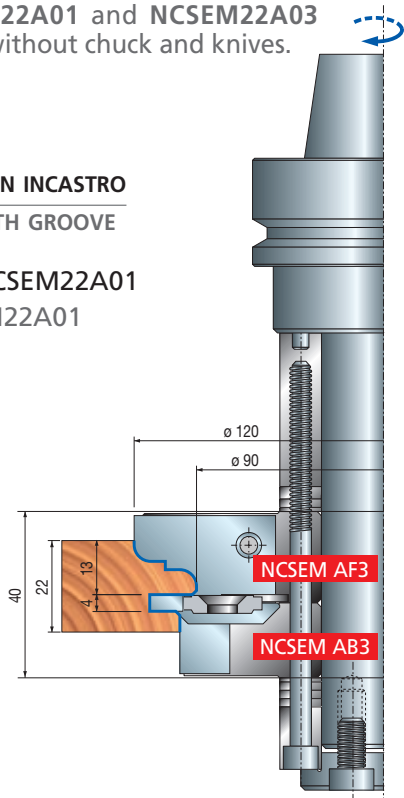
- Corpo in lega leggera (Ergal). Per la pulizia non utilizzare prodotti contenenti soda caustica. Gli utensili NCSEM22A01 e NCSEM22A03 non comprendono il mandrino né i coltelli.
- Light alloy body (Ergal). For cleaning do not use products containing caustic soda. Items NCSEM22A01 and NCSEM22A03 are supplied without chuck and knives.

	Coltelli di ricambio	Dimensioni	Codice
	Spare knives	Dimensions	Code
1		20 x 34 x 3	CCSEM CA3
2		20 x 34 x 3	CCSEM CB3
3		20 x 34 x 3	CCSEM CC3
4		20 x 34 x 3	CCSEM CD3
5		20 x 34 x 3	CCSEM CE3
6		20 x 34 x 3	CCSEM CF3

1 PROFILO CON INCASTRO

PROFILE WITH GROOVE

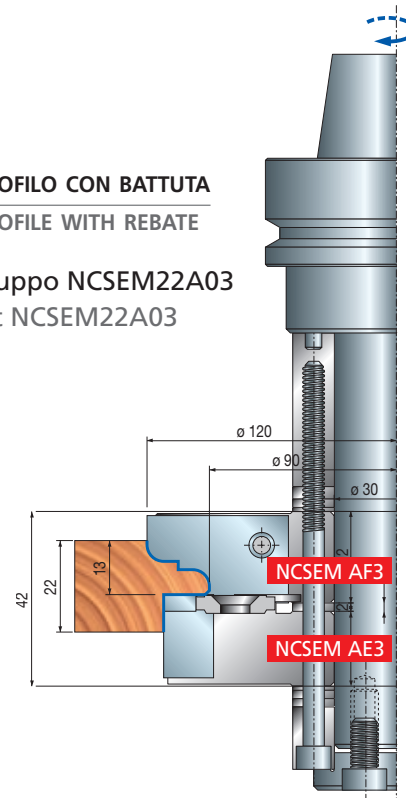
- Gruppo NCSEM22A01
- Set NCSEM22A01



2 PROFILO CON BATTUTA

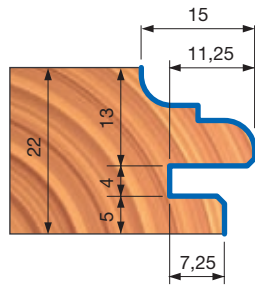
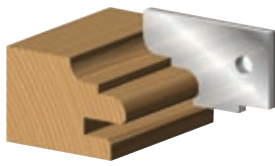
PROFILE WITH REBATE

- Gruppo NCSEM22A03
- Set NCSEM22A03

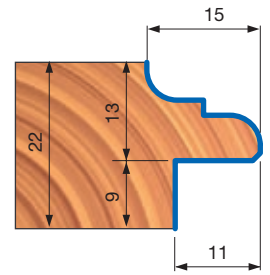
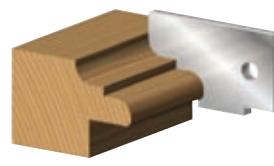


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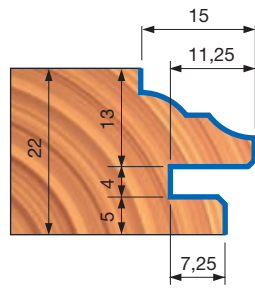
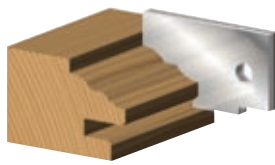
PROFILO / PROFILE 1



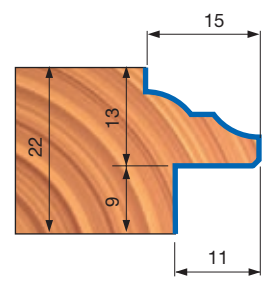
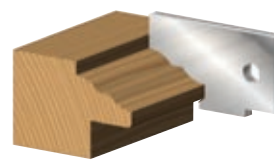
PROFILO / PROFILE 1A



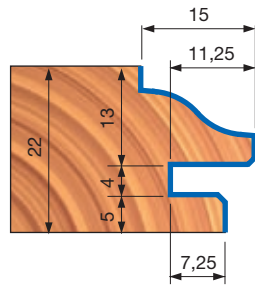
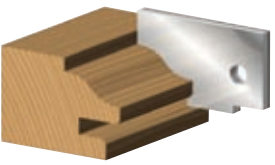
PROFILO / PROFILE 2



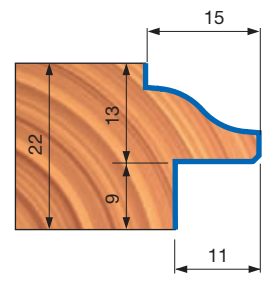
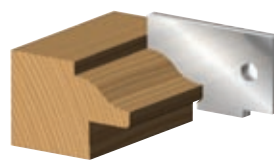
PROFILO / PROFILE 2A



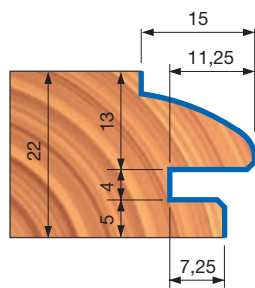
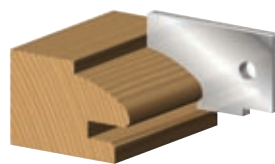
PROFILO / PROFILE 3



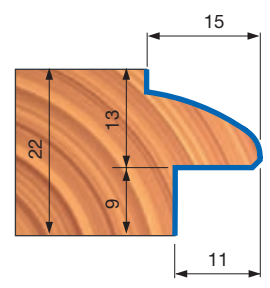
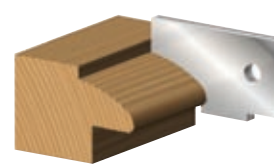
PROFILO / PROFILE 3A



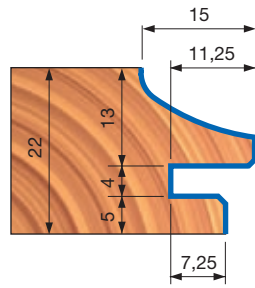
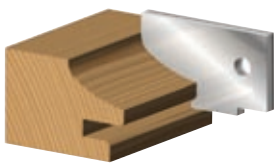
PROFILO / PROFILE 4



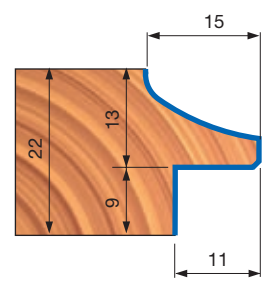
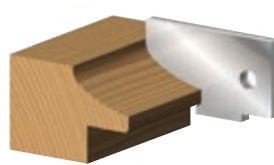
PROFILO / PROFILE 4A



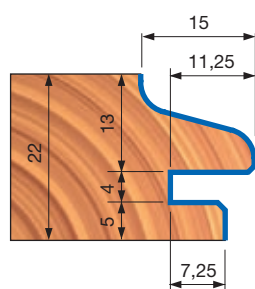
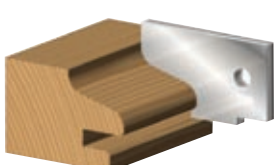
PROFILO / PROFILE 5



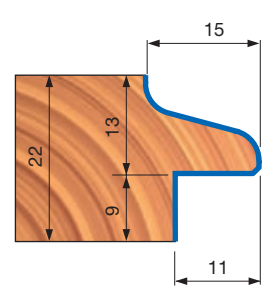
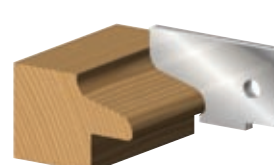
PROFILO / PROFILE 5A



PROFILO / PROFILE 6



PROFILO / PROFILE 6A



NCSEM22

GRUPPI PER PANTOGRAFO PER CONTROPROFILO TELAIO ANTINA - 22 mm

CNC TOOLS CUTTER FOR CABINET DOOR FRAME SCRIBE - 22 mm

ISOprofil®

BREVETTO
REGISTRATO

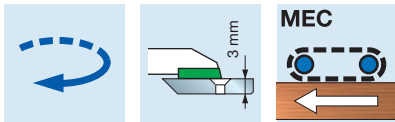
REGISTERED
PATENT

Utensili per gruppi NCSEM22A02 e NCSEM22A04
Tools for NCSEM22A02 and NCSEM22A04 sets



D	B	d	Z	R	Codice Code
112	20	30	2	2	NCSEM AD3
120	29	30	2	2	NCSEM AG3

Parti di ricambio Spare parts	Dimensioni Dimensions	Codice Code
Coltello / Knife	20 x 12 x 1,5	CG06M CA3
Cuneo / Wedge	16	CN01MS DA9
Vite / Screw	8 x 16	VT03M AA9
Rasante / Spur	22,86 x 2,5	RG02M AA3
Vite / Screw	5 x 8	VT05M AA9
Piastra di riscontro / Positioning plate	22 x 1,7 x 6,5	VT18M GA9
Cuneo / Wedge	35 x 31 x 9	CNRDM DD9
Vite / Screw	10 x 16	2616M EE9
Inserto rasante / Spur insert	34 x 3,5 x 16	SR06MD BA3
Vite / Screw	6 x 11,5	VT16M AB9
Vite / Screw	5 x 8	VT05M AA9



PERFORMANCE SYSTEM
Coltelli Riaffilabili
Resharpenable Knives

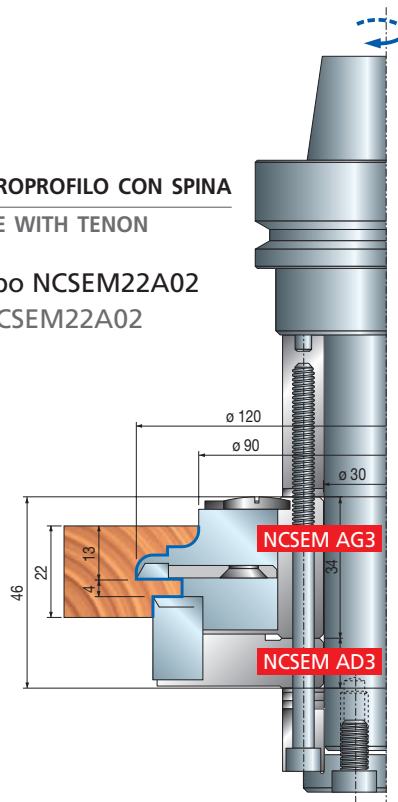
Coltelli di ricambio Spare knives	Dimensioni Dimensions	Codice Code
1	30 x 34 x 3	CCSEM DA3
2	30 x 34 x 3	CCSEM DB3
3	30 x 34 x 3	CCSEM DC3
4	30 x 34 x 3	CCSEM DD3
5	30 x 34 x 3	CCSEM DE3
6	30 x 34 x 3	CCSEM DF3

- Corpo in lega leggera (Ergal). Per la pulizia non utilizzare prodotti contenenti soda caustica.
- Light alloy body (Ergal). For cleaning do not use products containing caustic soda.

- Corpo in lega leggera (Ergal). Per la pulizia non utilizzare prodotti contenenti soda caustica. Gli utensili NCSEM22A02 e NCSEM22A04 non comprendono il mandrino né i coltelli.
- Light alloy body (Ergal). For cleaning do not use products containing caustic soda. Items NCSEM22A02 and NCSEM22A04 are supplied without chuck and knives.

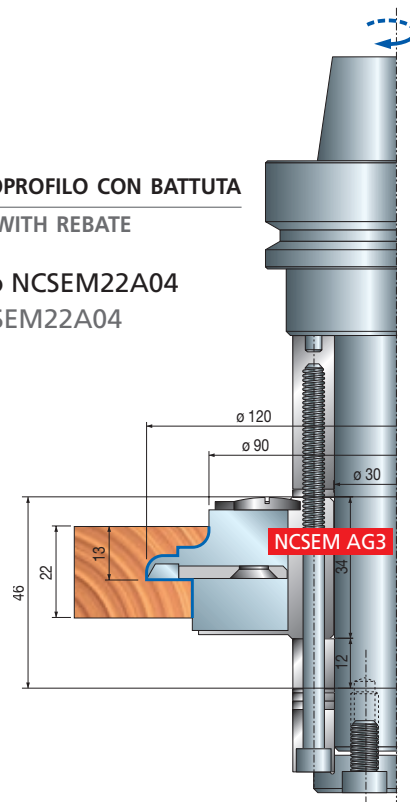
1 CONTROPROFILO CON SPINA SCRIBE WITH TENON

- Gruppo NCSEM22A02
- Set NCSEM22A02



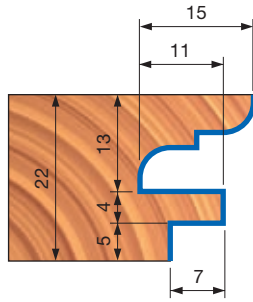
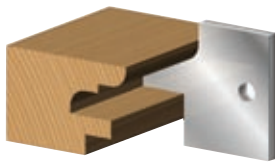
2 CONTROPROFILO CON BATTUTA SCRIBE WITH REBATE

- Gruppo NCSEM22A04
- Set NCSEM22A04

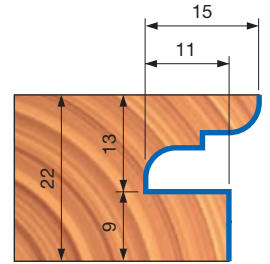
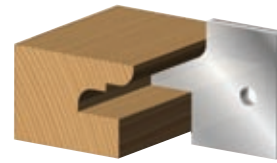


freud

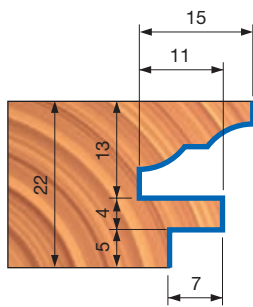
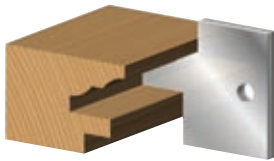
CONTROPROFILO / SCRIBE 1



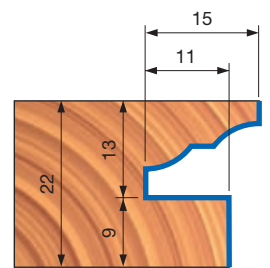
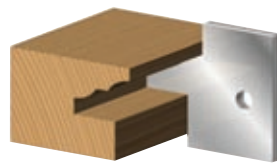
CONTROPROFILO / SCRIBE 1A



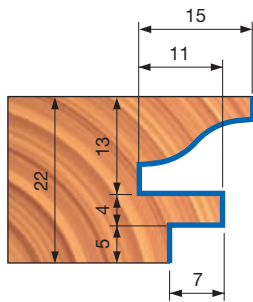
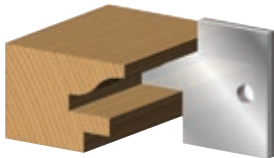
CONTROPROFILO / SCRIBE 2



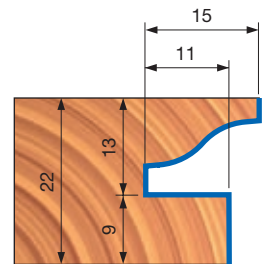
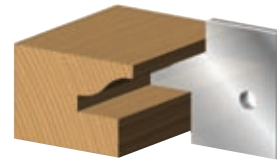
CONTROPROFILO / SCRIBE 2A



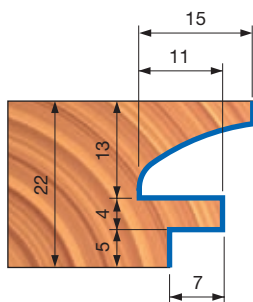
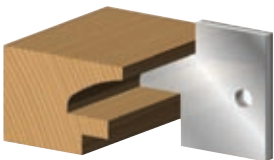
CONTROPROFILO / SCRIBE 3



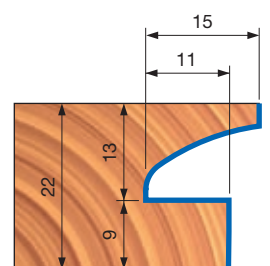
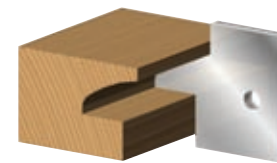
CONTROPROFILO / SCRIBE 3A



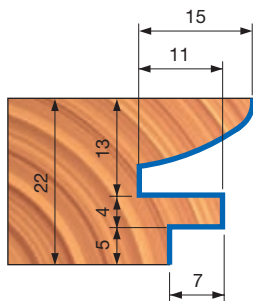
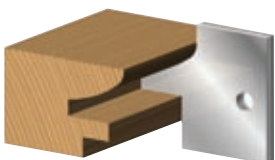
CONTROPROFILO / SCRIBE 4



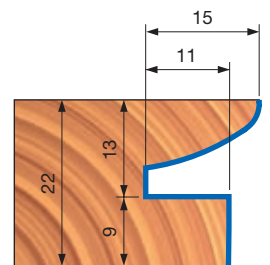
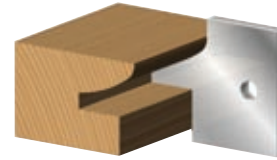
CONTROPROFILO / SCRIBE 4A



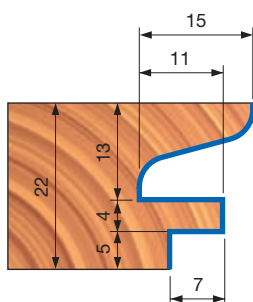
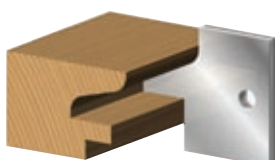
CONTROPROFILO / SCRIBE 5



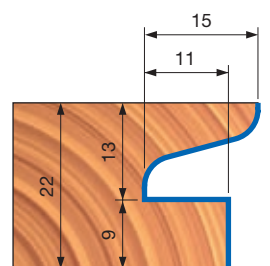
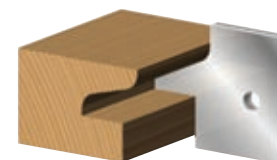
CONTROPROFILO / SCRIBE 5A



CONTROPROFILO / SCRIBE 6



CONTROPROFILO / SCRIBE 6A



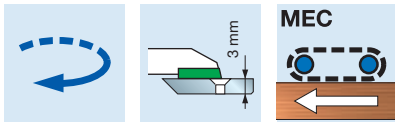
NCSEM30

GRUPPI PER PANTOGRAFO PER PROFILO TELAIO ANTINA - 30 mm CNC TOOLS FOR CABINET DOOR FRAME PROFILE - 30 mm

ISOprofil®

BREVETTO
REGISTRATO

REGISTERED
PATENT



PERFORMANCE SYSTEM Coltelli Riaffilabili Resharpenable Knives

- Corpo in lega leggera (Ergal). Per la pulizia non utilizzare prodotti contenenti soda caustica. Gli utensili NCSEM30A01 e NCSEM30A03 non comprendono il mandrino né i coltelli.
- Light alloy body (Ergal). For cleaning do not use products containing caustic soda. Items NCSEM30A01 and NCSEM30A03 are supplied without chuck and knives.

Utensili per gruppi NCSEM30A01 e NCSEM30A03 Tools for NCSEM30A01 and NCSEM30A03 sets

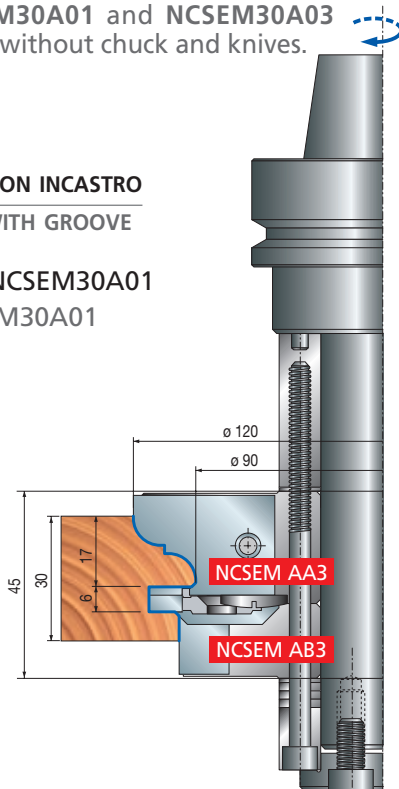
D	B	d	Z	R	Codice
mm	mm	mm			Code
112	20	30	2	2	NCSEM AE3
112,5	19	30	2	4	NCSEM AB3
120	28	30	2	2	NCSEM AA3

	Parti di ricambio	Dimensioni	Codice
	Spare parts	Dimensions	Code
AA3	Piastra di riscontro / Positioning plate	22 x 1,7 x 6,5	VT18M GA9
	Cuneo / Wedge	35 x 21 x 9	CNRDM DB9
	Vite / Screw	10 x 16	2616M EE9
	Insero per incastro / Grooving insert	27 x 4 x 16	IG04MD AA3T
	Vite / Screw	6 x 14,5	VT16M AA9
AB3	Vite / Screw	5 x 8	VT05M AA9
	Coltello / Knife	14,6 x 12 x 1,5	CG06M BA3
	Cuneo / Wedge	13	CN01M CA9
	Vite / Screw	8 x 16	VT03M AA9
	Insero smussatore / Bevelling insert	22 x 16 x 5	IG51M BA3
AE3	Vite / Screw	6 x 14,5	VT16M AA9
	Insero per incastro / Grooving insert	27 x 4 x 16	IG04MS AA3T
	Vite / Screw	6 x 14,5	VT16M AA9
	Coltello / Knife	20 x 12 x 1,5	CG06M CA3
	Cuneo / Wedge	15 x 16 x 8	CN09MS AC9
AE3	Ogiva / Nut	10 x 11,5 x 6	VT20M AA9
	Vite / Screw	6 x 22	VT19M AB9
	Rasante / Spur	22,86 x 2,5	RG02M AA3
	Vite / Screw	5 x 8	VT05M AA9

	Coltelli di ricambio	Dimensioni	Codice
	Spare knives	Dimensions	Code
1		24 x 34 x 3	CCSEM AA3
2		24 x 34 x 3	CCSEM AB3
3		24 x 34 x 3	CCSEM AC3
4		24 x 34 x 3	CCSEM AD3
5		24 x 34 x 3	CCSEM AE3
6		24 x 34 x 3	CCSEM AF3

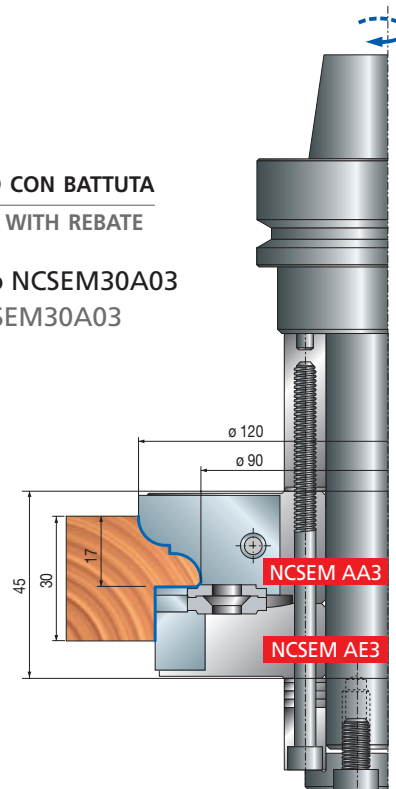
1 PROFILO CON INCASTRO PROFILE WITH GROOVE

- Gruppo NCSEM30A01
- Set NCSEM30A01

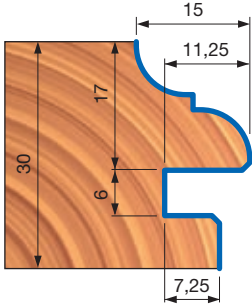
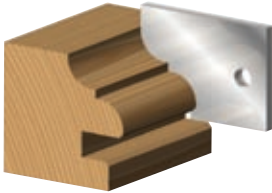


2 PROFILO CON BATTUTA PROFILE WITH REBATE

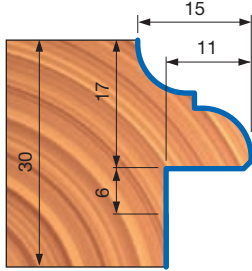
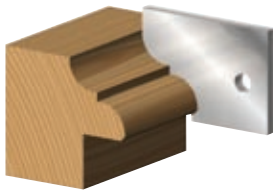
- Gruppo NCSEM30A03
- Set NCSEM30A03



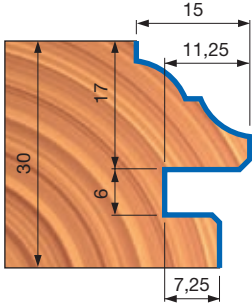
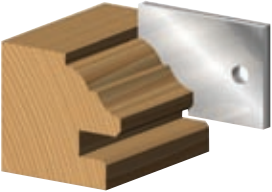
PROFILO / PROFILE 1



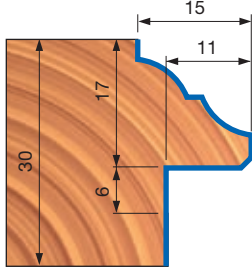
PROFILO / PROFILE 1A



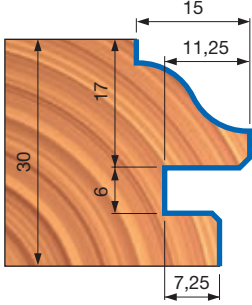
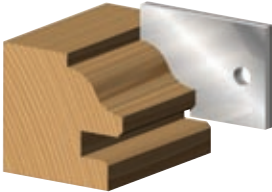
PROFILO / PROFILE 2



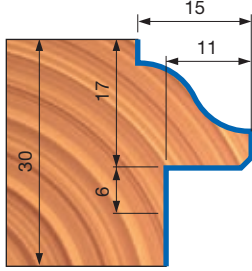
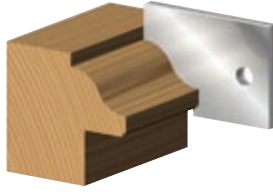
PROFILO / PROFILE 2A



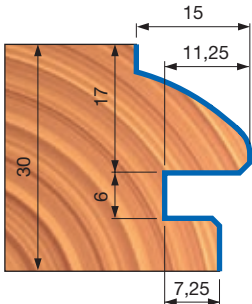
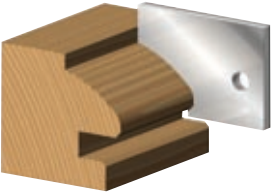
PROFILO / PROFILE 3



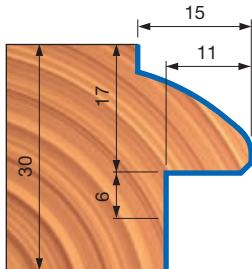
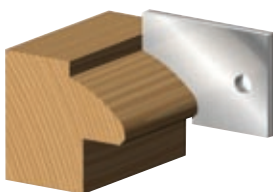
PROFILO / PROFILE 3A



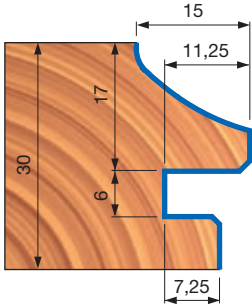
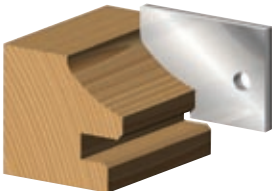
PROFILO / PROFILE 4



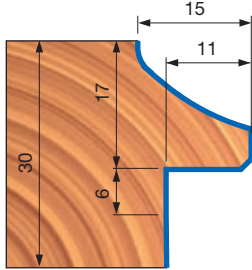
PROFILO / PROFILE 4A



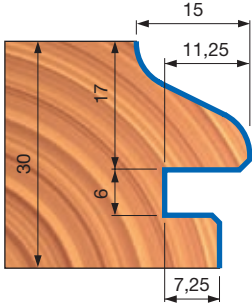
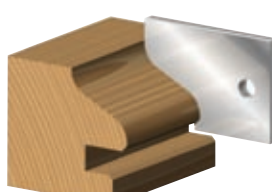
PROFILO / PROFILE 5



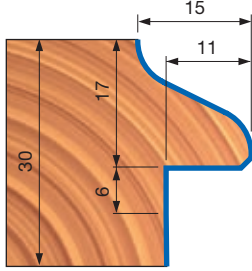
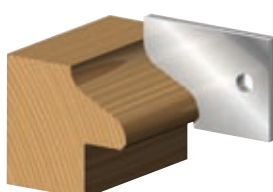
PROFILO / PROFILE 5A



PROFILO / PROFILE 6



PROFILO / PROFILE 6A



NCSEM30

GRUPPI PER PANTOGRAFO PER CONTROPR. TELAIO ANTINA - 30 mm
CNC TOOLS FOR CABINET DOOR FRAME SCRIBE - 30 mm

ISOprofil®

BREVETTO
REGISTRATO

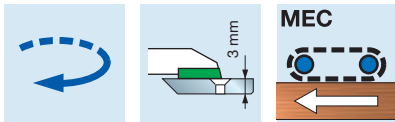
REGISTERED
PATENT

Utensili per gruppi NCSEM30A02 e NCSEM30A04
Tools for NCSEM30A02 and NCSEM30A04 sets



D	B	d	Z	R	Codice
mm	mm	mm			Code
112	20	30	2	2	NCSEM AD3
120	34	30	2	2	NCSEM AC3

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
AC3	Piastra di riscontro / Positioning plate	22 x 1,7 x 6,5 VT18M GA9
	Cuneo / Wedge	35 x 31 x 9 CNRDM DD9
	Vite / Screw	10 x 16 2616M EE9
	Insero rasante / Spur insert	34 x 3,5 x 16 x 3 x 3 SR06MD BA3
	Vite / Screw	6 x 11,5 VT16M AB9
	Vite / Screw	5 x 8 VT05M AA9
AD3	Coltello / Knife	14,6 x 12 x 1,5 CG06M BA3
	Cuneo / Wedge	13 CN01M CA9
	Vite / Screw	8 x 16 VT03M AA9
	Insero smussatore / Bevelling insert	22 x 16 x 5 IG51M BA3
	Vite / Screw	6 x 14,5 VT16M AA9
	Insero per incastro / Grooving insert	27 x 4 x 16 IG04MS AA3T
Vite / Screw	6 x 14,5 VT16M AA9	



PERFORMANCE
Cottelli Riaffilabili
SYSTEM
Resharpenable Knives

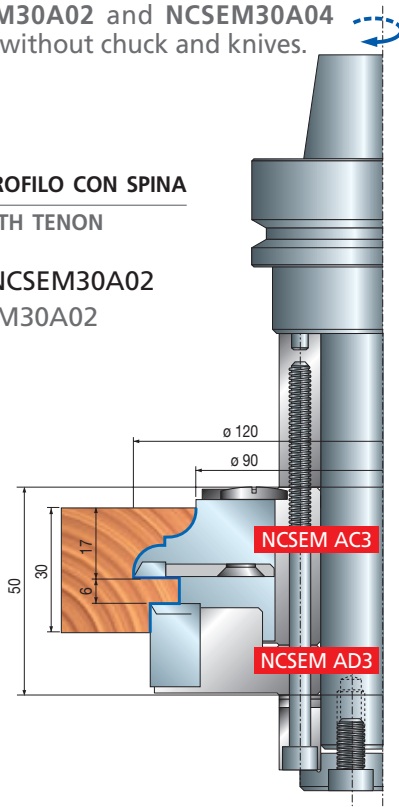
Coltelli di ricambio	Dimensioni	Codice
Spare knives	Dimensions	Code
1	34 x 34 x 3	CCSEM BA3
2	34 x 34 x 3	CCSEM BB3
3	34 x 34 x 3	CCSEM BC3
4	34 x 34 x 3	CCSEM BD3
5	34 x 34 x 3	CCSEM BE3
6	34 x 34 x 3	CCSEM BF3

■ Corpo in lega leggera (Ergal). Per la pulizia non utilizzare prodotti contenenti soda caustica. Gli utensili NCSEM30A02 e NCSEM30A04 non comprendono il mandrino né i coltelli.

■ Light alloy body (Ergal). For cleaning do not use products containing caustic soda. Items NCSEM30A02 and NCSEM30A04 are supplied without chuck and knives.

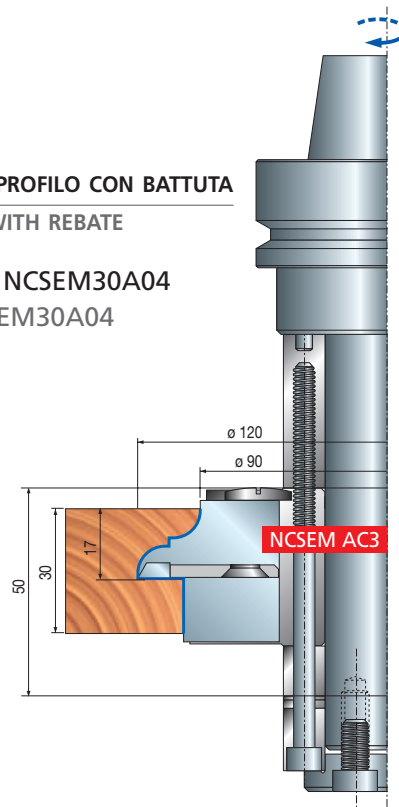
1 CONTROPROFILO CON SPINA SCRIBE WITH TENON

- Gruppo NCSEM30A02
- Set NCSEM30A02



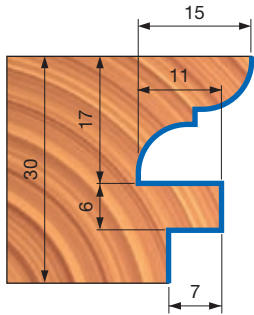
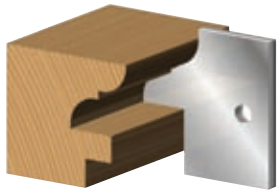
2 CONTROPROFILO CON BATTUTA SCRIBE WITH REBATE

- Gruppo NCSEM30A04
- Set NCSEM30A04

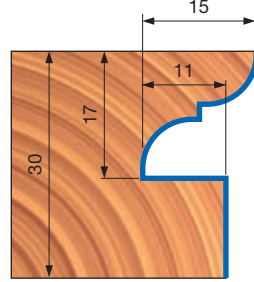
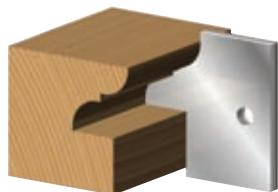


freud

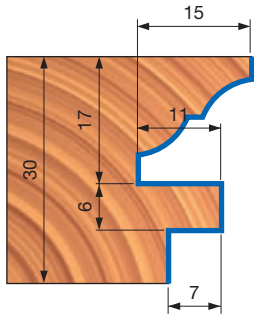
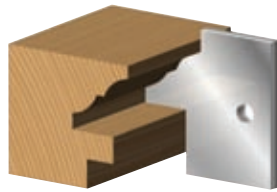
CONTROPROFILO / SCRIBE 1



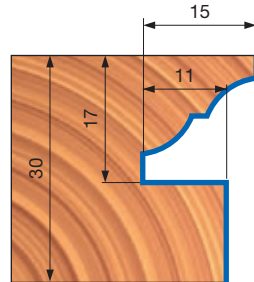
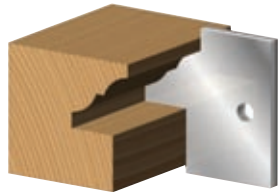
CONTROPROFILO / SCRIBE 1A



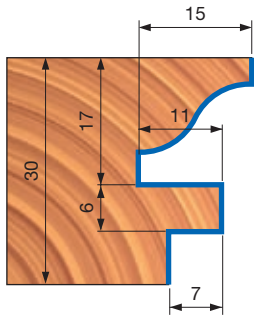
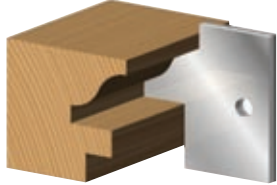
CONTROPROFILO / SCRIBE 2



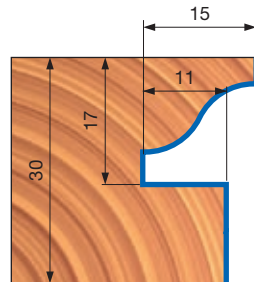
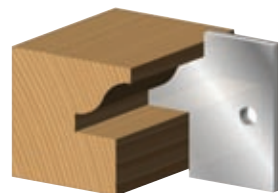
CONTROPROFILO / SCRIBE 2A



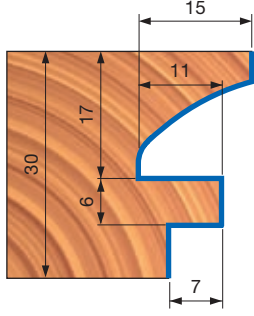
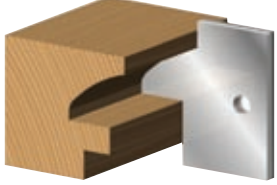
CONTROPROFILO / SCRIBE 3



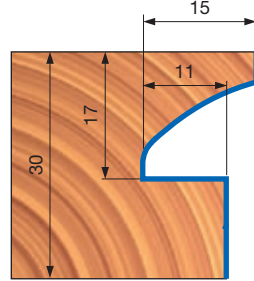
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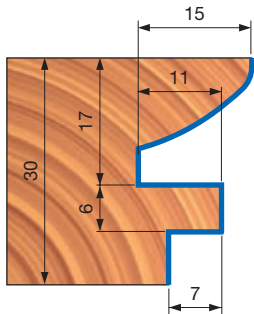
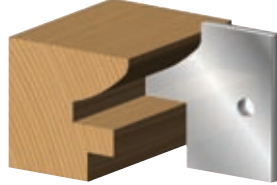
CONTROPROFILO / SCRIBE 4



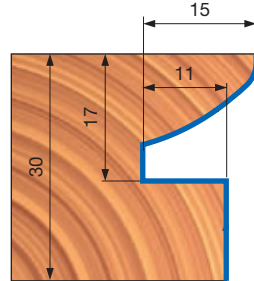
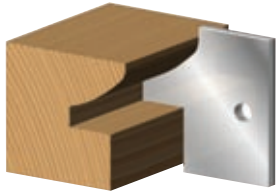
CONTROPROFILO / SCRIBE 4A



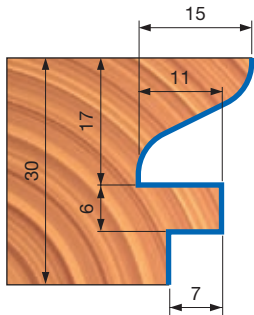
CONTROPROFILO / SCRIBE 5



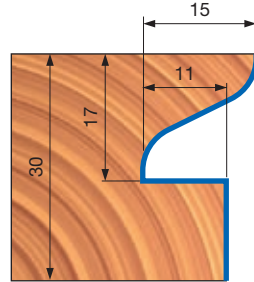
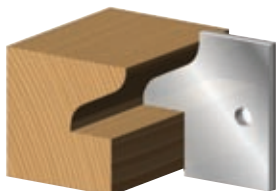
CONTROPROFILO / SCRIBE 5A



CONTROPROFILO / SCRIBE 6



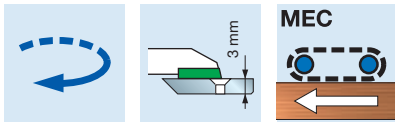
CONTROPROFILO / SCRIBE 6A



NC92M

PUNTA PORTACOLTELLI PROFILATI

CNC ROUTER CUTTER WITH PROFILED KNIVES



PERFORMANCE SYSTEM
Coltelli Riaffilabili
Resharpenable Knives

D	B	A	Max RPM	Codice
mm	mm	mm	U/min.	Code
120	30	pag. 401-407	10.000	NC92M 100*

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Cuneo / Wedge	30,7 x 28 x 8	CN13M CC9
Cuneo / Wedge	50 x 28 x 8	CN13M CD9
Vite / Screw	M10 x 18	VT03M CC9
Vite / Screw	16 x 7 x M5	VT08M AE9
Chiave / Allen key	5 x 110	CB03M EA9

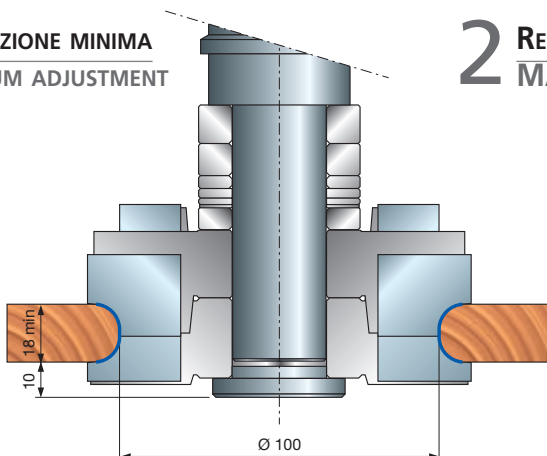
Coltelli di ricambio	Dimensioni	Codice
Spare knives	Dimensions	Code
1	35 x 30 x 3 3x45°	CC92M1 T01
2	35 x 30 x 3 5x45°	CC92M1 T02
3	35 x 30 x 3 R=3	CC92M1 T03
4	35 x 30 x 3 R=4	CC92M1 T04
5	35 x 30 x 3 R=5	CC92M1 T05
6	35 x 30 x 3 R=6	CC92M1 T06
7	35 x 30 x 3 R=7	CC92M1 T07
8	35 x 30 x 3 R=8	CC92M1 T08

Coltelli di ricambio	Dimensioni	Codice
Spare knives	Dimensions	Code
1	55 x 30 x 3 3x45°	CC92M2 T01
2	55 x 30 x 3 5x45°	CC92M2 T02
3	55 x 30 x 3 R=3	CC92M2 T03
4	55 x 30 x 3 R=4	CC92M2 T04
5	55 x 30 x 3 R=5	CC92M2 T05
6	55 x 30 x 3 R=6	CC92M2 T06
7	55 x 30 x 3 R=7	CC92M2 T07
8	55 x 30 x 3 R=8	CC92M2 T08

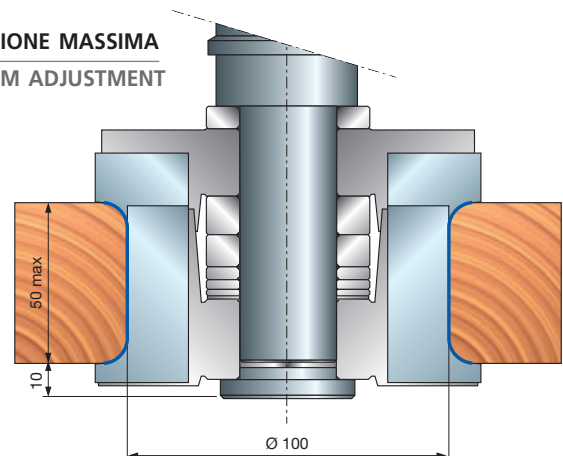
- Corpo in lega leggera (Ergal). Per la pulizia non utilizzare prodotti contenenti soda caustica.
- Light alloy body (Ergal). For cleaning do not use products containing caustic soda.

- Ideale per l'esecuzione di smussi e raccordi su legni naturali teneri e duri, legni esotici, truciolari e MDF con pantografi normali o CNC.
*L'ARTICOLO NC92M 100 VIENE FORNITO SENZA COLTELLI E SENZA MANDRINO. Per eseguire il profilo selezionato è necessario ordinare l'articolo NC92M 100, n. 2 coltelli CC92M1... per la testa superiore, n. 2 coltelli CC92M2... per la testa inferiore ed il mandrino desiderato.
- For profiling soft and hard solid woods, exotic woods, chipboard and MDF on normal and CNC overhead routing machines.
*ITEM NC92M 100 DOES NOT INCLUDE KNIVES AND CHUCK. For making the selected profile it is necessary to order item NC92M 100, 2 knives CC92M1... for the upper cutterhead, 2 knives CC92M2... for the lower cutterhead and chuck.

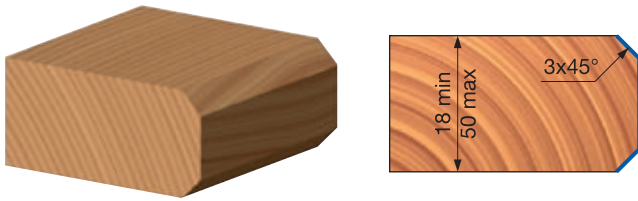
1 REGOLAZIONE MINIMA MINIMUM ADJUSTMENT



2 REGOLAZIONE MASSIMA MAXIMUM ADJUSTMENT

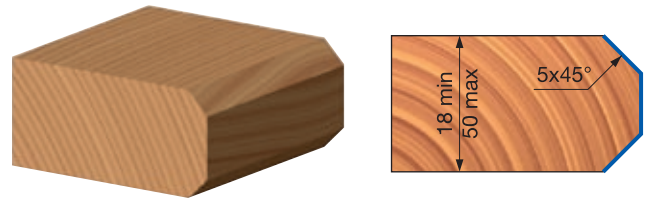


PROFILO / PROFILE 1



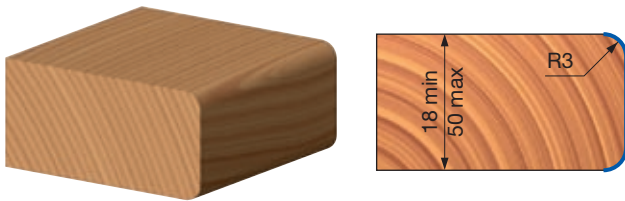
- Profilo ottenibile con i coltelli:
- Profile obtainable with knives:
CC92M1 T01 + CC92M2 T01

PROFILO / PROFILE 2



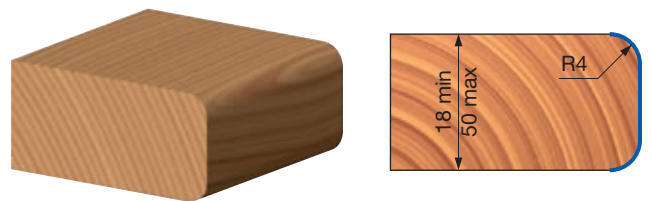
- Profilo ottenibile con i coltelli:
- Profile obtainable with knives:
CC92M1 T02 + CC92M2 T02

PROFILO / PROFILE 3



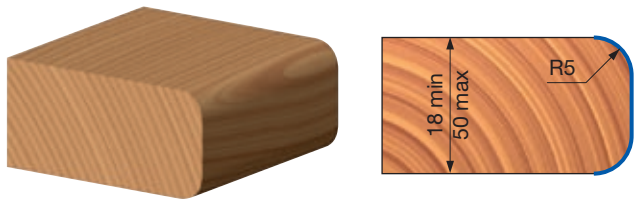
- Profilo ottenibile con i coltelli:
- Profile obtainable with knives:
CC92M1 T03 + CC92M2 T03

PROFILO / PROFILE 4



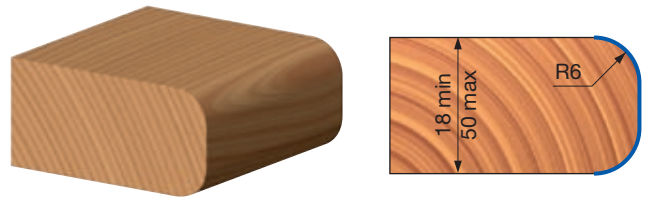
- Profilo ottenibile con i coltelli:
- Profile obtainable with knives:
CC92M1 T04 + CC92M2 T04

PROFILO / PROFILE 5



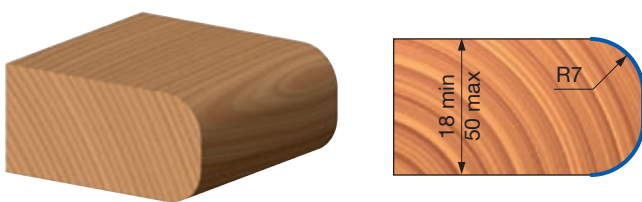
- Profilo ottenibile con i coltelli:
- Profile obtainable with knives:
CC92M1 T05 + CC92M2 T05

PROFILO / PROFILE 6



- Profilo ottenibile con i coltelli:
- Profile obtainable with knives:
CC92M1 T06+ CC92M2 T06

PROFILO / PROFILE 7



- Profilo ottenibile con i coltelli:
- Profile obtainable with knives:
CC92M1 T07 + CC92M2 T07

PROFILO / PROFILE 8



- Profilo ottenibile con i coltelli:
- Profile obtainable with knives:
CC92M1 T08 + CC92M2 T08

- L'utensile NC92M 100 non comprende il mandrino (per quest'ultimo si rimanda alla sezione accessori)
- ITEM NC92M 100 IS SUPPLIED WITHOUT CHUCK (for chuck ref. see the section accessories).

Esempio di ordinazione:
Order example:

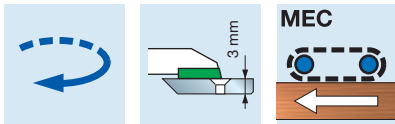
NC92M 100
CC92M1 T01
CC92M2 T01
MP05M AE9

Gruppo / Group
Coltelli / Knives
Coltelli / Knives
Mandrino / Chuck

1 pezzo / piece
2 pezzi / pieces
2 pezzi / pieces
1 pezzo / piece

NC93M

PUNTA PORTACOLTELLI PER GIUNZIONI CNC FINGER JOINT ROUTER BIT



PERFORMANCE
Coltelli Riaffilabili
SYSTEM
Resharpenable Knives

D	B	A	Max RPM	Codice
mm	mm	mm	U/min.	Code
120	30	pag. 401-407	10.000	NC93M 100*

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Cuneo / Wedge	41 x 17 x 8	CN11M B410
Vite / Screw	M4 x 6	2602M CE9
Vite / Screw	M10 x 18	VT03M CC9
Vite / Screw	16 x 7 x M5	VT08M AE9
Vite / Screw	18 x 7 x M6	VT08M AG9
Chiave / Allen key	5 x 110	CB03M EA9

Coltelli di ricambio	Dimensioni	Codice
Spare knives	Dimensions	Code
	45 x 30 x 3	CW24MA AA3
	45 x 30 x 3	CW24MB AA3

■ Ideale per l'esecuzione di giunzioni su legni naturali teneri e duri, legni esotici, aventi spessore da 40 mm min. a 80 mm max, con pantografi normali o CNC.

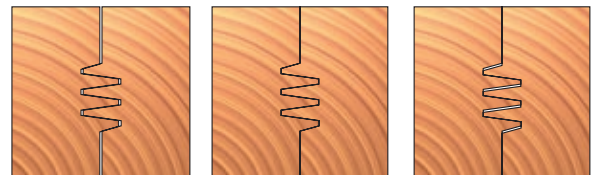
*L'articolo **NC93M 100** è composto dalle 2 teste portacoltelli comprensive di coltelli e da un set di anelli per la regolazione dell'ampiezza della giunzione. L'utensile **NC93M 100** si intende senza mandrino. Per quest'ultimo consultare la sezione accessori.

■ For jointing soft and hard solid woods, exotic woods from min. 40 mm to max 80 mm thickness, on normal and CNC overhead routing machines.

*Item **NC93M 100** includes two cutterheads supplied with knives and one set of spacers to adjust the joint height. Item **NC93M 100** is supplied without chuck. For chuck ref. see the accessories section.

■ ESEMPI DI REGOLAZIONE

■ ADJUSTMENT EXAMPLES



Giunzione forzata
Tight joint

Giunzione normale
Regular joint

Giunzione lasca
Loose joint

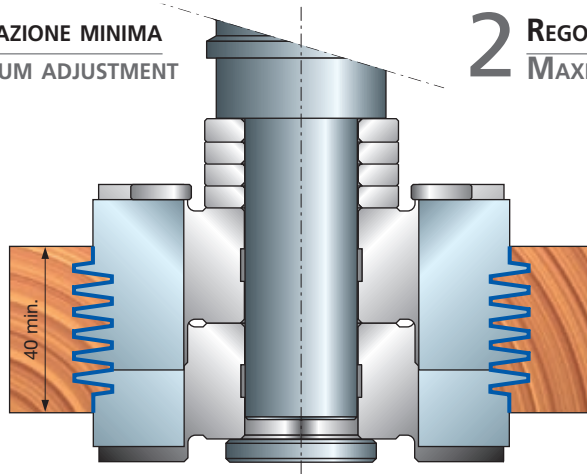
■ Corpo in lega leggera (Ergal). Per la pulizia non utilizzare prodotti contenenti soda caustica.

■ Light alloy body (Ergal). For cleaning do not use products containing caustic soda.

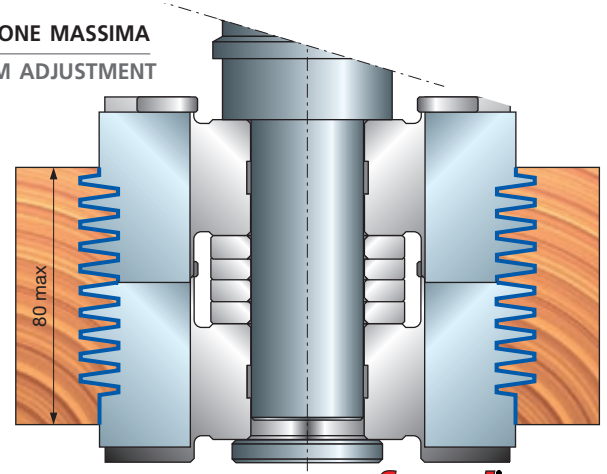
■ L'utensile **NC93M 100** non comprende il mandrino. Per ordinare il gruppo con rotazione destra, indicare nell'ordine il codice **NC93MD 100**; per ordinare il gruppo con rotazione sinistra, indicare il codice **NC93MS 100**.

■ Item **NC93M 100** is supplied without chuck. To order a right rotation set, please quote item code **NC93MD 100**; to order a left hand rotation set, please quote item code **NC93MS 100**.

1 REGOLAZIONE MINIMA MINIMUM ADJUSTMENT

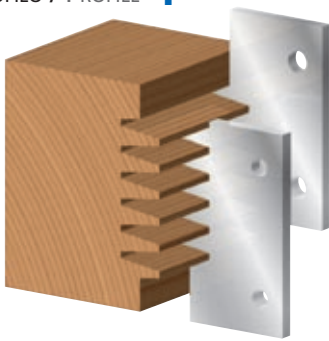


2 REGOLAZIONE MASSIMA MAXIMUM ADJUSTMENT

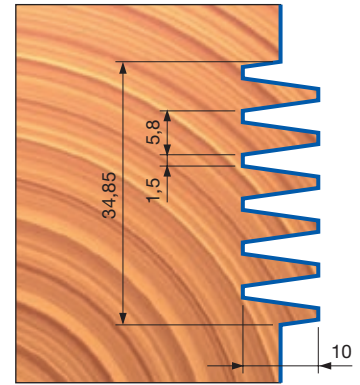


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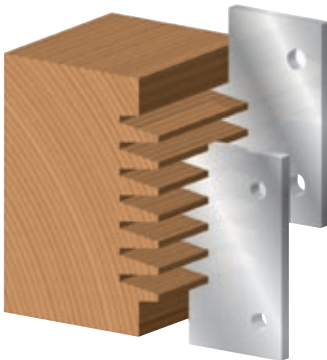
PROFILO / PROFILE 1



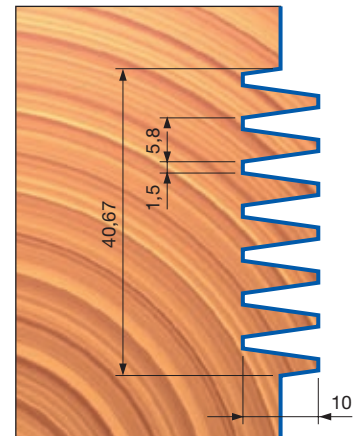
- Profilo ottenibile senza interporre anelli distanziali tra le due teste.
- Profile obtainable without spacers between the two cutterheads.



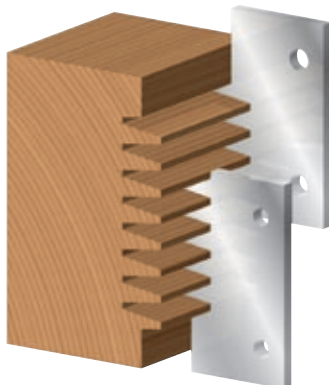
PROFILO / PROFILE 2



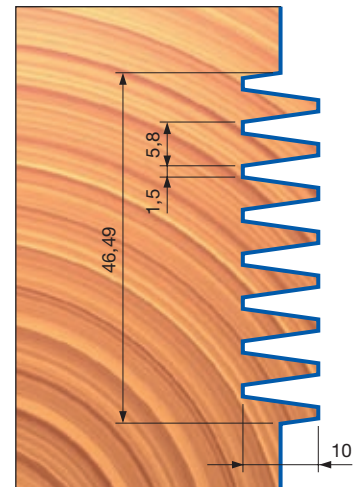
- Profilo ottenibile inserendo n. 1 anello distanziale tra le due teste.
- Profile obtainable by inserting 1 spacer between the two cutterheads.



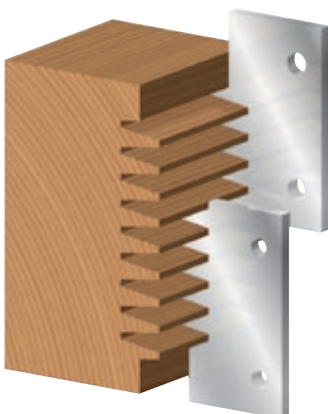
PROFILO / PROFILE 3



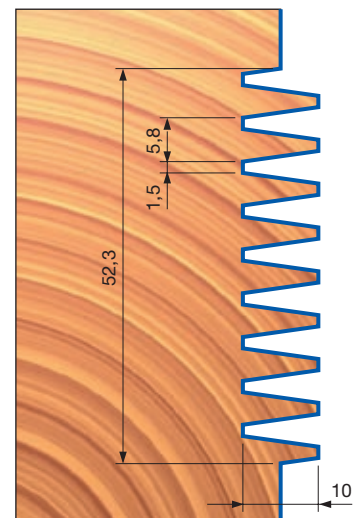
- Profilo ottenibile inserendo n. 2 anelli distanziali tra le due teste.
- Profile obtainable by inserting 2 spacers between the two cutterheads.



PROFILO / PROFILE 4



- Profilo ottenibile inserendo n. 3 anelli distanziali tra le due teste.
- Profile obtainable by inserting 3 spacers between the two cutterheads.



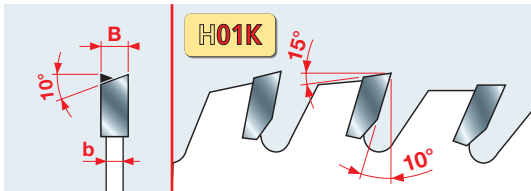
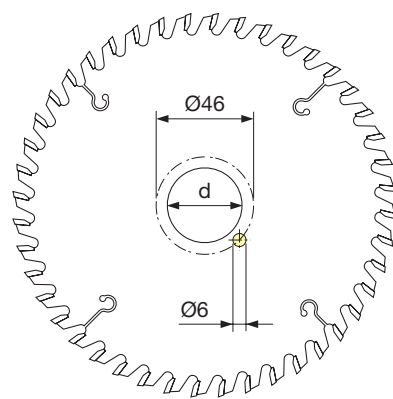
LU34M

HW - LAMA CIRCOLARE UNIVERSALE T.C.T. CIRCULAR SAWBLADE



D	d	B/b	Z	Codice Code
120	35	4 / 3	30	LU34M40EC3
120	35	5 / 3	30	LU34M50EC3
120	35	6 / 3	30	LU34M60EC3
180	35	4 / 3	44	LU34M40NC3
180	35	5 / 3	44	LU34M50NC3
180	35	6 / 3	44	LU34M60NC3

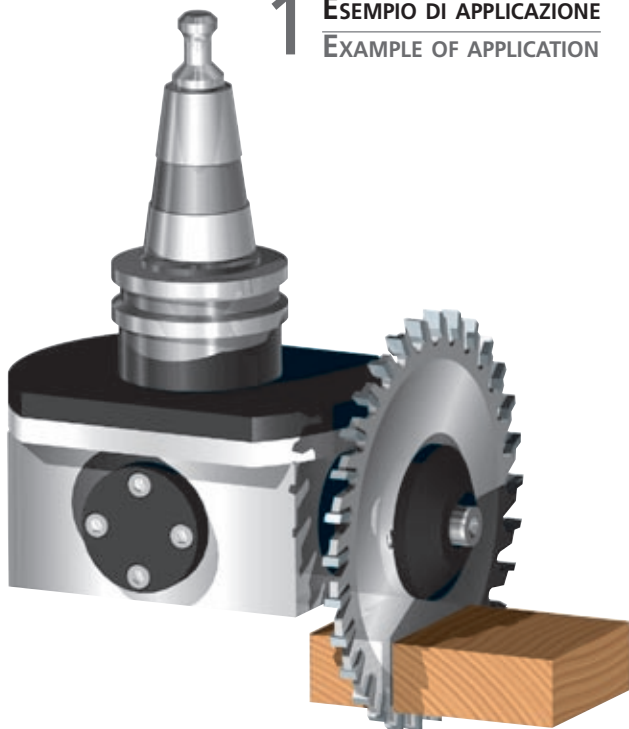
- Per l'esecuzione di scanalature lungo e trasverso vena con buona finitura su legni teneri, duri e materiali composti.
- For grooving along and across grain on softwoods, hardwoods and laminates.



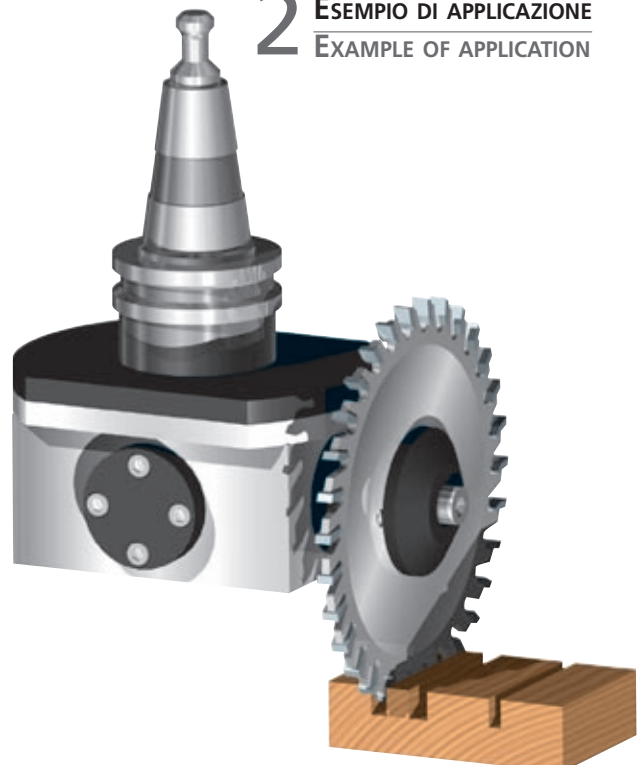
CARATTERISTICHE DEL DENTE - TOOTH'S FEATURES



1 ESEMPIO DI APPLICAZIONE EXAMPLE OF APPLICATION



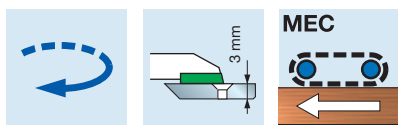
2 ESEMPIO DI APPLICAZIONE EXAMPLE OF APPLICATION



ST16MG

GRUPPI PER PROFILI DI PORTE INTERNE E PORTONCINI PROFILING SETS FOR INTERNAL AND EXTERNAL DOORS

Utensili per gruppi ST16MG-800 e ST16MG-801
Tools for ST16MG-800 and ST16MG-801 sets



PERFORMANCE SYSTEM
Coltelli Riaffilabili
Resharpenable Knives

D	B	d	Z	R	Codice Code
128	12	30	2	4	ST16M HB3
130,9	41	30			ST16M HC3
136	12	30	2	4	ST16M HD3
137	27	30			ST16M HA3

Parti di ricambio Spare parts	Dimensioni Dimensions	Codice Code
HA3		
Vite / Screw	M5 x 7 x 18	VT08M AE9
Cuneo / Wedge	23 x 38 x 8,5	CN12MD EB9A
Vite / Screw	m10 x 18	VT03M CC9
HB3		
Coltello / Knife	7,6 x 12 x 1,5	CG06M HA3
Cuneo / Wedge	15 x 7,2 x 8	CN09M DA9
Vite / Screw	M5 x 16	VT03M BB9
Rasante / Spur	22,8 x 2,5	RG02M AA3
Vite / Screw	M5 x 6	VT05M AC9
Insero smussatore / Bevelling insert	22 x 16 x 5	IG51M BA3
Vite / Screw	M6 x 13	VT16M AE9
HC3		
Vite / Screw	M5 x 7 x 18	VT08M AE9
Cuneo / Wedge	38 x 38 x 8,5	CN12MS EE9A
Vite / Screw	M10 x 18	VT03M CC9
HD3		
Coltello / Knife	7,6 x 12 x 1,5	CG06M HA3
Cuneo / Wedge	15 x 7,2 x 8	CN09M DA9
Vite / Screw	M5 x 16	VT03M BB9
Rasante / Spur	22,8 x 2,5	RG02M AA3
Vite / Screw	M5 x 8	VT05M AA9
Insero smussatore / Bevelling insert	22 x 16 x 5	IG51M BA3
Vite / Screw	M6 x 13	VT16M AE9

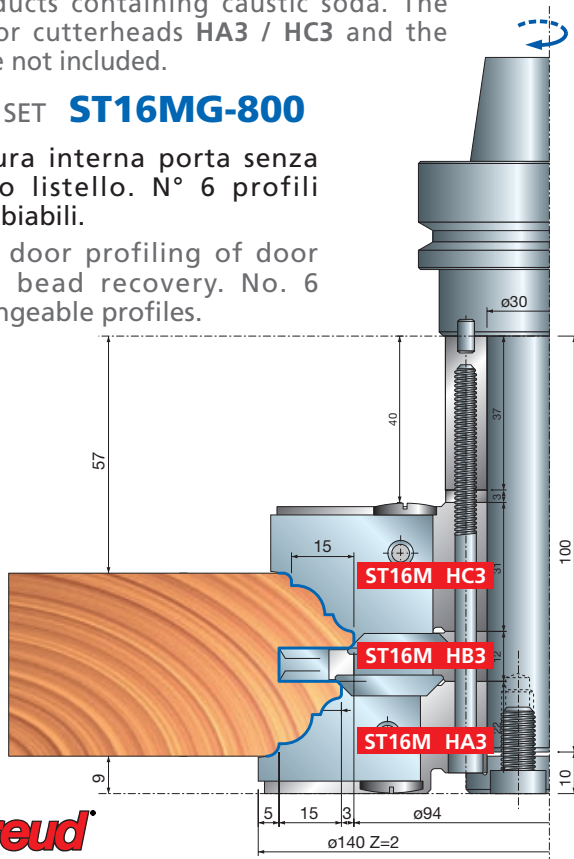
■ Corpo in lega leggera (Ergal). Per la pulizia non utilizzare prodotti contenenti soda caustica. I coltelli per gli utensili HA3 e HC3 e il mandrino vanno ordinati a parte.

■ Light alloy body (Ergal). For cleaning do not use products containing caustic soda. The knives for cutterheads HA3 / HC3 and the chuck are not included.

Spessore legno Wood thickness	Regolazione vetrocamera Doble-glazing thickness adj.
44 mm	15 mm
44 mm	19 mm

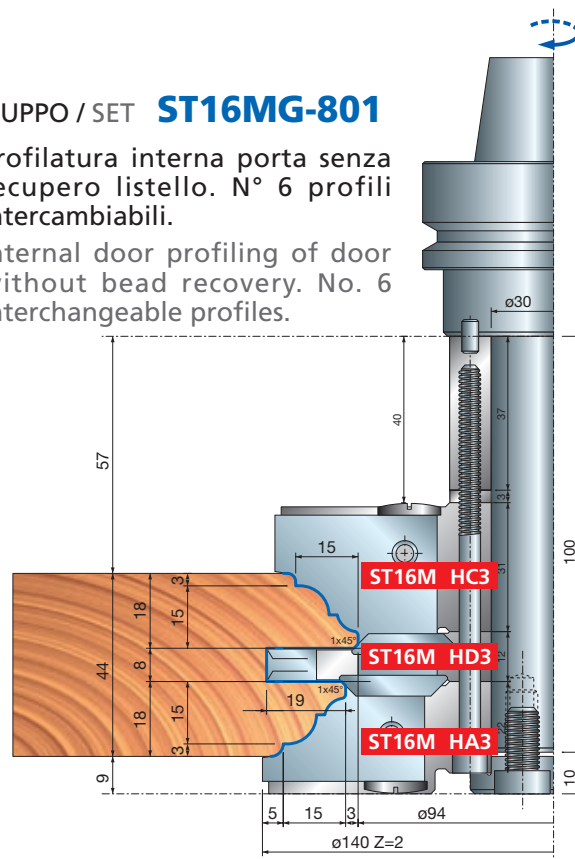
GRUPPO / SET **ST16MG-800**

- Profilatura interna porta senza recupero listello. N° 6 profili intercambiabili.
- Internal door profiling of door without bead recovery. No. 6 interchangeable profiles.



GRUPPO / SET **ST16MG-801**

- Profilatura interna porta senza recupero listello. N° 6 profili intercambiabili.
- Internal door profiling of door without bead recovery. No. 6 interchangeable profiles.

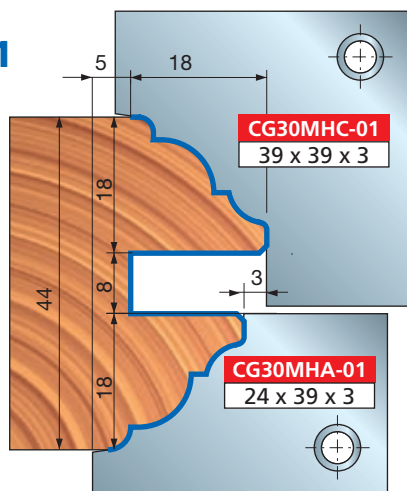


ST16MG

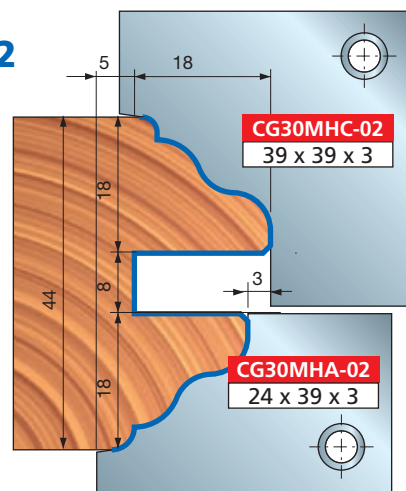
PROFILI CON RAGGIATURA ESTERNA PROFILING WITH EXTERNAL ROUNDING

COLTELLI PER UTENSILI / KNIVES FOR CUTTERHEADS: **ST16M HA3**
ST16M HC3

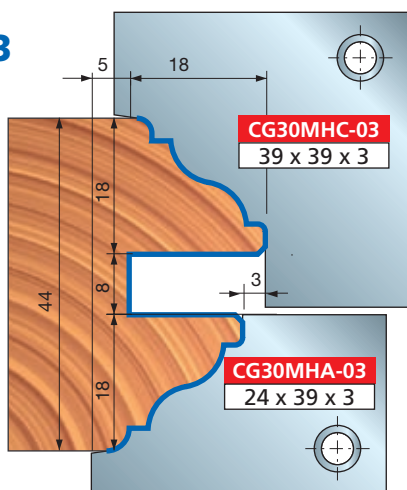
PROFILO / PROFILE **1**



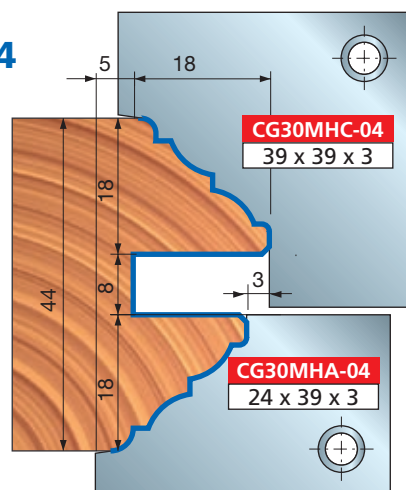
PROFILO / PROFILE **2**



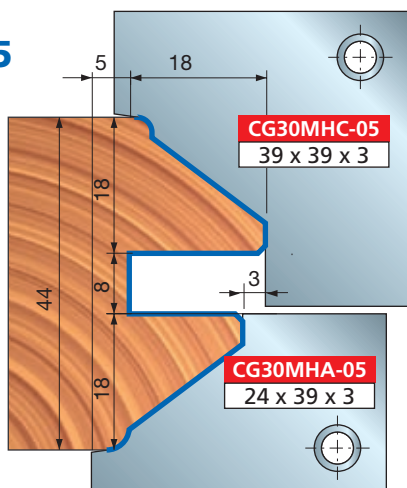
PROFILO / PROFILE **3**



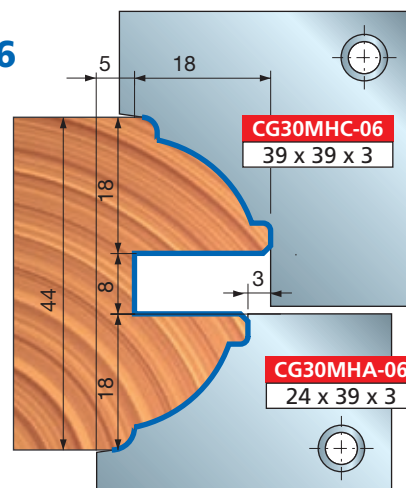
PROFILO / PROFILE **4**



PROFILO / PROFILE **5**



PROFILO / PROFILE **6**

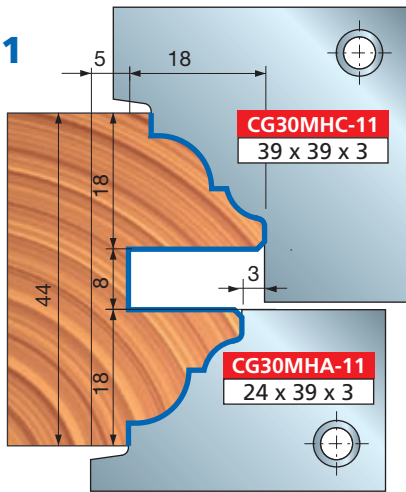


ST16MG

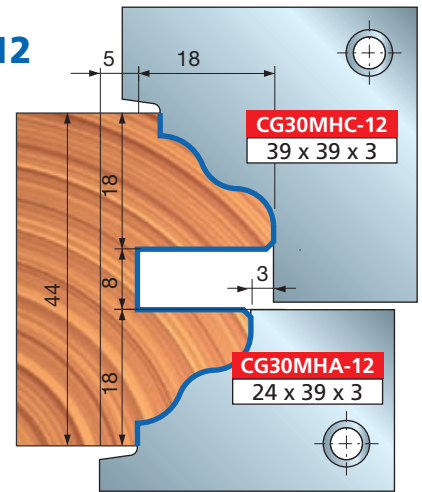
PROFILI SENZA RAGGIATURA ESTERNA PROFILING WITHOUT EXTERNAL ROUNDING

COLTELLI PER UTENSILI / KNIVES FOR CUTTERHEADS: **ST16M HA3**
ST16M HC3

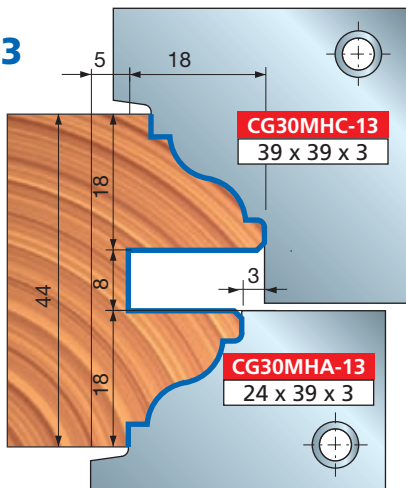
PROFILO / PROFILE **11**



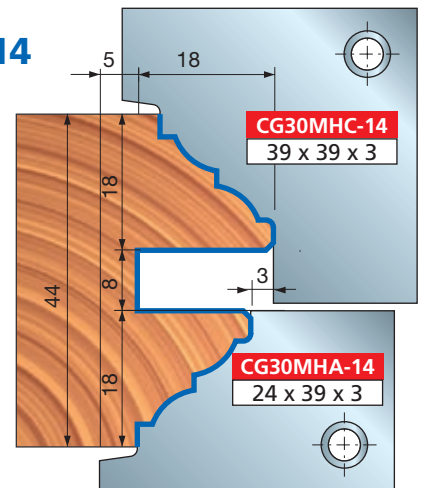
PROFILO / PROFILE **12**



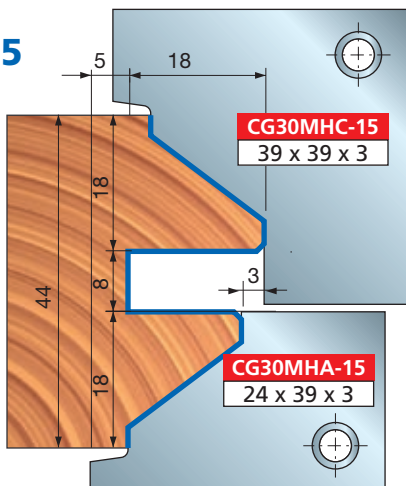
PROFILO / PROFILE **13**



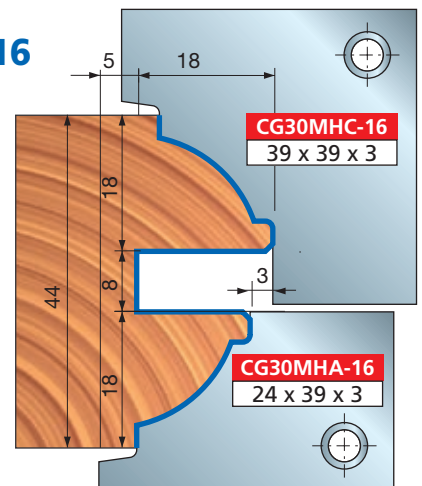
PROFILO / PROFILE **14**



PROFILO / PROFILE **15**



PROFILO / PROFILE **16**



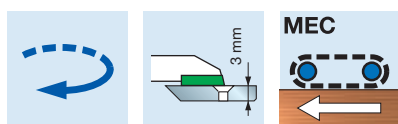
ST16MG

GRUPPI PER PROFILI DI PORTE INTERNE CON RECUPERO LISTELLO SET FOR INTERNAL DOORS PROFILING WITH BEAD RECOVERY

Utensili per gruppi ST16MG-802, ST16MG-803 e ST16MG-804
Tools for ST16MG-802, ST16MG-803 and ST16MG-804 sets



D	B	d	Z	R	Codice
mm	mm	mm			Code
128	12	30	2	4	ST16M HB3
128	50	30	2	2	ST16M HF3
128	59	30	2	6	ST16M HE3
130,9	41	30			ST16M HC3
136	12	30	2	4	ST16M HD3
137	27	30			ST16M HA3



PERFORMANCE
Coltelli Riaffilabili
SYSTEM
Resharpenable Knives

	Parti di ricambio	Dimensioni	Codice
	Spare parts	Dimensions	Code
HA3	Vite / Screw	M5 x 7 x 18	VT08M AE9
	Cuneo / Wedge	23 x 38 x 8,5	CN12MD EB9A
	Vite / Screw	m10 x 18	VT03M CC9
HB3	Coltello / Knife	7,6 x 12 x 1,5	CG06M HA3
	Cuneo / Wedge	15 x 7,2 x 8	CN09M DA9
	Vite / Screw	M5 x 16	VT03M BB9
	Rasante / Spur	22,8 x 2,5	RG02M AA3
	Vite / Screw	M5 x 6	VT05M AC9
	Insero smussatore / Bevelling insert	22 x 16 x 5	IG51M BA3
	Vite / Screw	M6 x 13	VT16M AE9
HC3	Vite / Screw	M5 x 7 x 18	VT08M AE9
	Cuneo / Wedge	38 x 38 x 8,5	CN12MS EE9A
	Vite / Screw	M10 x 18	VT03M CC9
HD3	Coltello / Knife	7,6X12X1,5	CG06M HA3
	Cuneo / Wedge	15X7,2X8	CN09M DA9
	Vite / Screw	M5X16	VT03M BB9
	Rasante / Spur	22,86X2,5	RG02M AA3
	Vite / Screw	M5X8	VT05M AA9
	Insero smussatore / Bevelling insert	22X16X5	IG51M BA3
	Vite / Screw	M6X13	VT16M AE9
HE3	Coltello / Knife	60 x 12 x 1,5	CG06M GA3
	Cuneo / Wedge	15 x 56 x 8	CN09M AQ9
	Ogiva / Nut	15 x 13,3 x 10	VT20M MA9
	Vite / Screw	M10 x 22	VT19M MA9
	Rasante / Spur	22,8 x 2,5	RG02M AA3
	Vite / Screw	M5 x 8	VT05M AA9
	Insero smussatore / Bevelling insert	22 x 16 x 5	IG51M BA3
	Vite / Screw	M6 x 14,5	VT16M AA9
	Insero raggatore / Rounding insert	22 x 16X5	IG52M AE3
HF3	Coltello / Knife	50 x 12 x 1,5	CG06M FA3
	Cuneo / Wedge	15 x 46 x 8	CN09M AP9
	Ogiva / Nut	15 x 13,3 x 10	VT20M MA9
	Vite / Screw	M10 x 22	VT19M MA9
	Insero raggatore / Rounding insert	22 x 16 x 5	IG52M AE3
	Vite / Screw	M6 x 13	VT16M AE9
	Cuneo / Wedge	28 x 9,5 x 8	CN03M BB9
Vite / Screw	M8 x 22	VT19M BB9	

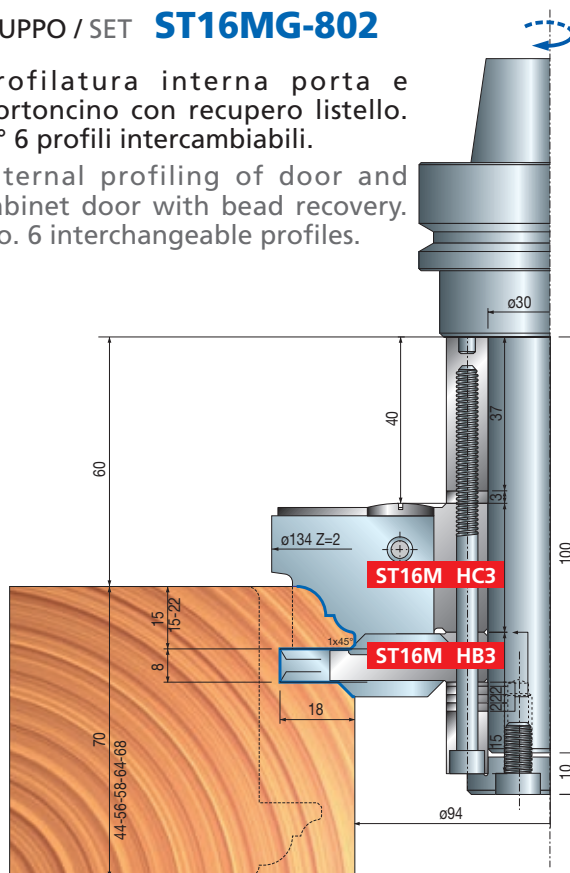
- Corpo in lega leggera (Ergal). Per la pulizia non utilizzare prodotti contenenti soda caustica. I coltelli per gli utensili HA3 e HC3 e il mandrino vanno ordinati a parte.
- Light alloy body (Ergal). For cleaning do not use products containing caustic soda. The knives for cutterheads HA3 / HC3 and the chuck are not included.

ST16MG

GRUPPI PER PROFILI DI PORTE INTERNE CON RECUPERO LISTELLO SET FOR INTERNAL DOORS PROFILING WITH BEAD RECOVERY

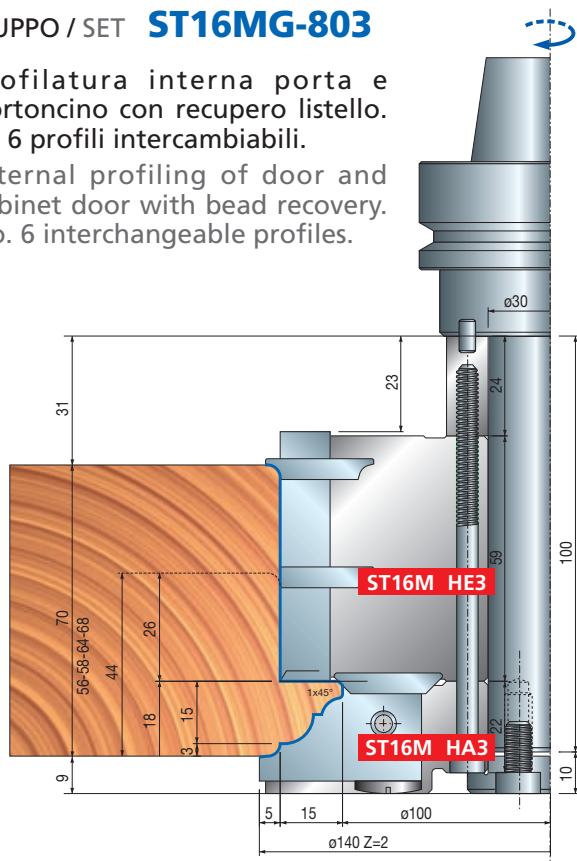
GRUPPO / SET **ST16MG-802**

- Profilatura interna porta e portoncino con recupero listello. N° 6 profili intercambiabili.
- Internal profiling of door and cabinet door with bead recovery. No. 6 interchangeable profiles.



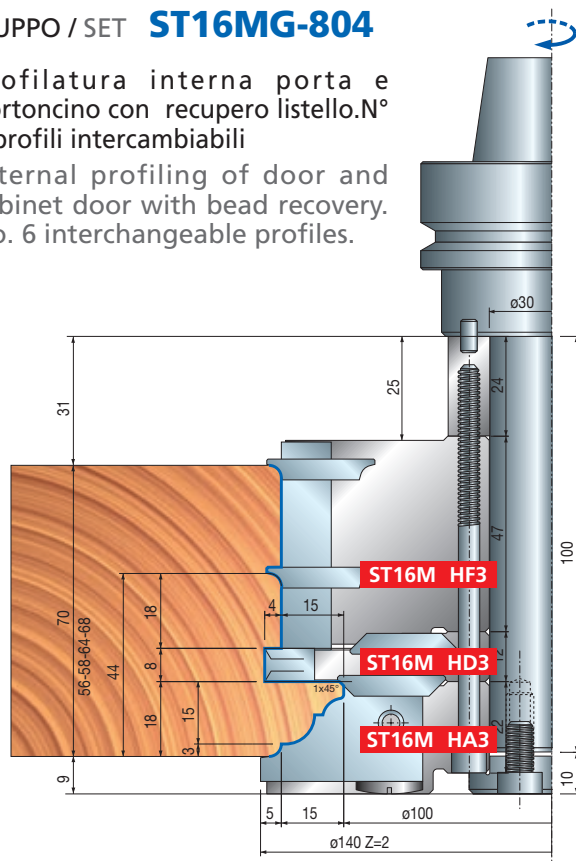
GRUPPO / SET **ST16MG-803**

- Profilatura interna porta e portoncino con recupero listello. N° 6 profili intercambiabili.
- Internal profiling of door and cabinet door with bead recovery. No. 6 interchangeable profiles.



GRUPPO / SET **ST16MG-804**

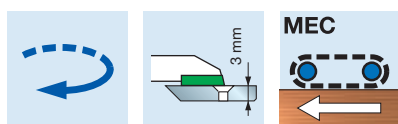
- Profilatura interna porta e portoncino con recupero listello. N° 6 profili intercambiabili.
- Internal profiling of door and cabinet door with bead recovery. No. 6 interchangeable profiles.



ST16MG

GRUPPI PER CONTROPROFILI DI PORTE SETS FOR DOOR TENONING

Utensili per gr. ST16MG-810, ST16MG-811, ST16MG 812, ST16MG-813
Tools for ST16MG-810, ST16MG-811, ST16MG-812, ST16MG-813 sets



PERFORMANCE
Coltelli Riaffilabili
SYSTEM
Resharpenable Knives

D	B	d	Z	R	Codice
mm	mm	mm			Code
110,4	8	30	2		ST16M HJ3
118	51	30	2	4	ST16M HL3
118,4	8	30	2		ST16M HH3
120	60	30	2	2	ST16M HK3
146	24	30		4	ST16M HG3
152	24	30		4	ST16M HI3

	Parti di ricambio	Dimensioni	Codice
	Spare parts	Dimensions	Code
HG3	Vite / Screw	5 x 7 x 18	VT08M AE9
	Cuneo / Wedge	23 x 38 x 8,5	CN12MS EB9A
	Vite / Screw	M10 x 18	VT03M CC9
	Insero rasante / Spur insert	40 x 16 x 4	IG05MS AA3
	Vite / Screw	M6 x 11,5	VT16M AB9
	Insero raggatore / Rounding insert	22 x 16 x 5	IG52M AE3
HH3 - HL3	Vite / Screw	M6 x 14,5	VT16M AA9
	Coltello / Knife	8,6 x 12 x 1,5	CG06M JA3
	Cuneo / Wedge	15 x 7,2 x 8	CN09M DA9
HI3	Vite / Screw	M5 x 19	VT11M AA9
	Vite / Screw	5 x 7 x 18	VT08M AE9
	Cuneo / Wedge	23 x 38 x 8,5	CN12MS EB9A
	Vite / Screw	M10 x 18	VT03M CC9
	Insero raggatore / Rounding insert	22 x 16 x 5	IG52M AE3
	Vite / Screw	M6 x 14,5	VT16M AA9
HK3	Insero rasante / Spur insert	40 x 16 x 4	IG05MD AA3
	Vite / Screw	M6 x 11,5	VT16M AB9
	Coltello / Knife	60 x 12 x 1,5	CG06M GA3
	Cuneo / Wedge	15 x 56 x 8	CN09M AQ9
	Ogiva / Nut	15 x 13,3 x 10	VT20M MA9
	Vite / Screw	M10 x 22	VT19M MA9
	Insero raggatore / Rounding insert	22 x 16 x 5	IG52M AE3
	Vite / Screw	M6 x 13	VT16M AE9
	Cuneo / Wedge	28 x 9,5 x 8	CN03M BB9
	Vite / Screw	M8 x 22	VT19M BB9
HL3	Supporto / Serrated support	14 x 21,5 x 22	CN03M BA9
	Vite / Screw	M10 x 22	VT19M MA9
	Rasante / Spur	22,8 x 2,5	RG02M AA3
	Vite / Screw	M5 x 8	VT05M AA9
	Insero raggatore / Rounding insert	22 x 16 x 5	IG52M AE3
	Vite / Screw	M6 x 13	VT16M AE9
	Cuneo / Wedge	28 x 9,5 x 8	CN03M BB9
	Vite / Screw	M8 x 22	VT19M BB9
	Supporto / Serrated support	14 x 21,5 x 22	CN03M BA9
	Coltello / Knife	50 x 12 x 1,5	CG06M FA3
	Cuneo / Wedge	15 x 46 x 8	CN09M AP9
	Ogiva / Nut	15 x 13,3 x 10	VT20M MA9

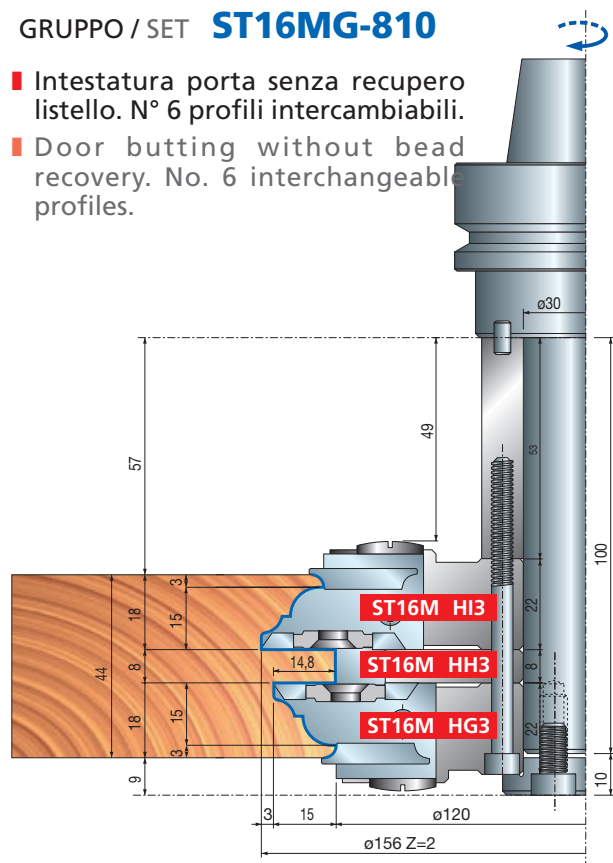
- Corpo in lega leggera (Ergal). Per la pulizia non utilizzare prodotti contenenti soda caustica. I coltelli per gli utensili HI3 e HG3 e il mandrino vanno ordinati a parte.
- Light alloy body (Ergal). For cleaning do not use products containing caustic soda. The knives for cutterheads HI3 / HG3 and the chuck are not included.

ST16MG

GRUPPI PER CONTROPROFILI DI PORTE SETS FOR DOOR TENONING

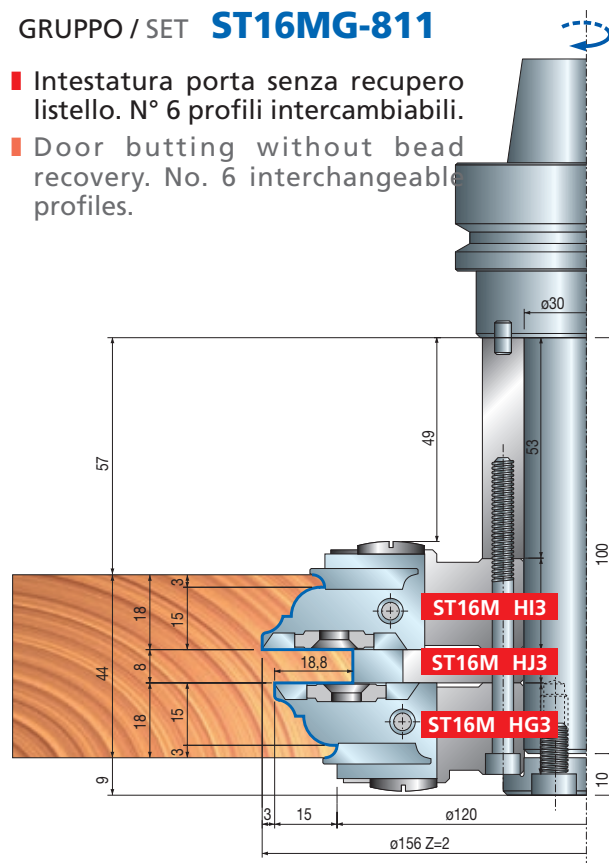
GRUPPO / SET **ST16MG-810**

- Intestatura porta senza recupero listello. N° 6 profili intercambiabili.
- Door butting without bead recovery. No. 6 interchangeable profiles.



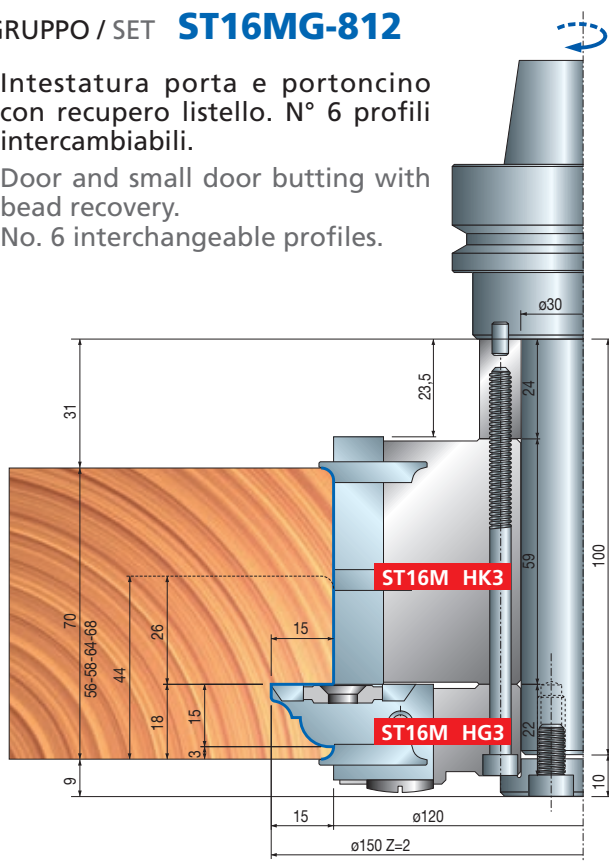
GRUPPO / SET **ST16MG-811**

- Intestatura porta senza recupero listello. N° 6 profili intercambiabili.
- Door butting without bead recovery. No. 6 interchangeable profiles.



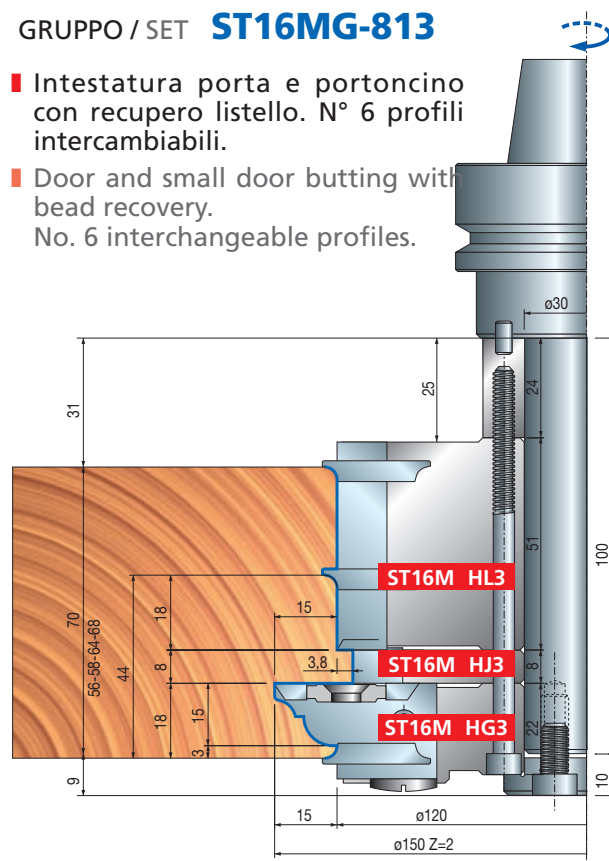
GRUPPO / SET **ST16MG-812**

- Intestatura porta e portoncino con recupero listello. N° 6 profili intercambiabili.
- Door and small door butting with bead recovery. No. 6 interchangeable profiles.



GRUPPO / SET **ST16MG-813**

- Intestatura porta e portoncino con recupero listello. N° 6 profili intercambiabili.
- Door and small door butting with bead recovery. No. 6 interchangeable profiles.

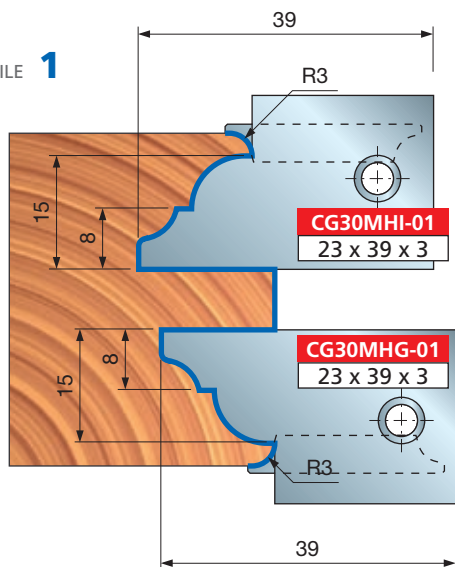


ST16MG

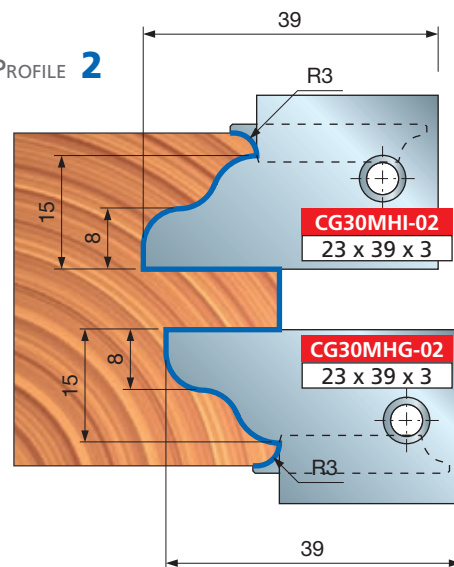
PROFILI CON RAGGIATURA ESTERNA DA 3 mm PROFILING WITH 3 mm EXTERNAL ROUNDING

COLTELLI PER UTENSILI / KNIVES FOR CUTTERHEADS: **ST16M HG3**
ST16M HI3

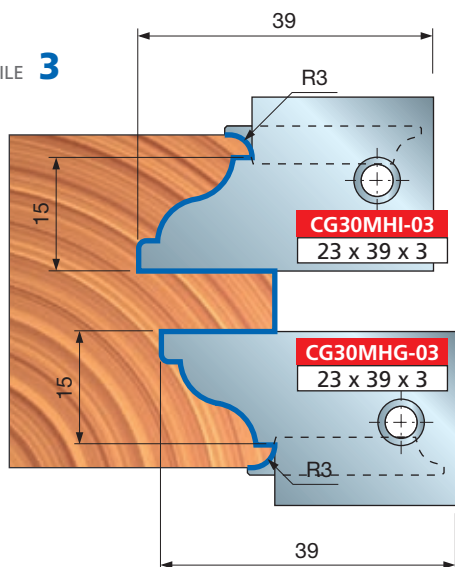
PROFILO / PROFILE **1**



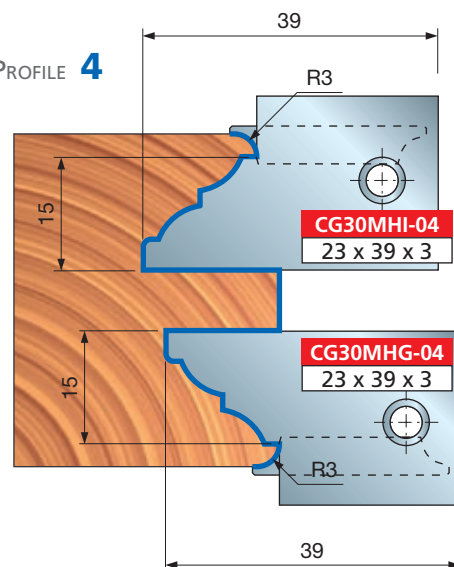
PROFILO / PROFILE **2**



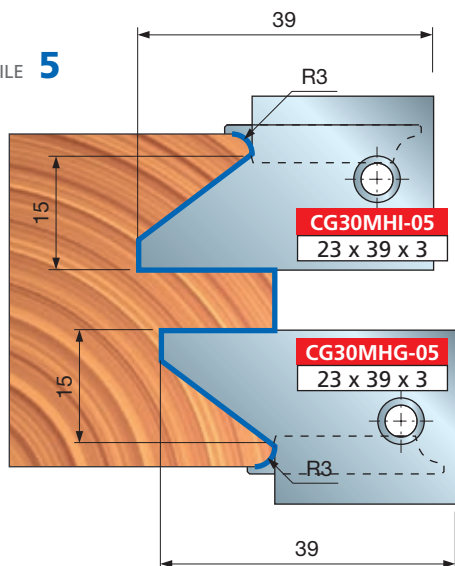
PROFILO / PROFILE **3**



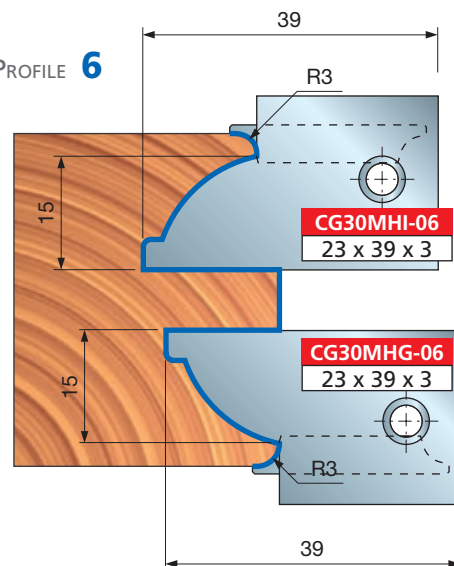
PROFILO / PROFILE **4**



PROFILO / PROFILE **5**



PROFILO / PROFILE **6**



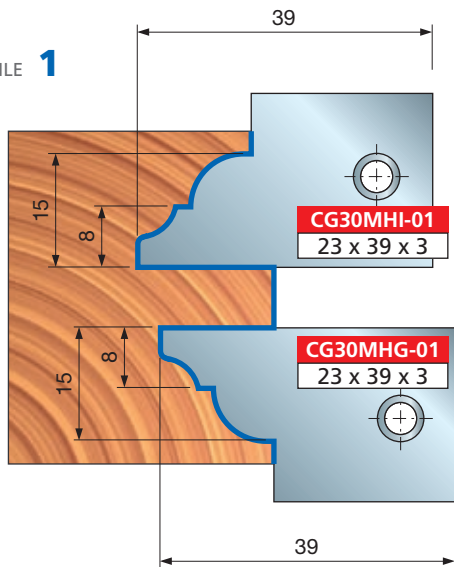
ST16MG

PROFILI SENZA RAGGIATURA ESTERNA

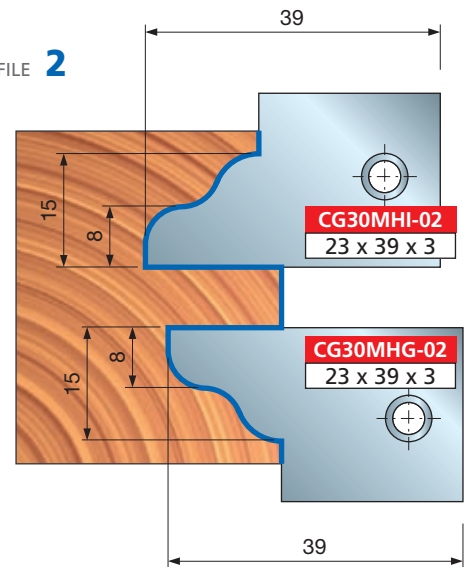
PROFILING WITHOUT EXTERNAL ROUNDING

COLTELLI PER UTENSILI / KNIVES FOR CUTTERHEADS: **ST16M HG3**
ST16M HI3

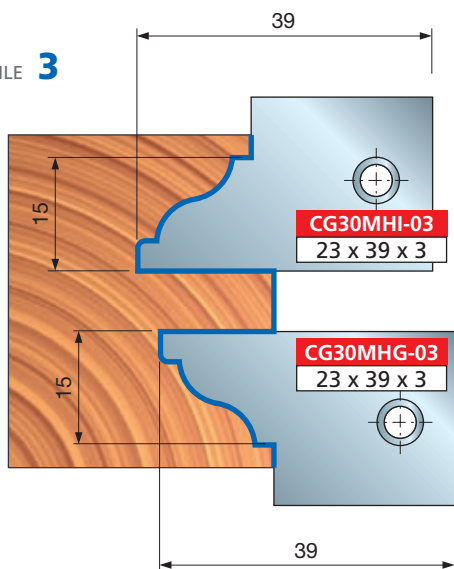
PROFILO / PROFILE **1**



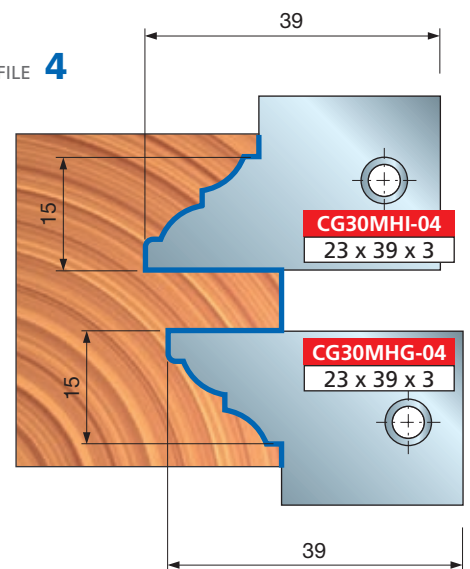
PROFILO / PROFILE **2**



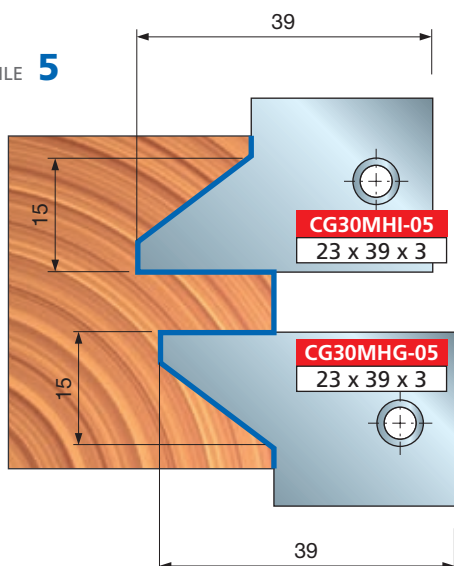
PROFILO / PROFILE **3**



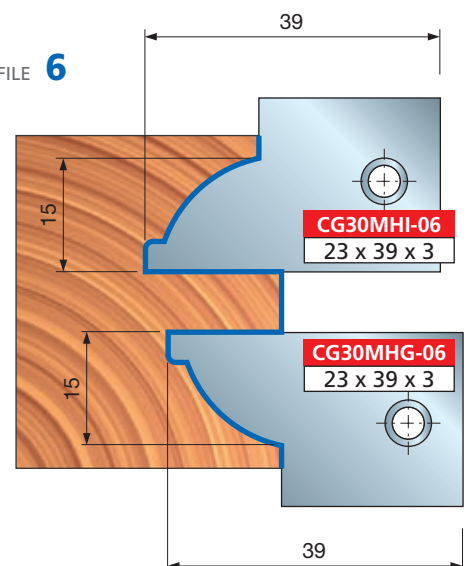
PROFILO / PROFILE **4**



PROFILO / PROFILE **5**

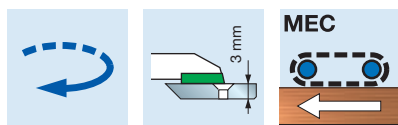


PROFILO / PROFILE **6**



ST16MG

GRUPPI PER BATTUTE DI PORTE SETS FOR DOOR REBATES



PERFORMANCE
Coltelli Riaffilabili
SYSTEM
Resharpenable Knives

Utensili per gruppi ST16MG-820 e ST16MG-821 Tools for ST16MG-820 and ST16MG-821 sets

D	B	d	Z	R	Codice Code
118	31	30	2	2	ST16MHN3
127,3	33	30	2	2	ST16M HO3
140,7	41	30	2	4	ST16M HM3

	Parti di ricambio Spare parts	Dimensioni Dimensions	Codice Code
HM3	Coltello / Knife	40 x 12 x 1,5	CG01M LA3
	Cuneo / Wedge	15 x 36 x 8	CN09MS AR9
	Ogiva / Nut	15 x 13,3 x 10	VT20M MA9
	Vite / Screw	M10 x 22	VT19M MA9
	Rasante raggiatore / Multipurpose insert	10	IG25MS 103
	Vite / Screw	M6 x 10	2622M CB9
	Rondella / Ring	16 x 11,9 x 2,6	VT18M AG9
	Cuneo / Wedge	28 x 9,5 x 8	CN03M BB9
	Vite / Screw	M8 x 22	VT19M BB9
	Supporto / Serrated support	14 x 21,5 x 22	CN03M BA9
HM3	Insero raggiatore / Rounding insert	22 x 16 x 5	IG52M AB3
	Vite / Screw	M6 x 13	VT16M AE9
	Coltello / Knife	30 x 12 x 1,5	CG01M EA3
	Cuneo / Wedge	15 x 26 x 8	CN09MD AD9
	Ogiva / Nut	15 x 13,3 x 10	VT20M MA9
	Vite / Screw	M10 x 22	VT19M MA9
	Insero raggiatore / Rounding insert	22 x 16 x 5	IG52M AB3
	Vite / Screw	M6 x 13	VT16M AE9
	Cuneo / Wedge	28 x 9,5 x 8	CN03M BB9
	Vite / Screw	M8 x 22	VT19M BB9
HO3	Supporto / Serrated support	14 x 21,5 x 22	CN03M BA9
	Coltello / Knife	30 x 12 x 1,5	CG01M EA3
	Cuneo / Wedge	15 x 26 x 8	CN09MS AD9
	Ogiva / Nut	15 x 13,3 x 10	VT20M MA9
	Vite / Screw	M10 x 22	VT19M MA9
	Insero raggiatore / Rounding insert	22 x 16 x 5	IG52M AB3
	Vite / Screw	M6 x 13	VT16M AE9
	Cuneo / Wedge	28 x 9,5 x 8	CN03M BB9
	Vite / Screw	M8 x 22	VT19M BB9
	Supporto / Serrated support	14 x 21,5 x 22	CN03M BA9

■ Corpo in lega leggera (Ergal). Per la pulizia non utilizzare prodotti contenenti soda caustica.
Gli utensili per **ST16MG-820** e **ST16MG-821** non comprendono il mandrino.

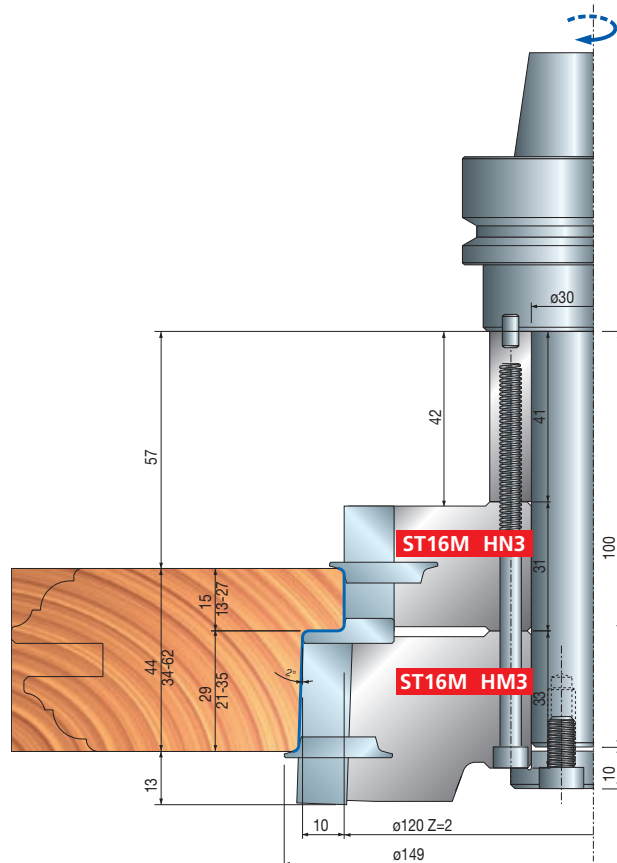
■ Light alloy body (Ergal). For cleaning do not use products containing caustic soda.
The tools for **ST16MG-820** and **ST16MG-821** are supplied without chuck.

ST16MG

GRUPPI PER BATTUTE DI PORTE SETS FOR DOOR REBATES

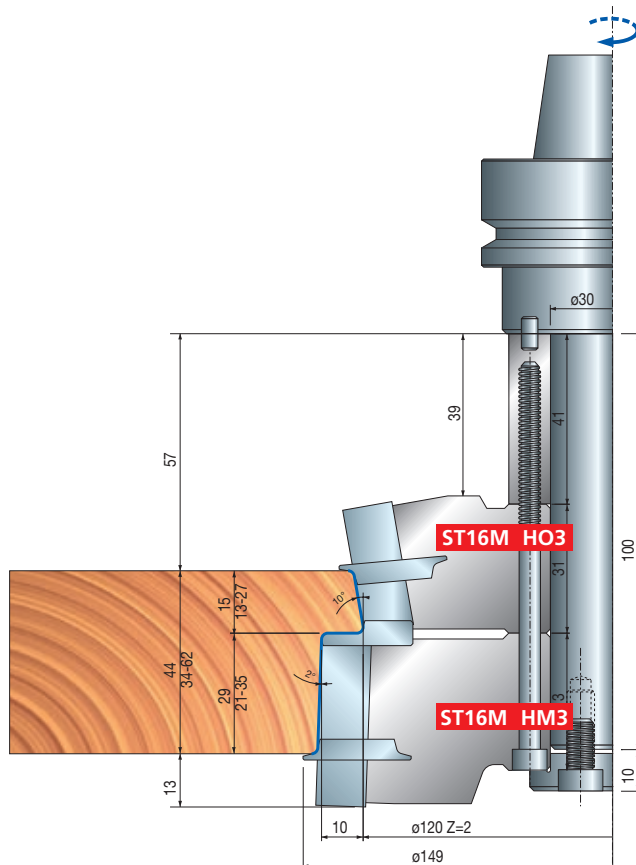
GRUPPO / SET **ST16MG-820**

- Squadratura porta con battuta dritta.
N° 6 profili intercambiabili.
- Door squaring – Straight rebate.
No. 6 interchangeable profiles.



GRUPPO / SET **ST16MG-821**

- Squadratura porta con battuta inclinata. N° 6 profili intercambiabili.
- Door squaring – Inclined rebate.
No. 6 interchangeable profiles.



ST16MG

GRUPPI PER PROFILATURA INTERNA TELAIO PORTA

WINDOW TOOLING SET FOR DOOR FRAME INTERNAL PROFILING



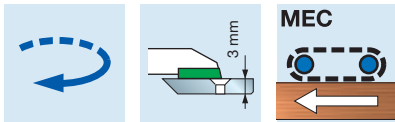
Utensili per gruppi ST16MG-830

Tools for ST16MG-830 set

D	B	d	Z	R	Codice
mm	mm	mm			Code
141	29	30	2	2	ST16M HP3

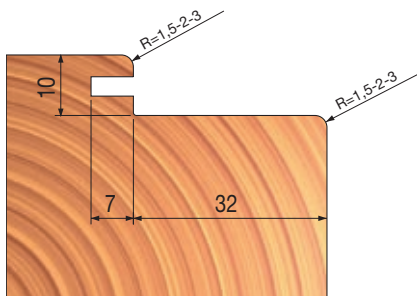
Parti di ricambio		Dimensioni	Codice
Spare parts		Dimensions	Code
Coltello / Knife		18,5 x 24 x 3	CG30M 024
Vite / Screw		5 x 7 x 18	VT08M AE9
Cuneo / Wedge		18 x 23 x 8,5	CN12MS BA9A
Vite / Screw		M10 x 18	VT03M CC9
Insero per incastri / Grooving insert		40 x 16 x 3	IG04MD AC3
Vite / Screw		M6 x 14,5	VT16M AA9

Inseri opzionali		Dimensioni	Codice
Optional inserts		Dimensions	Code
Insero smussatore / Beveling insert		22 x 16 x 5 45°	IG51M BA3
Insero raggiatore / Rounding insert		22 x 16 x 5 R=1,5	IG52M AB3
Insero raggiatore / Rounding insert		22 x 16 x 5 R=2	IG52M AC3
Insero raggiatore / Rounding insert		22 x 16 x 5 R=3	IG52M AE3

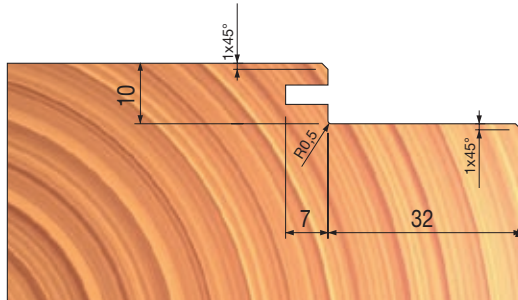


PERFORMANCE SYSTEM
Cotelli Riaffilabili
Resharpenable Knives

CON INSERTI **RAGGIATORI**
WITH **ROUNDING** INSERTS

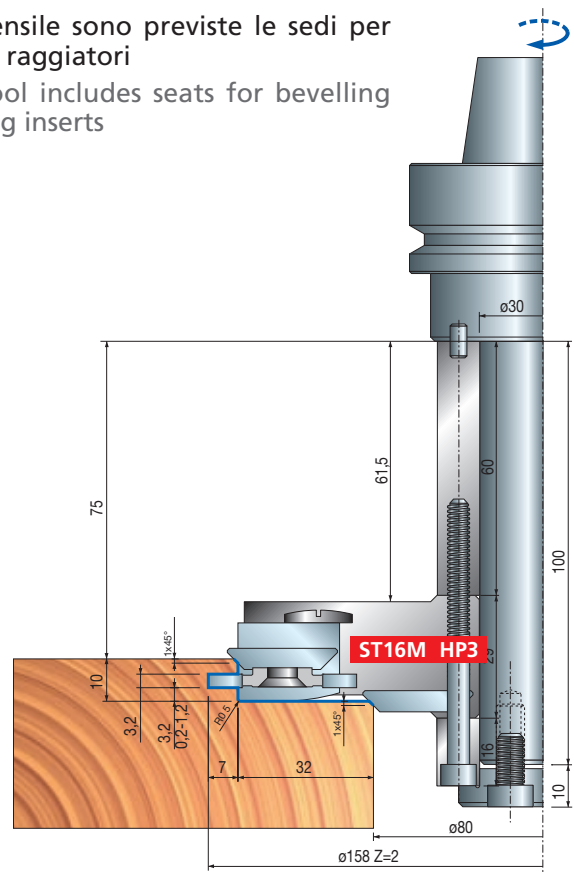


CON INSERTI **SMUSSATORI**
WITH **BEVELLING** INSERTS



GRUPPO / SET **ST16MG-830**

- N.B. Sull'utensile sono previste le sedi per smussatori e raggiatori
- Note The tool includes seats for beveling and rounding inserts



PCN110

PUNTA PORTACOLTELLI PROFILATI

CNC ROUTER CUTTER WITH PROFILED KNIVES

ARTICOLI SPECIALI
SPECIAL ITEMS



D	B	A	Max RPM	Codice
mm	mm	mm	U/min.	Code
50	33	20x50	25.000	PCN110
50	33	CM2	25.000	PCN110CM

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Coltello / Knife	17,5 x 35 x 3	CCN110
Vite / Screw	M5 x 5	2615M CC9
Vite / Screw	M6 x 12	2622M CC9
Rondella / Ring	14 x 2 x 6	VT18M AL9
Chiave / Allen key	4 x 110	CB03M BA9
Chiave esag. a "L" / Allen key	2,5	2619M CA9

■ Per la profilatura di legni naturali teneri e duri, legni esotici, truciolari e MDF su pantografi normali o CNC. Nel codice **PCN110** o **PCN110CM** è compreso il corpo punta, n. 2 coltelli profilati a disegno, viti e chiavi di servizio. Per ogni singola punta devono essere ordinati almeno 6 coltelli profilati.

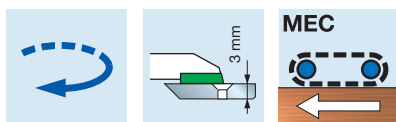
Es. di ordinazione: n. 1 **PCN110** e n. 4 **CCN110** (aventi lo stesso profilo dei 2 coltelli montati). Per ogni ordine è necessario indicare il tipo di attacco, il tipo di materiale lavorato e se il profilo dei coltelli è "a disegno" oppure "a campione legno" (includere il campione all'ordine).

NB. Il codice è puramente indicativo e vale solo come proposta d'ordine.

■ For profiling soft and hard solid woods, exotic woods, chipboard and MDF on normal and CNC overhead routing machines. Code **PCN110** or **PCN110CM** includes the router bit body, 2 profiled knives, screws and servicing keys. For each router cutter, minimum 6 profiled knives must be ordered.

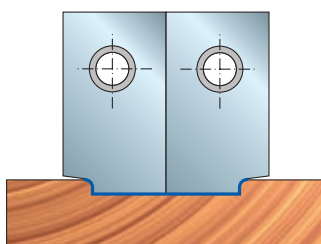
Order example: n. 1 **PCN110** and n. 4 **CCN110** (with same profile as knives fitted on router cutter). For each order, it is necessary to state the type of shank, the material to be machined and include a drawing and/or wood sample of the profile to be obtained.

Please note: the code is only guideline and is only applicable while order is being processed.

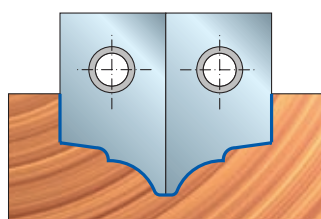


PERFORMANCE
Coltelli Riaffilabili
SYSTEM
Resharpenable Knives

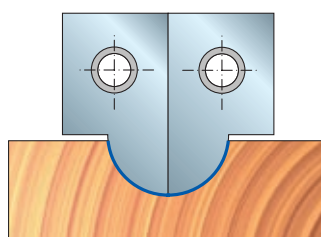
ESEMPIO / EXAMPLE 1



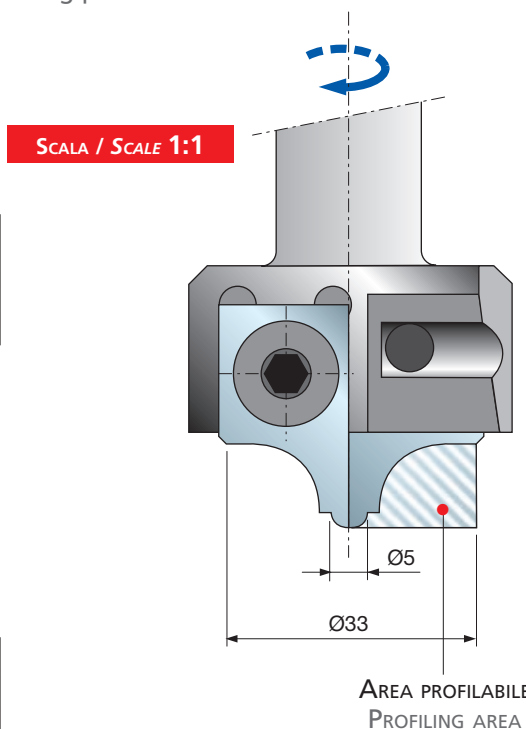
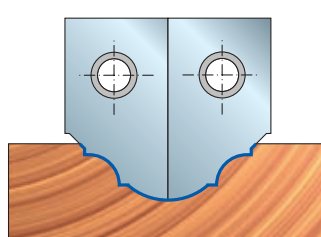
ESEMPIO / EXAMPLE 2



ESEMPIO / EXAMPLE 3



ESEMPIO / EXAMPLE 4



PCN121

PUNTA PORTACOLTELLI PROFILATI

CNC ROUTER CUTTER WITH PROFILED KNIVES

ARTICOLI SPECIALI
SPECIAL ITEMS



D	B	A	Max RPM	Codice
mm	mm	mm	U/min.	Code
65	45	20x50	18.000	PCN121
65	45	CM2	18.000	PCN121CM

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Coltello / Knife	24,5 x 34 x 2,5	CCN120
Vite / Screw	M8 x 18	2622M DF9
Vite / Screw	M4 x 10	2622M AB9
Rondella / Ring	9 x 1,5 x 4	VT18M AH9
Chiave esag. a "L" / Allen key	2,5	2619M CA9

■ Per la profilatura di legni naturali teneri e duri, legni esotici, truciolari e MDF su pantografi normali o CNC. Nel codice **PCN121** o **PCN121CM** è compreso il corpo punta, n. 2 coltelli profilati a disegno, viti e chiavi di servizio. Per ogni singola punta devono essere ordinati almeno 6 coltelli profilati.

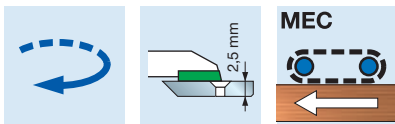
Es. di ordinazione: n. 1 **PCN121** e n. 4 **CCN120** (aventi lo stesso profilo dei 2 coltelli montati). Per ogni ordine è necessario indicare il tipo di attacco, il tipo di materiale lavorato e se il profilo dei coltelli è "a disegno" oppure "a campione legno" (includere il campione all'ordine).

NB. Il codice è puramente indicativo e vale solo come proposta d'ordine.

■ For profiling soft and hard solid woods, exotic woods, chipboard and MDF on normal and CNC overhead routing machines. Code **PCN120** or **PCN120CM** includes the router bit body, 2 profiled knives, screws and servicing keys. For each router cutter, minimum 6 profiled knives must be ordered.

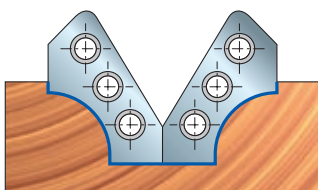
Order example: n. 1 **PCN121** and n. 4 **CCN120** (with same profile as knives fitted on router cutter). For each order, it is necessary to state the type of shank, the material to be machined and include a drawing and/or wood sample of the profile to be obtained.

Please note: the code is only guideline and is only applicable while order is being processed.

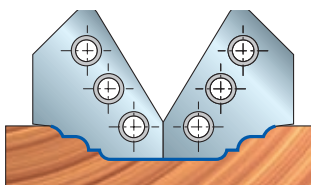


PERFORMANCE SYSTEM
Coltelli Riaffilabili
Resharpenable Knives

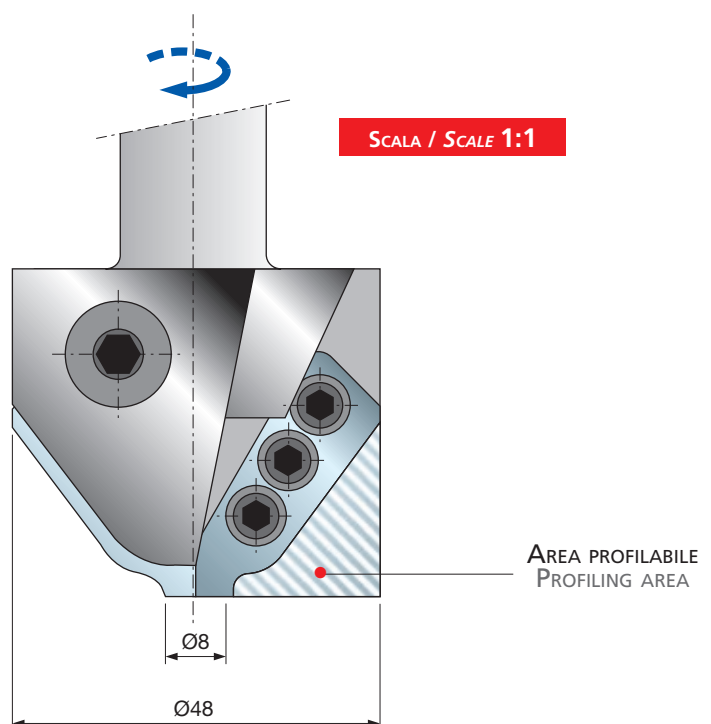
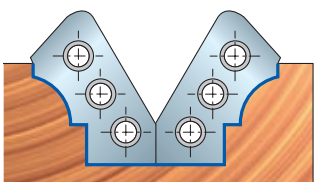
ESEMPIO / EXAMPLE 1



ESEMPIO / EXAMPLE 2



ESEMPIO / EXAMPLE 3

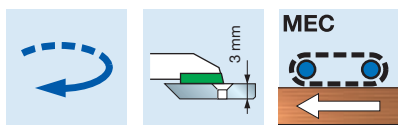


PCN130

PUNTA PORTACOLTELLI PROFILATI

CNC ROUTER CUTTER WITH PROFILED KNIVES

ARTICOLI SPECIALI
SPECIAL ITEMS



PERFORMANCE
Coltelli Riaffilabili
SYSTEM
Resharpenable Knives

D	B	A	Max RPM	Codice
mm	mm	mm	U/min.	Code
98	55	20x50	11.000	PCN130
98	55	CM2	11.000	PCN130CM

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Coltello / Knife	55 x 35 x 3	CCN130
Vite / Screw	M6 x 12	2622M CC9
Vite / Screw	M10 x 25	2622M EH9
Rondella / Ring	14 x 2 x 6	VT18M AL9
Chiave / Allen key	4 x 110	CB03M BA9
* Vite / Screw	M4 x 6	2602M CE9
* Vite / Screw	18 x 7 x M6	VT08M AG9

■ Per la profilatura di legni naturali teneri e duri, legni esotici, truciolari e MDF su pantografi normali o CNC. Nel codice **PCN130** o **PCN130CM** è compreso il corpo punta, n. 2 coltelli profilati a disegno, viti e chiavi di servizio. Per ogni singola punta devono essere ordinati almeno 6 coltelli profilati Es. di ordinazione: n. 1 **PCN130** e n. 4 **CCN130** (aventi lo stesso profilo dei 2 coltelli montati). Per ogni ordine è necessario indicare il tipo di attacco, il tipo di materiale lavorato e se il profilo dei coltelli è "a disegno" oppure "a campione legno" (includere il campione all'ordine).

NB. Il codice è puramente indicativo e vale solo come proposta d'ordine.

■ For profiling soft and hard solid woods, exotic woods, chipboard and MDF on normal and CNC overhead routing machines. Code **PCN130** or **PCN130CM** includes the router bit body, 2 profiled knives, screws and servicing keys. For each router cutter, minimum 6 profiled knives must be ordered.

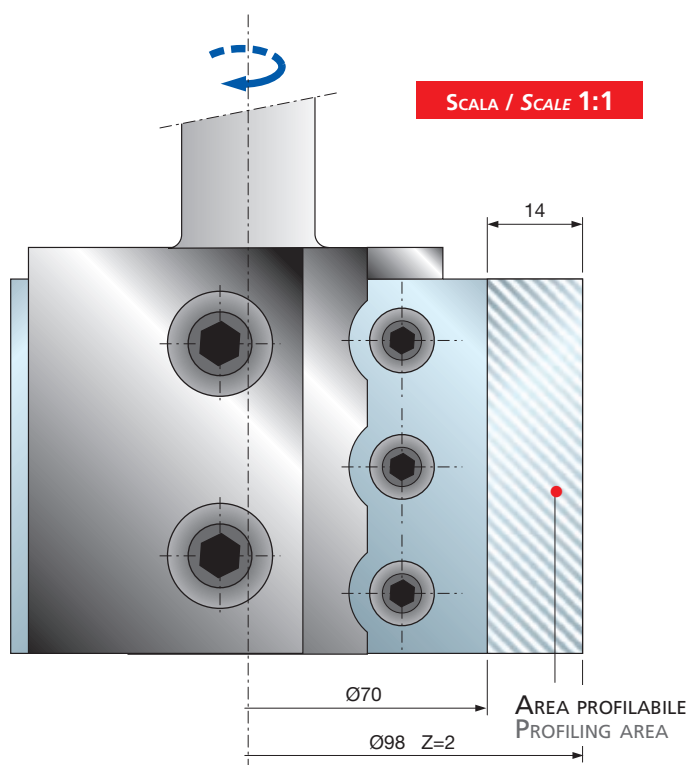
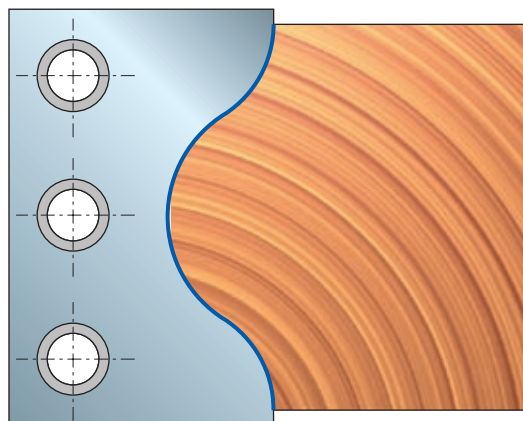
Order example: n. 1 **PCN130** and n. 4 **CCN130** (with same profile as knives fitted on router cutter). For each order, it is necessary to state the type of shank, the material to be machined and include a drawing and/or wood sample of the profile to be obtained.

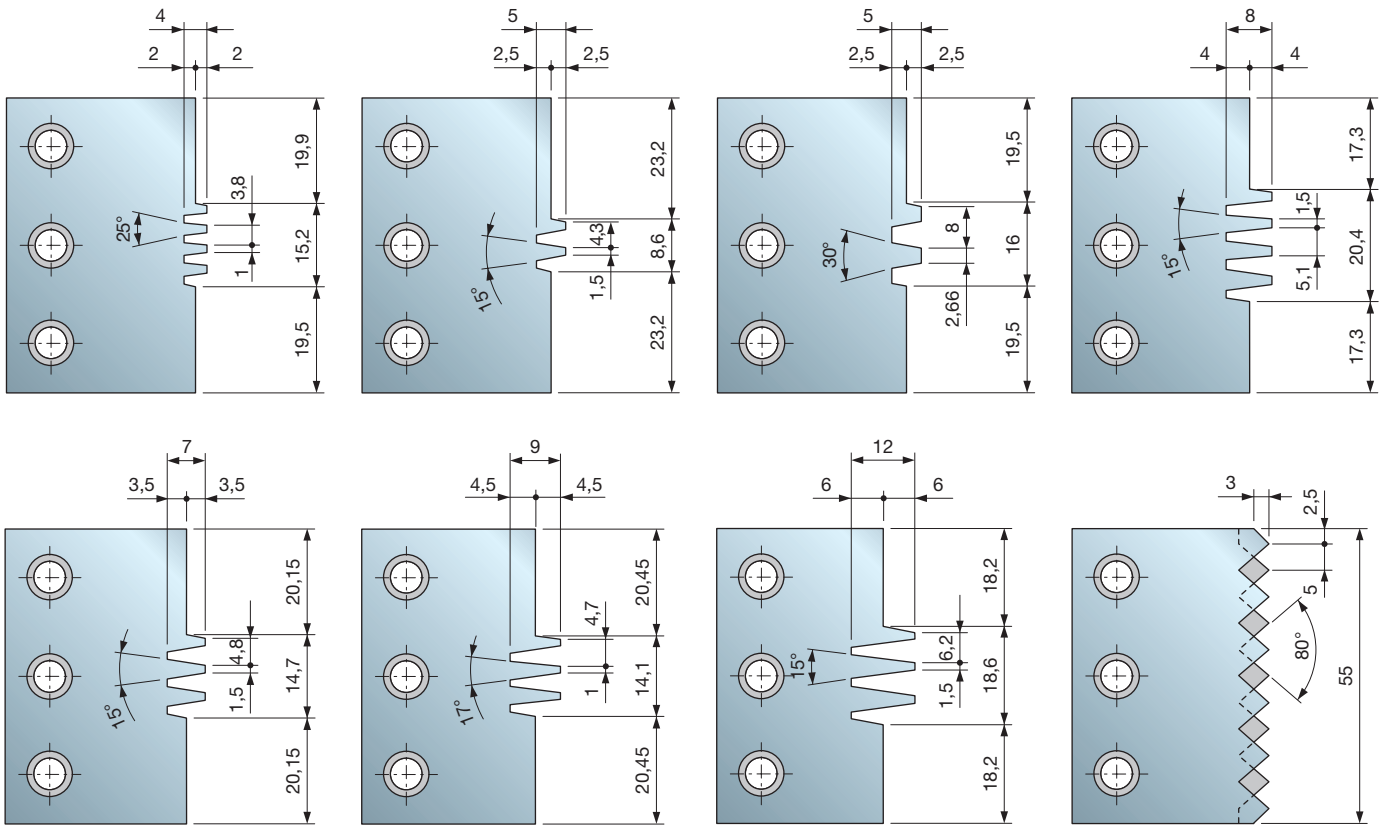
Please note: the code is only guideline and is only applicable while order is being processed.

*Parti di ricambio necessarie in caso di giunzioni.

*Spare parts needed in case of jointing profiles.

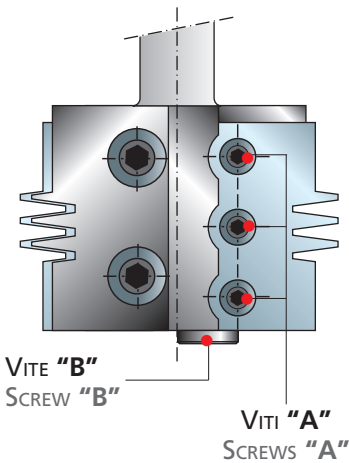
ESEMPIO / EXAMPLE





SISTEMA DI REGOLAZIONE

ADJUSTING SYSTEM



ISTRUZIONI PER LA REGOLAZIONE DEL GIOCO DI ACCOPPIAMENTO

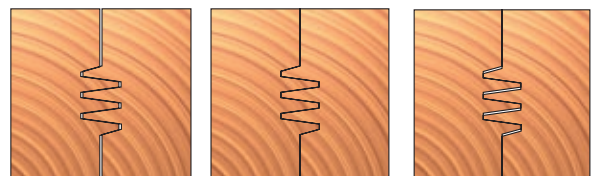
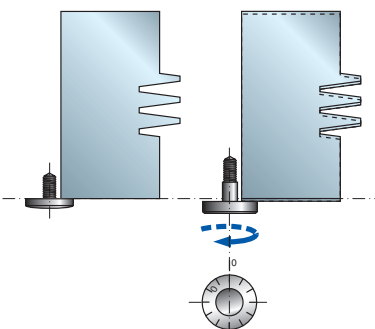
- Allentare le viti A mediante la chiave in dotazione.
- Allentare o serrare la vite B nella misura necessaria per ottenere il tipo di giunzione desiderata.
- Esercitando una leggera pressione sul coltello verso la sede e verso la vite B, serrare le viti A.

HOW TO ACHIEVE DIFFERENT TYPES OF JOINT

- Loosen screws "A" with the key supplied.
- Loosen or tighten screw "B" so to obtain the desired type of joint.
- Tighten screws "A" while pushing the knife towards screw "B" and the knife seat.

ESEMPI DI REGOLAZIONE

ADJUSTMENT EXAMPLES



Giunzione forzata
Tight joint

Giunzione normale
Regular joint

Giunzione lasca
Loose joint

PCN133






PUNTA PORTACOLTELLI PROFILATI

CNC ROUTER CUTTER WITH PROFILED KNIVES

ARTICOLI SPECIALI
SPECIAL ITEMS



D	B	A	Max RPM	Codice
mm	mm	mm	U/min.	Code
98	35	20x50	11.000	PCN133
98	35	CM2	11.000	PCN133CM

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Coltello / Knife	 35 x 35 x 3	CCN133
Vite / Screw	 M6 x 12	2622M CC9
Vite / Screw	 M10 x 25	2622M EH9
Rondella / Ring	 14 x 2 x 6	VT18M AL9
Chiave / Allen key	 4 x 110	CB03M BA9

■ Per la profilatura di legni naturali teneri e duri, legni esotici, truciolari e MDF su pantografi normali o CNC. Nel codice **PCN133** o **PCN133CM** è compreso il corpo punta, n. 2 coltelli profilati a disegno, viti e chiavi di servizio. Per ogni singola punta devono essere ordinati almeno 6 coltelli profilati.

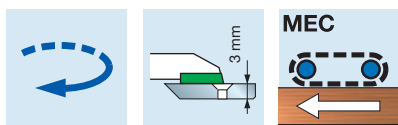
Es. di ordinazione: n. 1 **PCN133** e n. 4 **CCN133** (aventi lo stesso profilo dei 2 coltelli montati). Per ogni ordine è necessario indicare il tipo di attacco, il tipo di materiale lavorato e se il profilo dei coltelli è "a disegno" oppure "a campione legno" (includere il campione all'ordine).

NB. Il codice è puramente indicativo e vale solo come proposta d'ordine.

■ For profiling soft and hard solid woods, exotic woods, chipboard and MDF on normal and CNC overhead routing machines. Code **PCN133** or **PCN133CM** includes the router bit body, 2 profiled knives, screws and servicing keys. For each router cutter, minimum 6 profiled knives must be ordered.

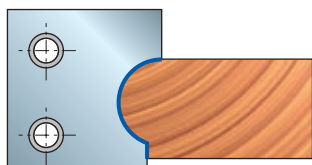
Order example: n. 1 **PCN133** and n. 4 **CCN133** (with same profile as knives fitted on router cutter). For each order, it is necessary to state the type of shank, the material to be machined and include a drawing and/or wood sample of the profile to be obtained.

Please note: the code is only guideline and is only applicable while order is being processed.

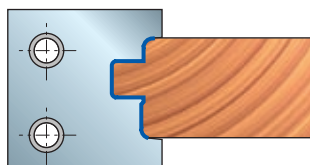


PERFORMANCE
Coltelli Riaffilabili
SYSTEM
Resharpenable Knives

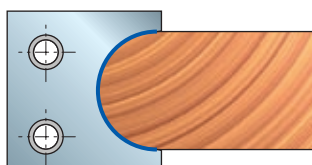
ESEMPIO / EXAMPLE 1



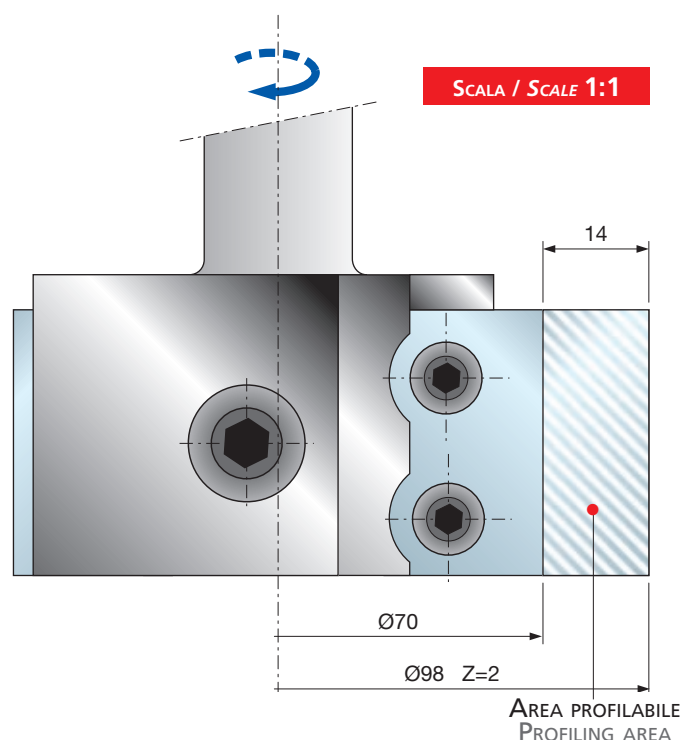
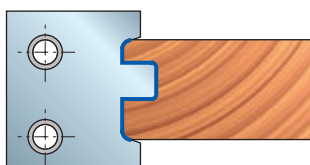
ESEMPIO / EXAMPLE 2



ESEMPIO / EXAMPLE 3



ESEMPIO / EXAMPLE 4



PCN140

PUNTA PORTACOLTELLI PROFILATI

CNC ROUTER CUTTER WITH PROFILED KNIVES

ARTICOLI SPECIALI
SPECIAL ITEMS



D	B	A	Max RPM	Codice
mm	mm	mm	U/min.	Code
90	58	20x50	12.000	PCN140
90	58	CM2	12.000	PCN140CM

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Coltello / Knife	48 x 53 x 3	CCN140
Vite / Screw	M6 x 12	2622M CC9
Vite / Screw	M10 x 25	2622M EH9
Rondella / Ring	14 x 2 x 6	VT18M AL9
Chiave / Allen key	4 x 110	CB03M BA9

■ Per la profilatura di legni naturali teneri e duri, legni esotici, truciolari e MDF su pantografi normali o CNC. Nel codice **PCN140** o **PCN140CM** è compreso il corpo punta, n. 2 coltelli profilati a disegno, viti e chiavi di servizio. Per ogni singola punta devono essere ordinati almeno 6 coltelli profilati.

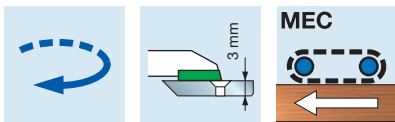
Es. di ordinazione: n. 1 **PCN140** e n. 4 **CCN140** (aventi lo stesso profilo dei 2 coltelli montati). Per ogni ordine è necessario indicare il tipo di attacco, il tipo di materiale lavorato e se il profilo dei coltelli è "a disegno" oppure "a campione legno" (includere il campione all'ordine).

NB. Il codice è puramente indicativo e vale solo come proposta d'ordine.

■ For profiling soft and hard solid woods, exotic woods, chipboard and MDF on normal and CNC overhead routing machines. Code **PCN140** or **PCN140CM** includes the router bit body, 2 profiled knives, screws and servicing keys. For each router cutter, minimum 6 profiled knives must be ordered.

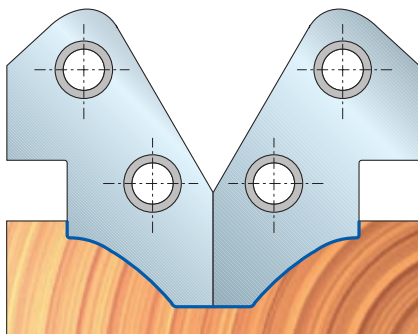
Order example: n. 1 **PCN140** and n. 4 **CCN140** (with same profile as knives fitted on router cutter). For each order, it is necessary to state the type of shank, the material to be machined and include a drawing and/or wood sample of the profile to be obtained.

Please note: the code is only guideline and is only applicable while order is being processed.

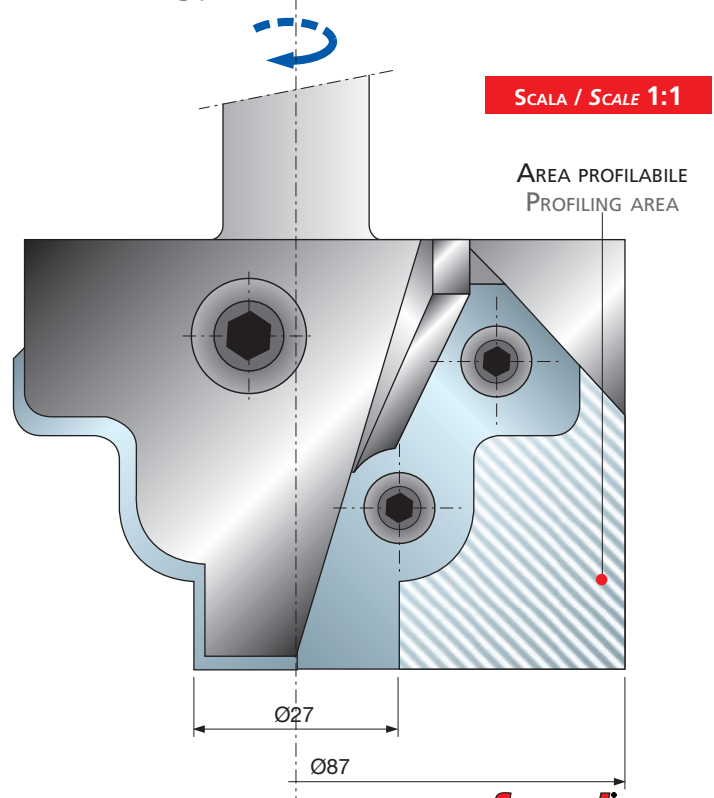
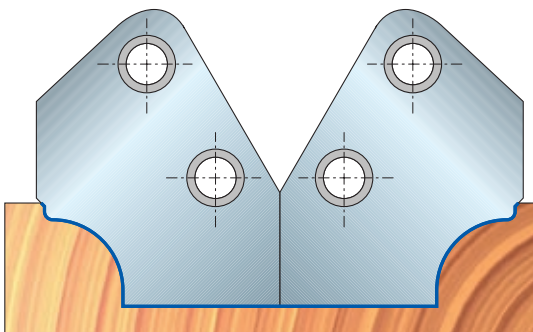


PERFORMANCE
Coltelli Riaffilabili
SYSTEM
Resharpenable Knives

ESEMPIO / EXAMPLE 1



ESEMPIO / EXAMPLE 2



freud

PCN150

PUNTA PORTACOLTELLI PROFILATI

CNC ROUTER CUTTER WITH PROFILED KNIVES

ARTICOLI SPECIALI
SPECIAL ITEMS



D	B	A	Max RPM	Codice
mm	mm	mm	U/min.	Code
90	59	20x50	12.000	PCN150
90	59	CM2	12.000	PCN150CM

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Coltello / Knife	47 x 53 x 3	CCN150
Vite / Screw	M6 x 12	2622M CC9
Vite / Screw	M10 x 25	2622M EH9
Rondella / Ring	14 x 2 x 6	VT18M AL9
Chiave / Allen key	4 x 110	CB03M BA9

■ Per la profilatura di legni naturali teneri e duri, legni esotici, truciolari e MDF su pantografi normali o CNC. Nel codice **PCN150** o **PCN150CM** è compreso il corpo punta, n. 2 coltelli profilati a disegno, viti e chiavi di servizio. Per ogni singola punta devono essere ordinati almeno 6 coltelli profilati.

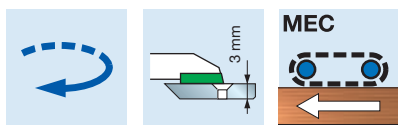
Es. di ordinazione: n. 1 **PCN150** e n. 4 **CCN150** (aventi lo stesso profilo dei 2 coltelli montati). Per ogni ordine è necessario indicare il tipo di attacco, il tipo di materiale lavorato e se il profilo dei coltelli è "a disegno" oppure "a campione legno" (includere il campione all'ordine).

NB. Il codice è puramente indicativo e vale solo come proposta d'ordine.

■ For profiling soft and hard solid woods, exotic woods, chipboard and MDF on normal and CNC overhead routing machines. Code **PCN150** or **PCN150CM** includes the router bit body, 2 profiled knives, screws and servicing keys. For each router cutter, minimum 6 profiled knives must be ordered.

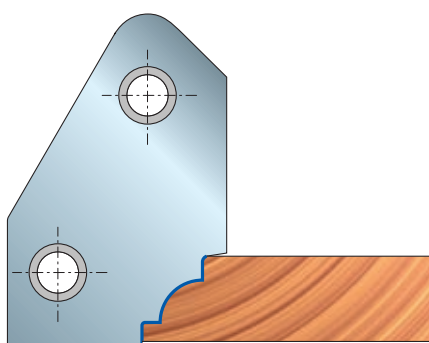
Order example: n. 1 **PCN150** and n. 4 **CCN150** (with same profile as knives fitted on router cutter). For each order, it is necessary to state the type of shank, the material to be machined and include a drawing and/or wood sample of the profile to be obtained.

Please note: the code is only guideline and is only applicable while order is being processed.

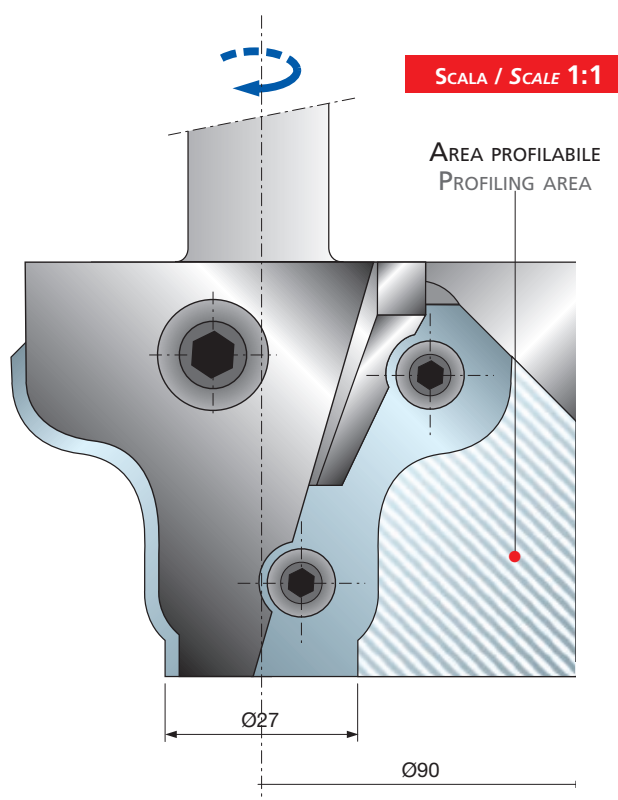
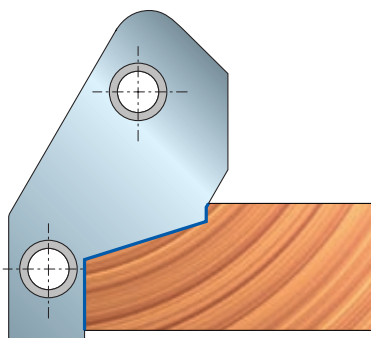


PERFORMANCE
Coltelli Riaffilabili
SYSTEM
Resharpenable Knives

ESEMPIO / EXAMPLE 1



ESEMPIO / EXAMPLE 2



PCN160

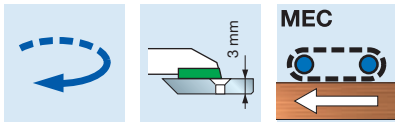
PUNTA PER SPECCHIETTI DI ANTINA CNC RAISED PANEL ROUTER CUTTER

ARTICOLI SPECIALI
SPECIAL ITEMS



D	B	A	Max RPM	Codice
mm	mm	mm	U/min.	Code
141	54	20x50	9.000	PCN160
141	54	CM2	9.000	PCN160CM

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Coltello / Knife	60 x 35 x 3	CCN160
Vite / Screw	M6 x 12	2622M CC9
Vite / Screw	M10 x 25	2622M EH9
Vite / Screw	M5 x 8	VT05M AA9
Rondella / Ring	14 x 2 x 6	VT18M AL9
Piastra di riscontro / Positioning plate	20 x 11,6 x 2,2	VT18M AS9
Chiave / Allen key	4 x 110	CB03M BA9



PERFORMANCE
Coltelli Riaffilabili
SYSTEM
Resharpenable Knives

■ Per la profilatura di legni naturali teneri e duri, legni esotici, truciolari e MDF su pantografi normali o CNC. Nel codice **PCN160** o **PCN160CM** è compreso il corpo punta, n. 2 coltelli profilati a disegno, viti e chiavi di servizio. Per ogni singola punta devono essere ordinati almeno 6 coltelli profilati. Es. di ordinazione: n. 1 **PCN160** e n. 4 **CCN160** (aventi lo stesso profilo dei 2 coltelli montati). Per ogni ordine è necessario indicare il tipo di attacco, il tipo di materiale lavorato e se il profilo dei coltelli è "a disegno" oppure "a campione legno" (includere il campione all'ordine).

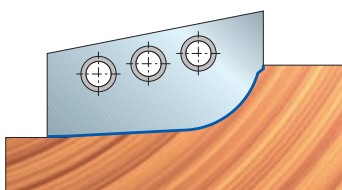
NB. Il codice è puramente indicativo e vale solo come proposta d'ordine.

■ For profiling soft and hard solid woods, exotic woods, chipboard and MDF on normal and CNC overhead routing machines. Code **PCN160** or **PCN160CM** includes the router bit body, 2 profiled knives, screws and servicing keys. For each router cutter, minimum 6 profiled knives must be ordered.

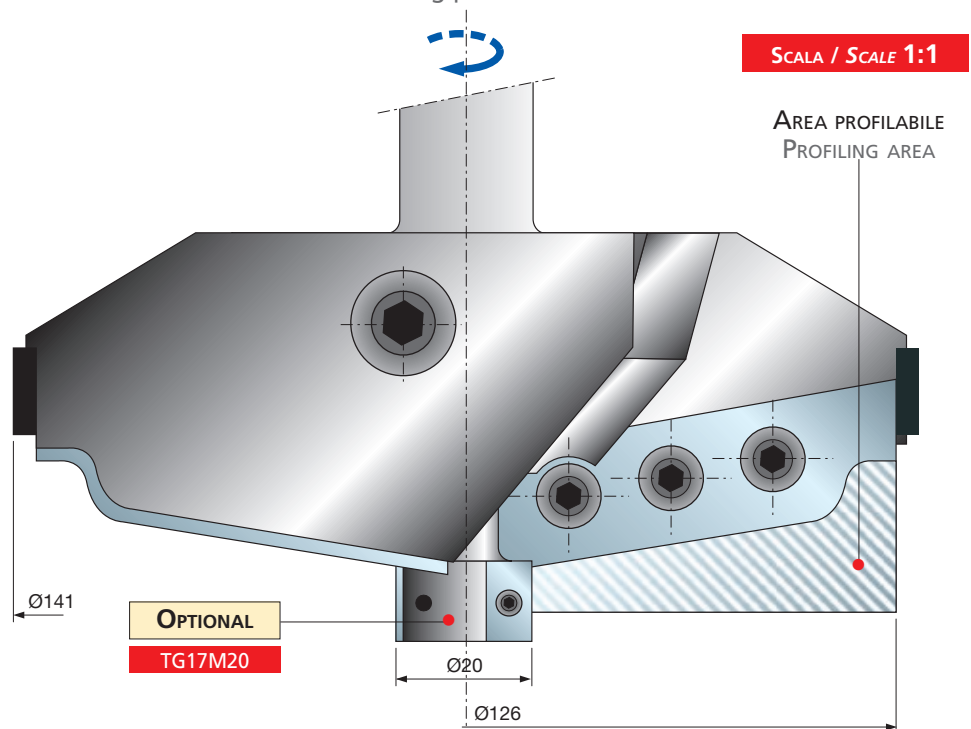
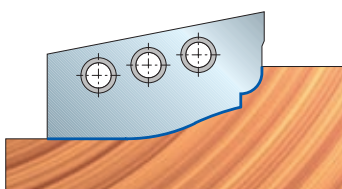
Order example: n. 1 **PCN160** and n. 4 **CCN160** (with same profile as knives fitted on router cutter). For each order, it is necessary to state the type of shank, the material to be machined and include a drawing and/or wood sample of the profile to be obtained.

Please note: the code is only guideline and is only applicable while order is being processed.

ESEMPIO / EXAMPLE 1



ESEMPIO / EXAMPLE 2



freud

PCN160R

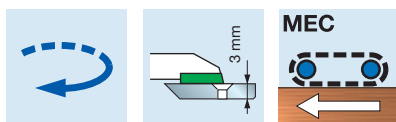
PUNTA PER SPECCHIETTI DI ANTINA CNC RAISED PANEL ROUTER CUTTER

ARTICOLI SPECIALI
SPECIAL ITEMS



D	B	A	Max RPM	Codice
mm	mm	mm	U/min.	Code
120	54	20x50	9.000	PCN160R
120	54	CM2	9.000	PCN160CMR

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Coltello / Knife	50 x 35 x 3	CCN160R
Vite / Screw	M6 x 12	2622M CC9
Vite / Screw	M10 x 25	2622M EH9
Vite / Screw	M5 x 8	VT05M AA9
Rondella / Ring	14 x 2 x 6	VT18M AL9
Piastra di riscontro / Positioning plate	20 x 11,6 x 2,2	VT18M AS9
Chiave / Allen key	4 x 110	CB03M BA9



PERFORMANCE
Coltelli Riaffilabili
SYSTEM
Resharpenable Knives

■ Per la profilatura di legni naturali teneri e duri, legni esotici, truciolari e MDF su pantografi normali o CNC. Nel codice **PCN160R** o **PCN160CMR** è compreso il corpo punta, n. 2 coltelli profilati a disegno, viti e chiavi di servizio. Per ogni singola punta devono essere ordinati almeno 6 coltelli profilati.

Es. di ordinazione: n. 1 **PCN160R** e n. 4 **CCN160R** (aventi lo stesso profilo dei 2 coltelli montati). Per ogni ordine è necessario indicare il tipo di attacco, il tipo di materiale lavorato e se il profilo dei coltelli è "a disegno" oppure "a campione legno" (includere il campione all'ordine).

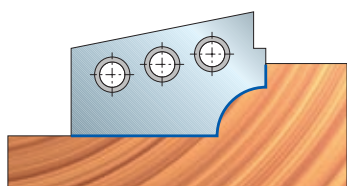
NB. Il codice è puramente indicativo e vale solo come proposta d'ordine.

■ For profiling soft and hard solid woods, exotic woods, chipboard and MDF on normal and CNC overhead routing machines. Code **PCN160R** or **PCN160CMR** includes the router bit body, 2 profiled knives, screws and servicing keys. For each router cutter, minimum 6 profiled knives must be ordered.

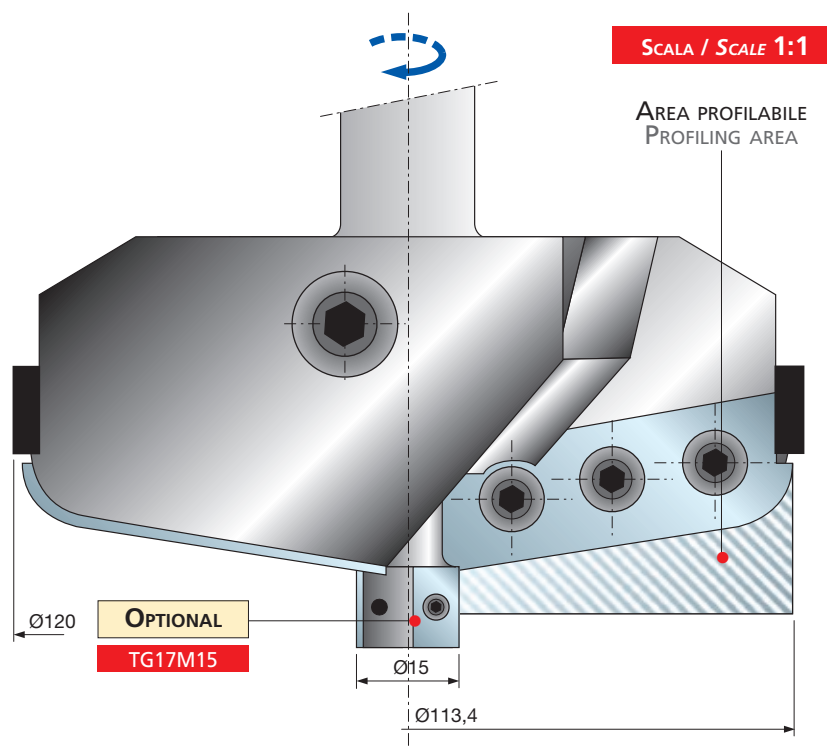
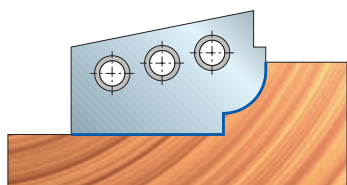
Order example: n. 1 **PCN160R** and n. 4 **CCN160R** (with same profile as knives fitted on router cutter). For each order, it is necessary to state the type of shank, the material to be machined and include a drawing and/or wood sample of the profile to be obtained.

Please note: the code is only guideline and is only applicable while order is being processed.

ESEMPIO / EXAMPLE 1



ESEMPIO / EXAMPLE 2



PCN300

PUNTA PER PROFILO TELAIO ANTINA

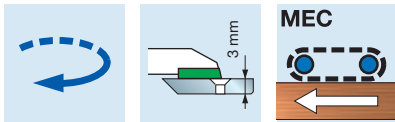
CNC CABINET DOOR ROUTER CUTTER - PROFILE

ARTICOLI SPECIALI
SPECIAL ITEMS



D	B	A	Max RPM	Codice
mm	mm	mm	U/min.	Code
102	35	20x50	10.500	PCN300

Parti di ricambio	Dimensioni	Codice
Spare parts	Dimensions	Code
Coltello / Knife	35 x 30 x 3	CK02 DC3
Cuneo / Wedge	31 x 17 x 8	CN11M B310
Vite / Screw	M10 x 18	VT03M CC9
Vite / Screw	M6 x 14,5	VT16M AA9
Vite / Screw	16 x 7 x M5	VT08M AE9
Insero per incastri / Grooving insert	34 x 4	SR06MD AG3
Insero per incastri / Grooving insert	34 x 7	SR06MD AH3
Chiave / Allen key	5 x 110	CB03M EA9



PERFORMANCE
Coltelli Riaffilabili
SYSTEM
Resharpenable Knives

■ Per la profilatura di legni naturali teneri e duri, legni esotici, truciolari e MDF su pantografi normali o CNC. Nel codice PCN300 è compresa la testa portacoltelli, n. 2 coltelli profilati a disegno, l'attacco cilindrico (20x50 mm), viti e chiavi di servizio. Per ogni singola punta devono essere ordinati almeno 6 coltelli profilati.

Es. di ordinazione: n. 1 PCN300 e n. 4 CK02 DC3 (aventi lo stesso profilo dei 2 coltelli montati).

Per ogni ordine è necessario indicare se il profilo dei coltelli è a disegno" oppure "a campione legno" (includere il campione all'ordine). Per eseguire il canale da 5 mm è necessario sostituire gli inserti SR06MD-AG3 (Sp. 4 mm) con gli inserti SR06MD AI3 (Sp. 5 mm) ordinabili separatamente.

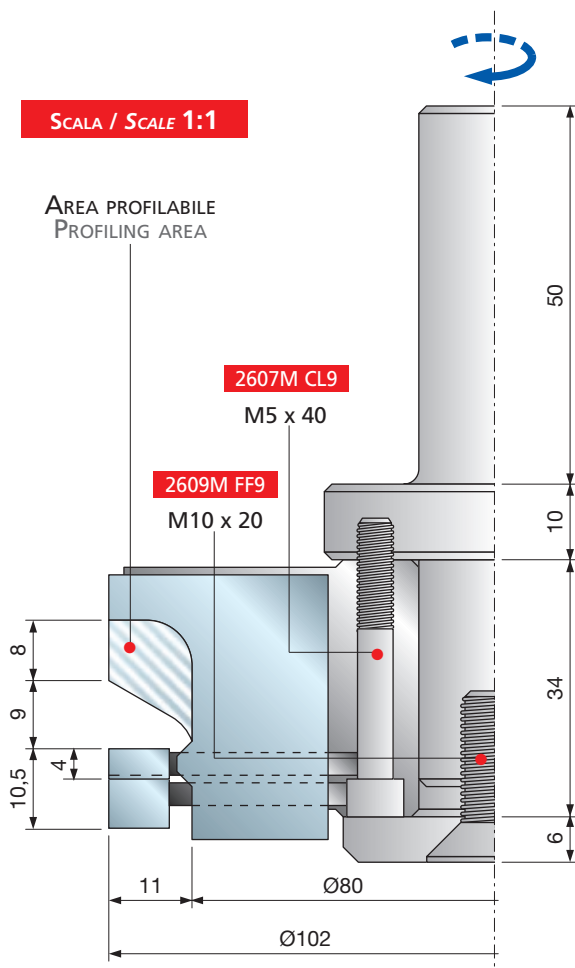
NB. Il codice è puramente indicativo e vale solo come proposta d'ordine.

■ For profiling soft and hard solid woods, exotic woods, chipboard and MDF on normal and CNC overhead routing machines. Code PCN300 includes the router bit body, 2 profiled knives, the chuck, screws and servicing keys. For each router cutter, minimum 6 profiled knives must be ordered.

Order example: n. 1 PCN300 and n. 4 CK02 DC3 (with same profile as knives fitted on router cutter).

For each order, it is necessary to include a drawing and/or wood sample of the profile to be obtained. To obtain a 5 mm groove, it is necessary to replace the SR06MD AG3 (4 mm thick) inserts with the SR06MD AI3 (5 mm thick) inserts which must be ordered separately.

Please note: the code is only guideline and is only applicable while order is being processed.



ANTINE PANTOGRAFATE

CABINET DOORS

ESEMPI DI LAVORAZIONE

WORKING EXAMPLE

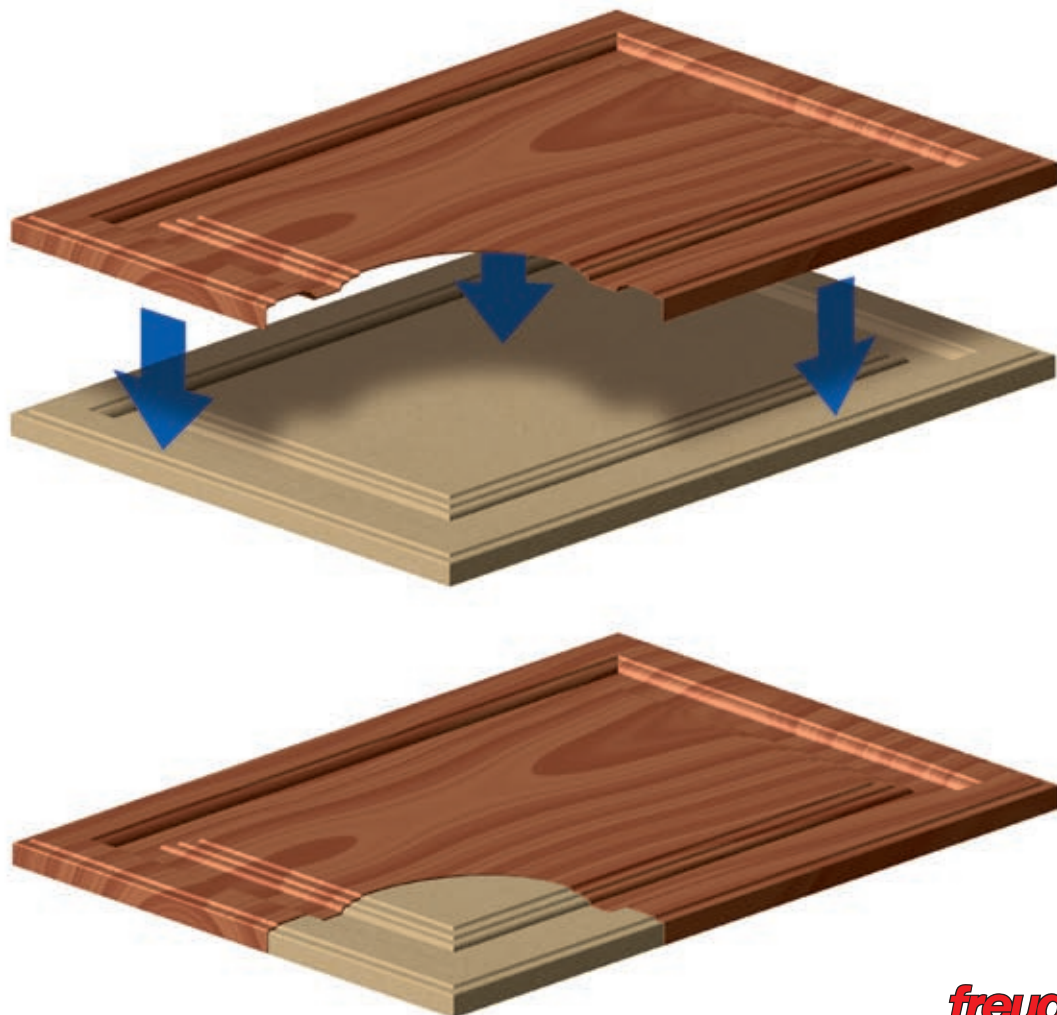


- La tecnologia impiegata nella produzione delle antine ha portato all'utilizzo di materiali diversi dal legno massiccio, che permettono la lavorazione di un unico pezzo, evitando di dover eseguire il telaio con profilo e controprofilo. Si utilizza soprattutto MDF, materiale che offre una superficie particolarmente liscia e si presta molto bene alla lavorazione ad una certa profondità. Questi pannelli possono poi essere ricoperti con vari materiali: PVC, carte, laminati sottili ed anche impiallacciatura.

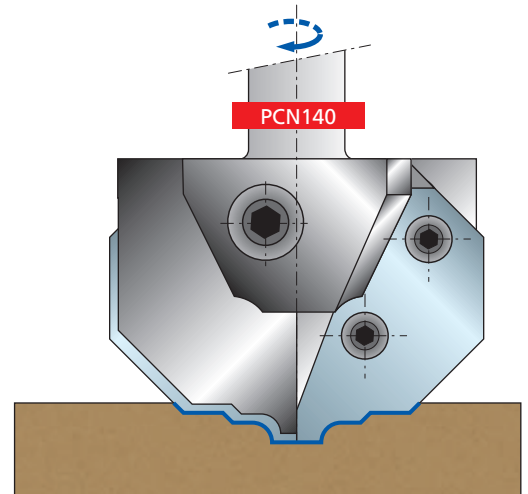
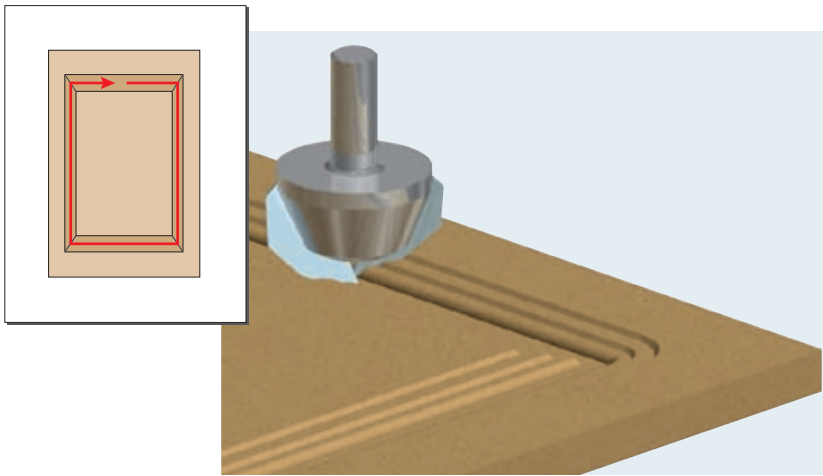
La gamma di punte CNC **Freud** semplifica molto questo tipo di produzione, permettendo la realizzazione di antine di ogni genere e dimensione utilizzando solo pochi utensili molto versatili. Inoltre, la **Freud** è in grado di produrre gli utensili necessari in base alle esigenze del Cliente, a prezzi veramente competitivi.

- Improved technology in cabinet doors production has allowed the use of other materials besides solid wood and has consequently eliminated the need to achieve the profile and scribe of the frame. It is now possible to manufacture these pieces using a coated panel, and the most popular material is MDF, which can be easily routed at a considerable depth while always offering a smooth finish. The coating can be made using various materials such as PVC, paper, thin laminates and even veneered parts.

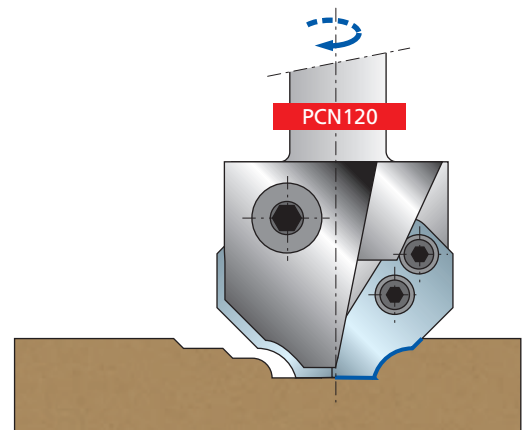
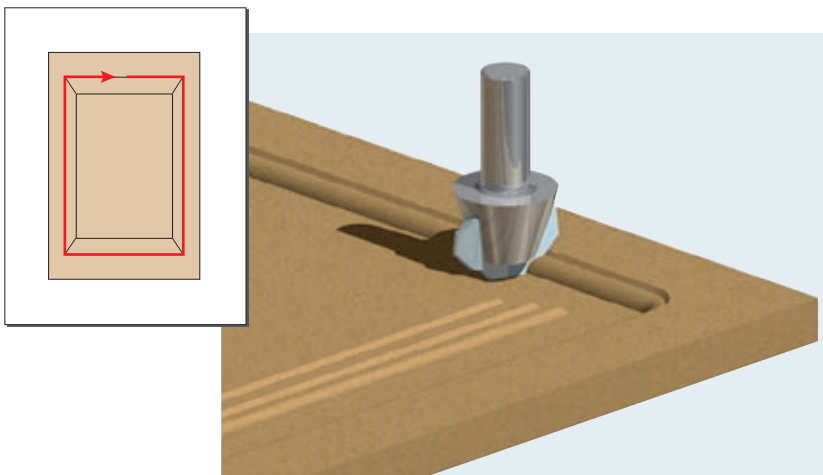
Now, thanks to the **Freud**, CNC router bits all this has become much easier: with a few versatile tools it is now feasible to produce all types of cabinet doors and of any given sizes: according to the customer's requirements **Freud** can, in fact, manufacture the necessary tools at really competitive prices.



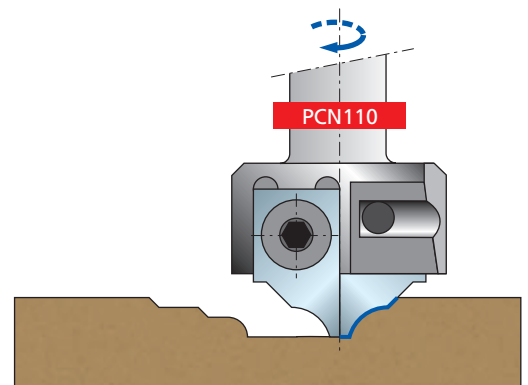
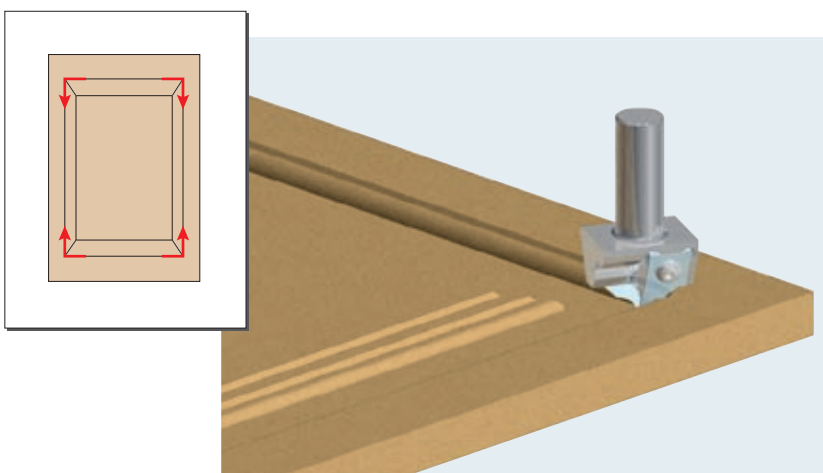
1 PRIMA LAVORAZIONE
FIRST STEP



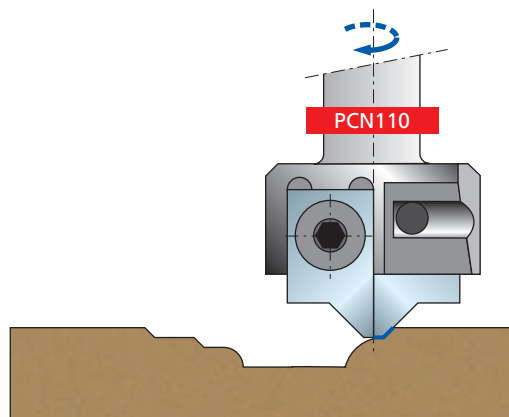
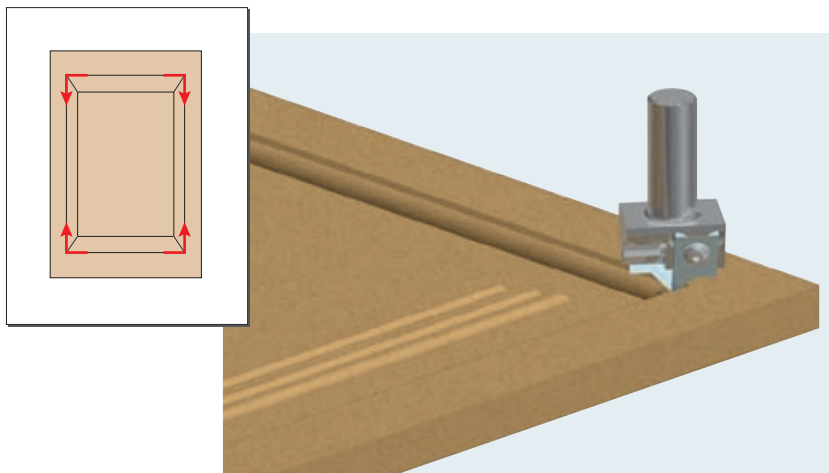
2 SECONDA LAVORAZIONE
SECOND STEP



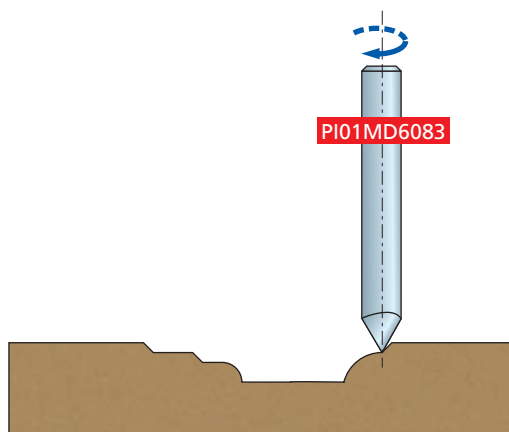
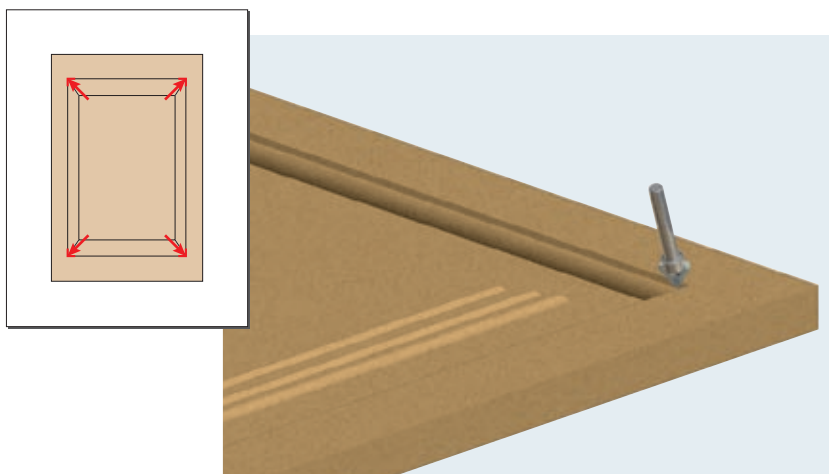
3 TERZA LAVORAZIONE
THIRD STEP



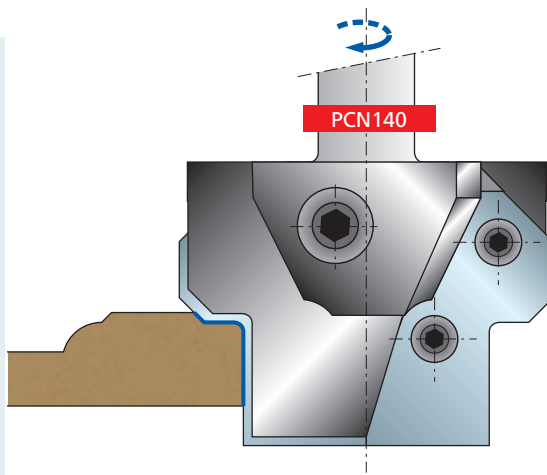
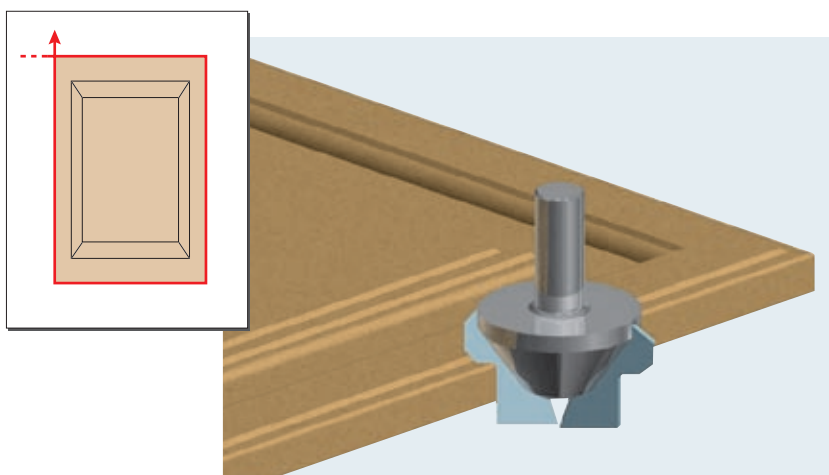
4 QUARTA LAVORAZIONE
FOURTH STEP



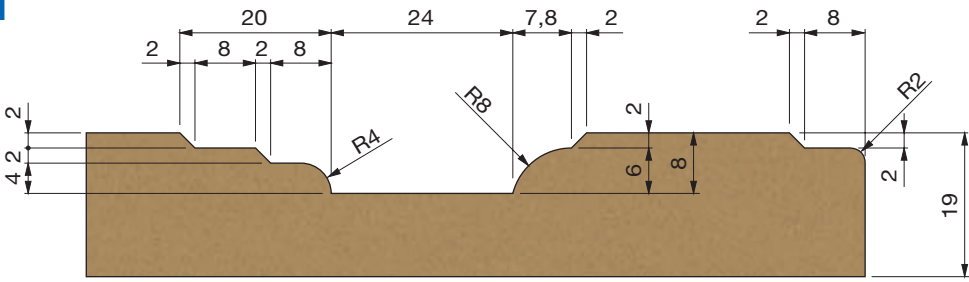
5 QUINTA LAVORAZIONE
FIFTH STEP



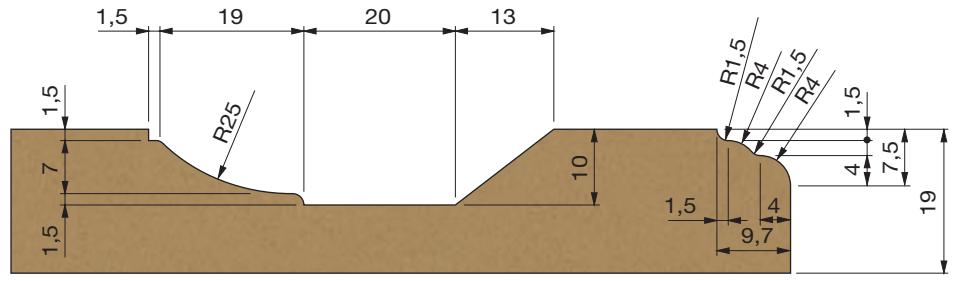
6 SESTA LAVORAZIONE
SIXTH STEP



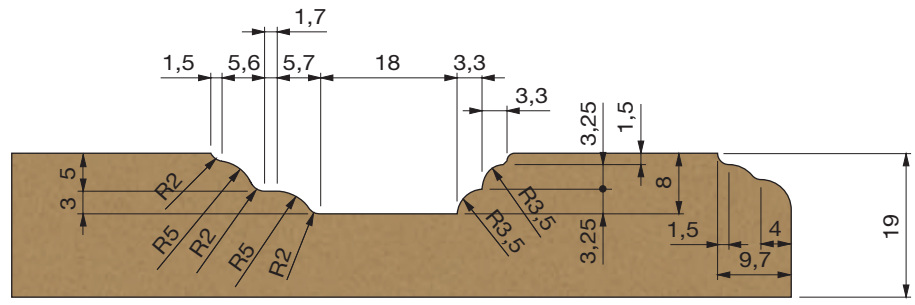
PROFILO / PROFILE 1



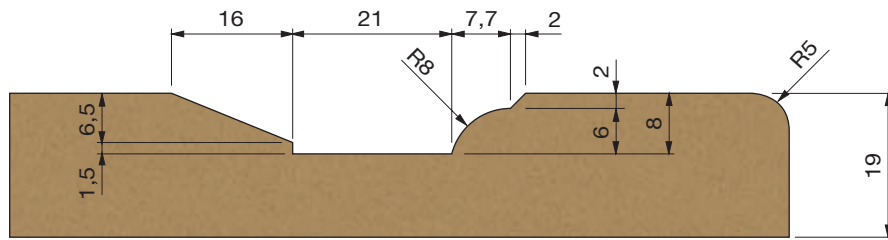
PROFILO / PROFILE 2



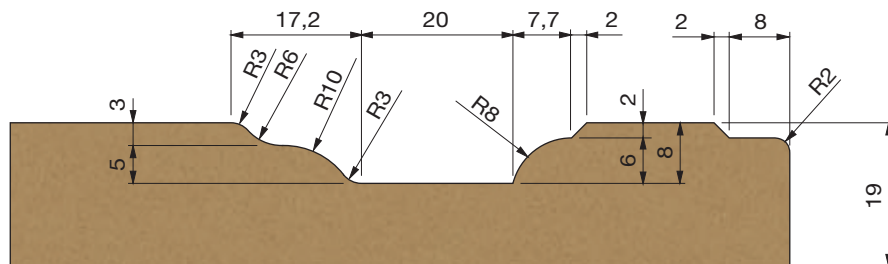
PROFILO / PROFILE 3



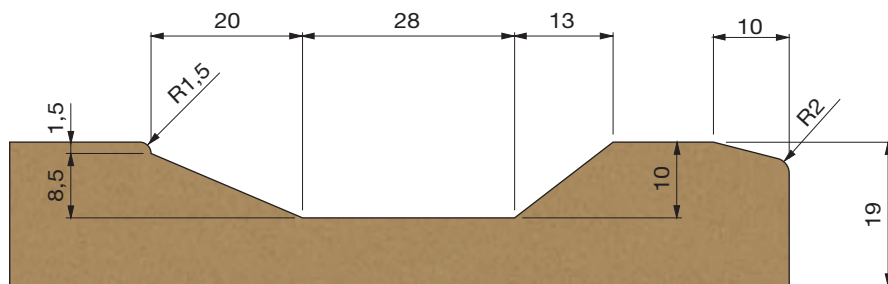
PROFILO / PROFILE 4



PROFILO / PROFILE 5



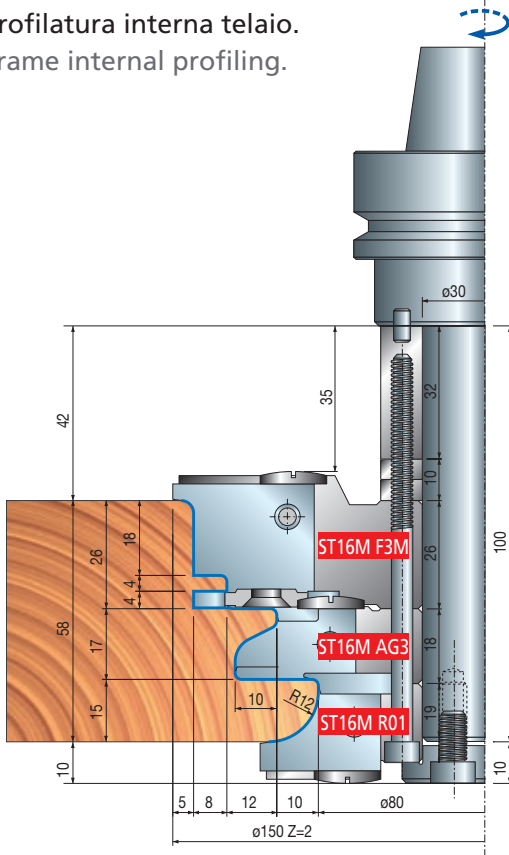
PROFILO / PROFILE 6



SERRAMENTO "ST16MGR108"

WINDOW TOOLING SYSTEM "ST16MGR108"

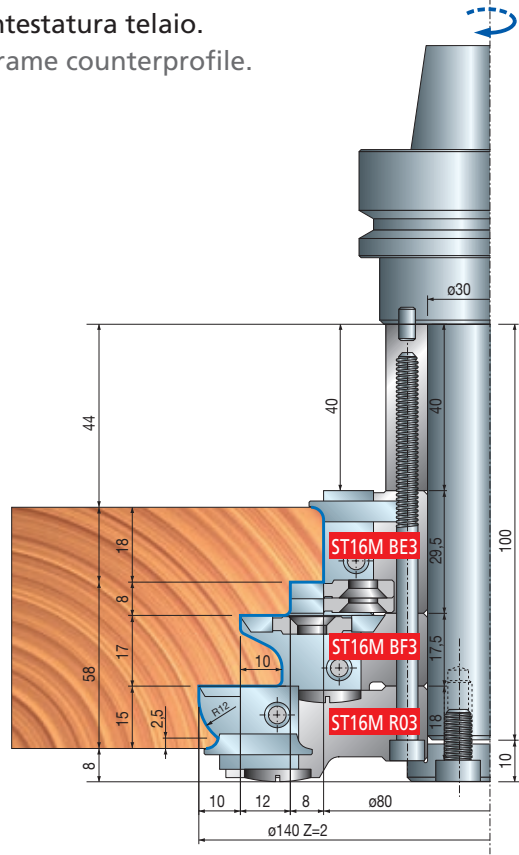
- Profilatura interna telaio.
- Frame internal profiling.



SERRAMENTO "ST16MGR206"

WINDOW TOOLING SYSTEM "ST16MGR206"

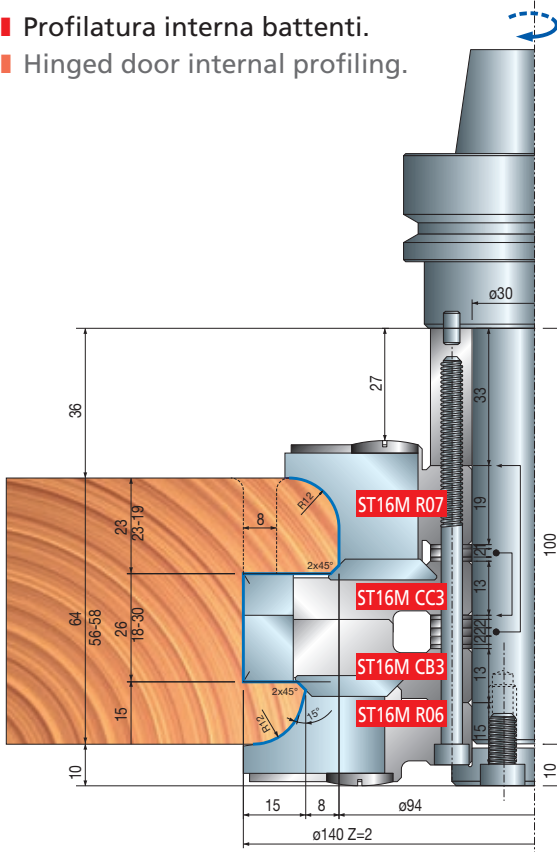
- Intestatura telaio.
- Frame counterprofile.



SERRAMENTO "ST16MGR310"

WINDOW TOOLING SYSTEM "ST16MGR310"

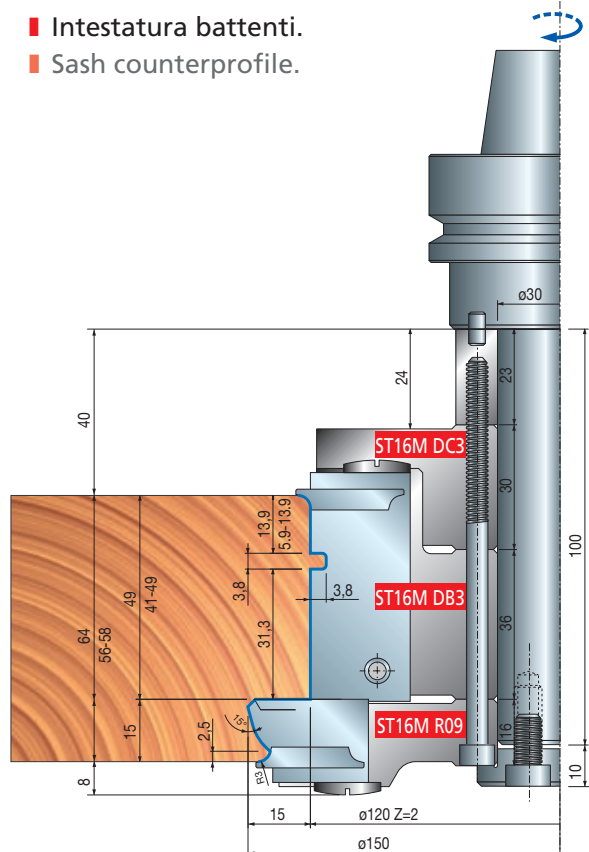
- Profilatura interna battenti.
- Hinged door internal profiling.



SERRAMENTO "ST16MGR410"

WINDOW TOOLING SYSTEM "ST16MGR410"

- Intestatura battenti.
- Sash counterprofile.



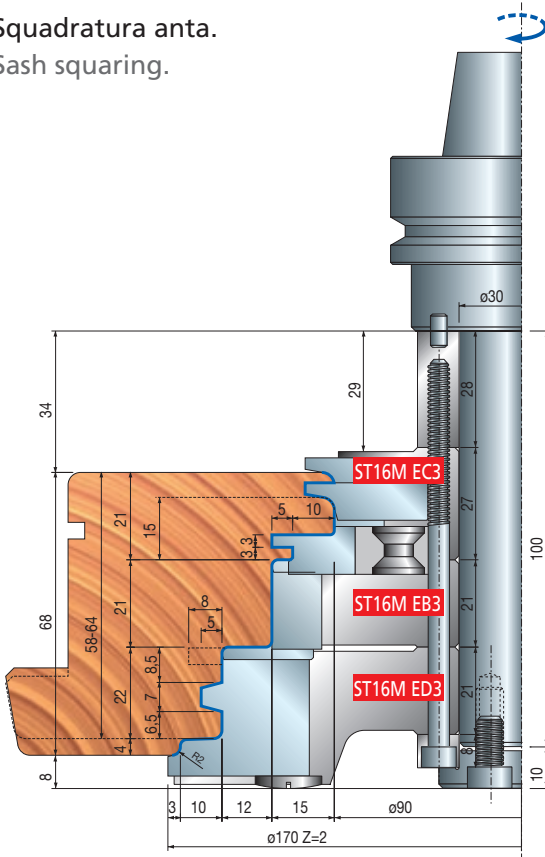
ESEMPI DI GRUPPI PER SERRAMENTI PER PANTOGRAFO

EXAMPLE OF WINDOW TOOLING SETS FOR CNC OVERHEAD ROUTER MACHINES

SERRAMENTO "ST16MGR501"

WINDOW TOOLING SYSTEM "ST16MGR501"

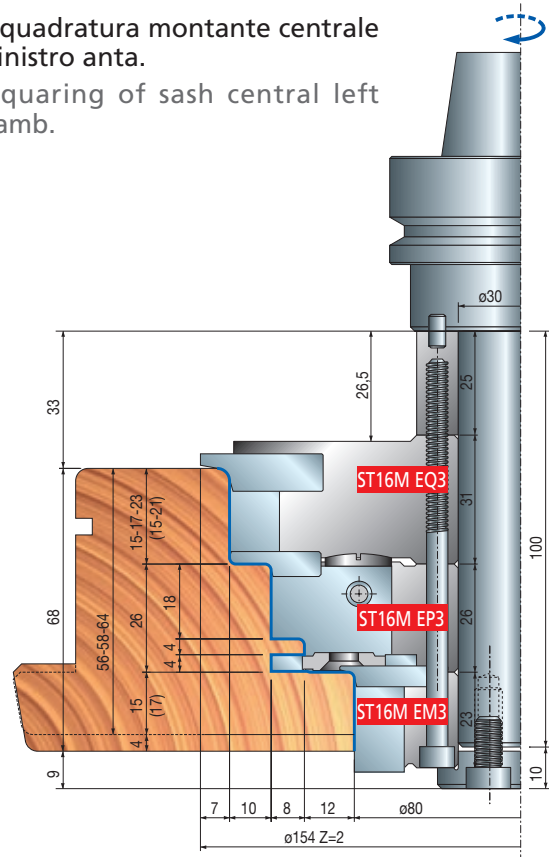
- Squadratura anta.
- Sash squaring.



SERRAMENTO "ST16MGR514"

WINDOW TOOLING SYSTEM "ST16MGR514"

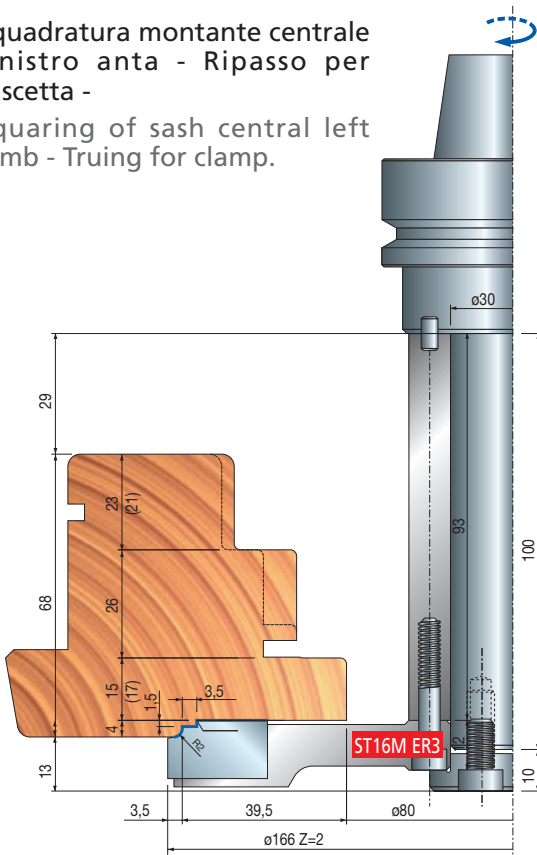
- Squadratura montante centrale sinistro anta.
- Squaring of sash central left jamb.



SERRAMENTO "ST16MGR515"

WINDOW TOOLING SYSTEM "ST16MGR515"

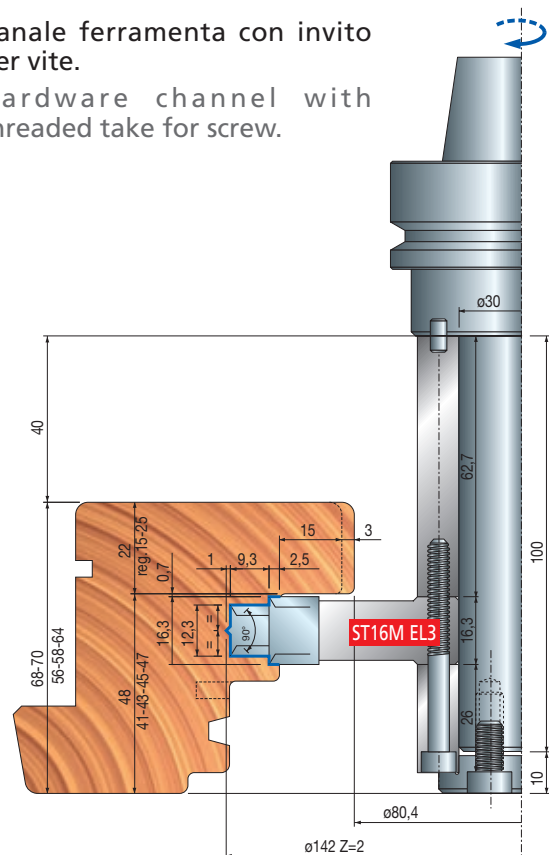
- Squadratura montante centrale sinistro anta - Ripasso per fascetta -
- Squaring of sash central left jamb - Truing for clamp.



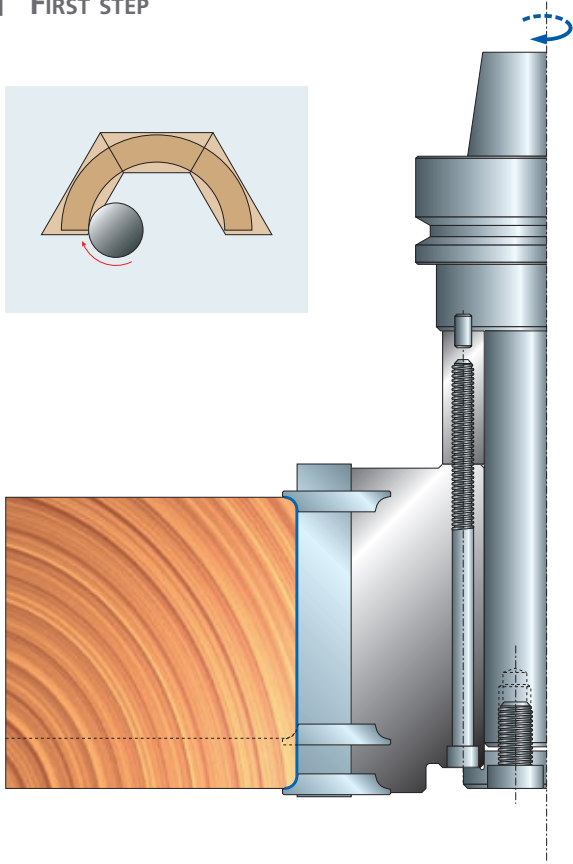
SERRAMENTO "ST16MGR512"

WINDOW TOOLING SYSTEM "ST16MGR512"

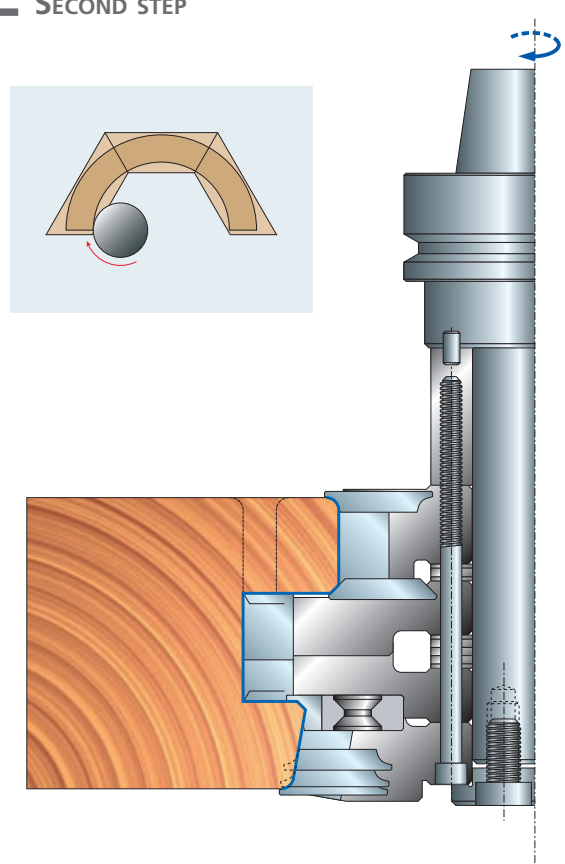
- Canale ferramenta con invito per vite.
- Hardware channel with threaded take for screw.



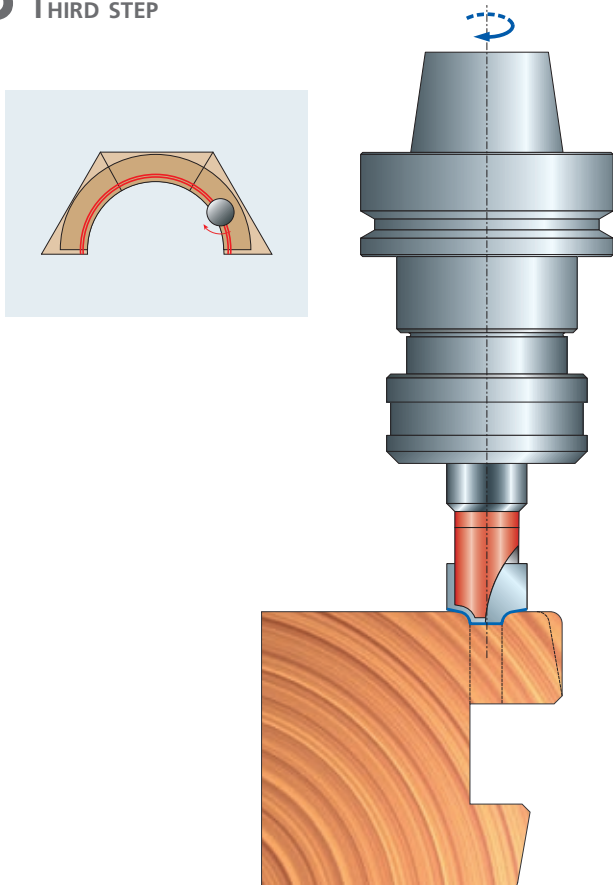
1 PRIMA LAVORAZIONE
FIRST STEP



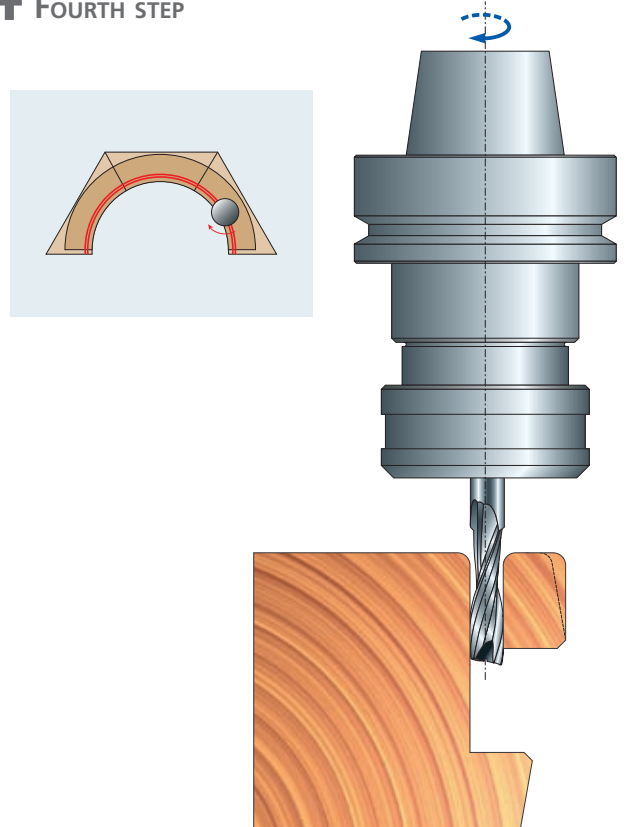
2 SECONDA LAVORAZIONE
SECOND STEP



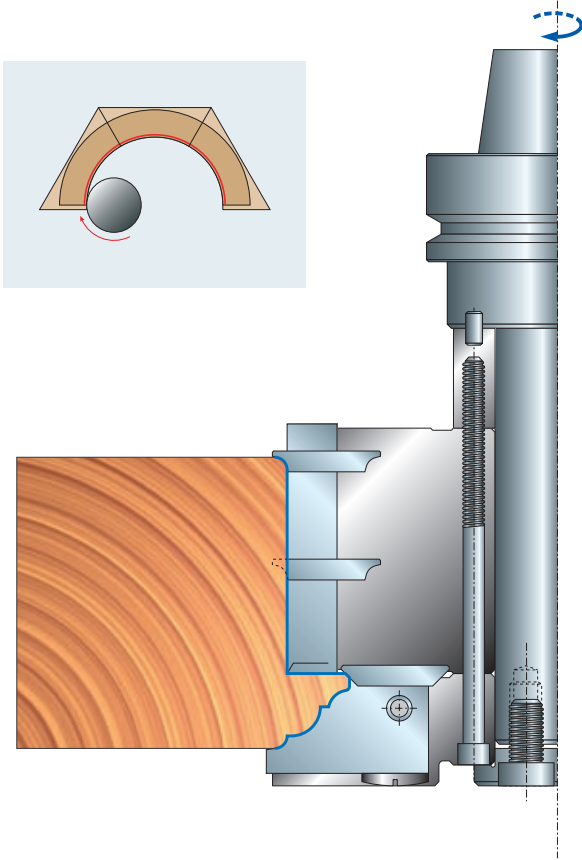
3 TERZA LAVORAZIONE
THIRD STEP



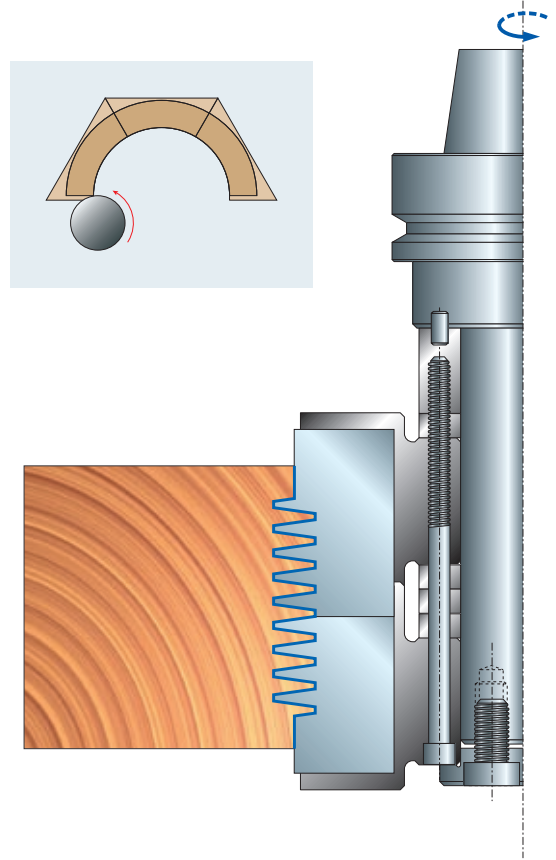
4 QUARTA LAVORAZIONE
FOURTH STEP



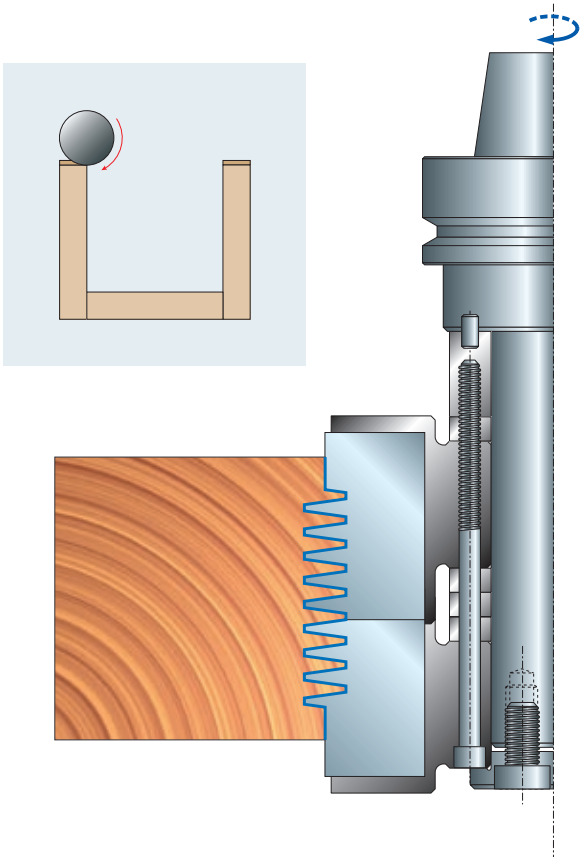
5 QUINTA LAVORAZIONE
FIFTH STEP



6 SESTA LAVORAZIONE
SIXTH STEP



7 SETTIMA LAVORAZIONE
SEVENTH STEP



8 OTTAVA LAVORAZIONE
EIGHTH STEP

