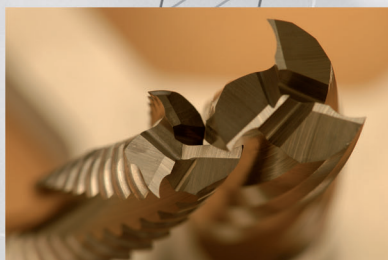


# freud®



## PUNTE E UTENSILI CNC ROUTER BITS AND CNC TOOLS



### ISO 9001:2008

LA FREUD ATTUA UN SISTEMA DI GESTIONE DELLA QUALITÀ CERTIFICATO ISO 9001:2008  
PER LA COMMERCIALIZZAZIONE DI LAME CIRCOLARI CON RIPORTI IN HW E DI COMPONENTI IN  
METALLO DURO SINTERIZZATO.

FREUD APPLIES A QUALITY SYSTEM ISO 9001:2008 FOR TRADING OF HW  
TIPPED SAWBLADES AND HARD METAL COMPONENTS.



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# LEGENDA DEI SIMBOLI E DELLE ABBREVIAZIONI

## EXPLANATION OF SYMBOLS AND ABBREVIATIONS

|               |                                                      |                |                                                  |           |                                                                 |
|---------------|------------------------------------------------------|----------------|--------------------------------------------------|-----------|-----------------------------------------------------------------|
| <b>CODICE</b> | CODICE ARTICOLO<br>ITEM CODE                         | <b>D</b>       | DIAMETRO<br>DIAMETER                             | <b>H</b>  | ALTEZZA TOTALE<br>OVERALL HEIGHT                                |
| <b>A</b>      | ATTACCO<br>SHANK                                     | <b>d</b>       | FORO<br>BORE                                     | <b>h1</b> | ALTEZZA SCARICO TAGLIENTE<br>CUTTING EDGE'S DISCHARGING AREA H. |
| <b>Z</b>      | NUMERO DI DENTI<br>NUMBER OF TEETH                   | <b>D1</b>      | DIAMETRO ESTERNO ATTACCO<br>SHANK OUTER DIAMETER | <b>h</b>  | ALTEZZA UTILE<br>CUTTING HEIGHT                                 |
| <b>B</b>      | SPESORE DI TAGLIO<br>CUTTING THICKNESS               | <b>S</b>       | SPESORE DI TAGLIO<br>THICKNESS OF CUT            |           |                                                                 |
| <b>B/b</b>    | Sp. TAGLIO / Sp. CORPO<br>CUTTING THICK./BODY THICK. | <b>Max RPM</b> | NUM.MAX DI GIRI<br>MAXIMUM SPEED                 |           |                                                                 |
| <b>b</b>      | SPESORE CORPO<br>BODY THICKNESS                      | <b>R</b>       | NUMERO DI RASANTI<br>NUMBER OF SPURS             |           |                                                                 |



LEGNO DURO  
HARD WOOD



LAMINATO  
LAMINATED



BILAMINATO  
BILAMINATED



ROTAZIONE  
DX E SX  
RIGHT HAND  
AND LEFT HAND



ROTAZIONE DX  
RIGHT HAND



ROTAZIONE SX  
LEFT HAND



ELICA POSITIVA  
E NEGATIVA  
UP AND DOWN SPIRAL



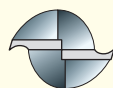
ELICA POSITIVA  
UP SPIRAL



ELICA NEGATIVA  
DOWN SPIRAL



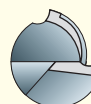
1 TAGLIENTE  
1 CUTTER



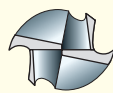
2 TAGLIENTI  
2 CUTTERS



3 TAGLIENTI  
3 CUTTERS



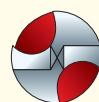
Z 1+1



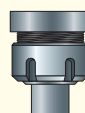
Z 2+2



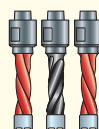
PUNTA CON 1  
COLTELLO A GETTARE  
ROUTER BIT WITH  
1 DISPOSABLE KNIFE



VISTA IN PIANTA DI  
PUNTA PER FORATRICI  
PLAN VIEW OF ROUTER  
BIT FOR MULTIBORING  
MACHINES



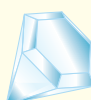
PUNTE  
PER PANTOGRAFI  
ROUTER CUTTERS  
FOR OVERHEAD  
ROUTER MACHINES



PUNTE PER  
MACCHINE FORATRICI  
ROUTER BITS  
FOR MULTIBORING  
MACHINES



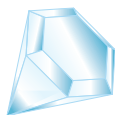
UTENSILE CON  
COLTELLI  
A GETTARE  
TOOL WITH  
DISPOSABLE KNIVES



DIAMANTE  
POLICRISTALLINO  
PCD



METALLO  
DURO FREUD  
FREUD HARD  
METAL



## 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

$((78,8 \times 1) \times 12,85 \text{€}) + 65,00 \text{€} = 1.077,58 \text{€}$

Fresa a Z=2 DIA H6

$((78,8 \times 2) \times 12,85 \text{€}) + 65,00 \text{€} = 2.090,16 \text{€}$

Fresa a Z=3 DIA H6

$((78,8 \times 3) \times 12,85 \text{€}) + 65,00 \text{€} = 3.102,74 \text{€}$

**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

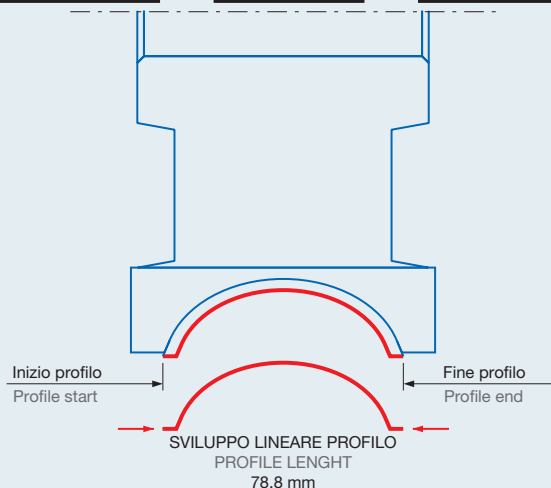
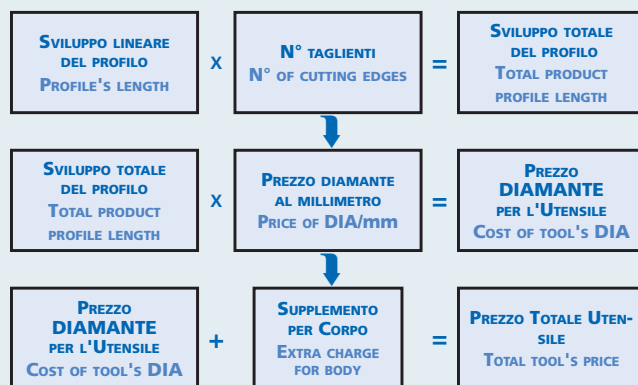
$((78,8 \times 1) \times 12,85 \text{€}) + 65,00 \text{€} = 1.077,58 \text{€}$

Brazed cutter with Z=2 H6 DIA

$((78,8 \times 2) \times 12,85 \text{€}) + 65,00 \text{€} = 2.090,16 \text{€}$

Brazed cutter with Z=3 H6 DIA

$((78,8 \times 3) \times 12,85 \text{€}) + 65,00 \text{€} = 3.102,74 \text{€}$



**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.





■ 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 cuspe 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 difficoltosi, 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 diritti.

■ 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.

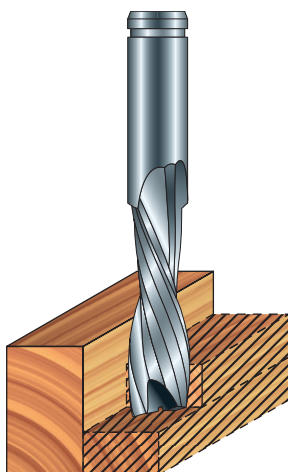
■ Thin grinding wheels (around 3 mm thick) are used to carry out smaller grooves, where sharpening is more difficult, such as what is technically called the top front clearance.

■ 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.

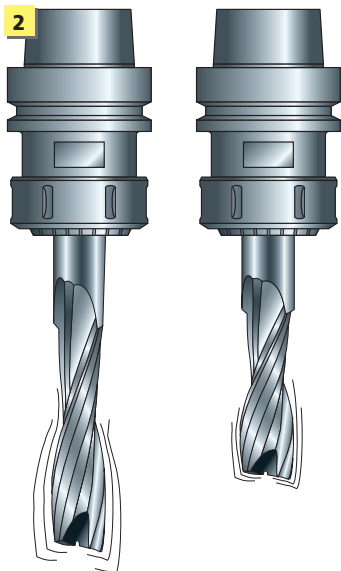
■ The serrated parts of the router bit with chip breaker (see articles PI04MD, PI04ME and PI06MD) are produced using grinding wheels with an abrasive grooved surface, with variable pitch (the pitch is based on the diameter of the router bit).

■ 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.

1



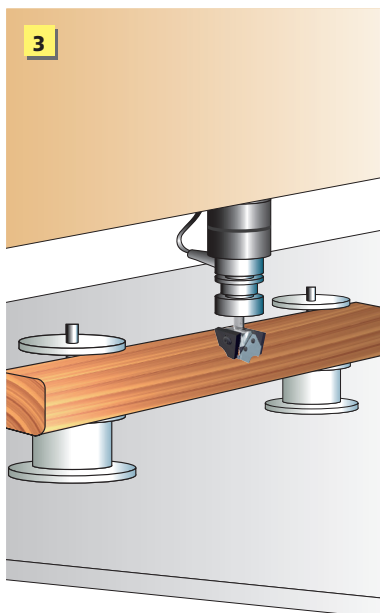
2



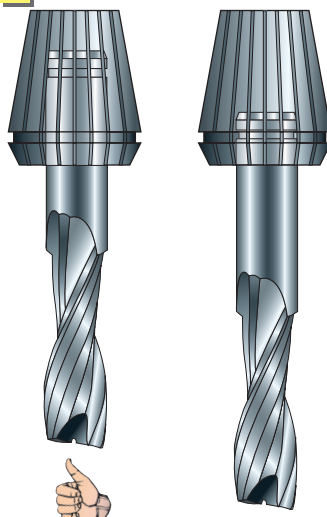
Per ridurre le vibrazioni dell'utensile, che potrebbero compromettere la finitura, nonché causare danni al pezzo da lavorare ed all'utensile stesso, è necessario rispettare le seguenti condizioni:

- 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 (Fig. 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.

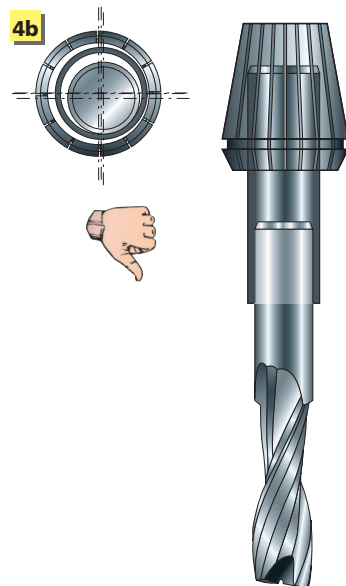
3



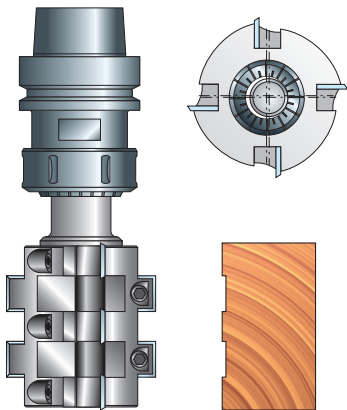
4a



4b



5



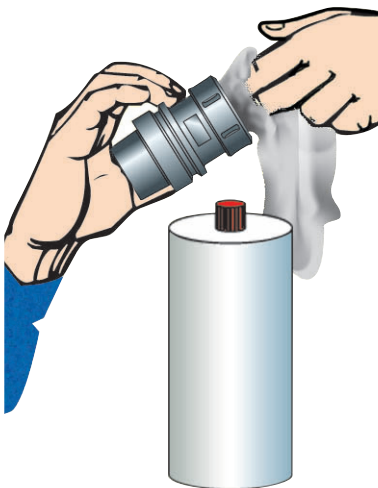
To reduce vibrations from the router bit, which can compromise the finish and cause damage to both the tool and the workpiece, it is necessary to respect the following conditions:

- 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).

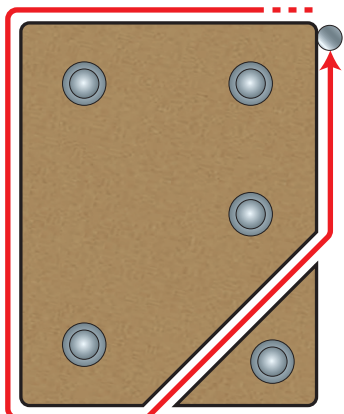
For the same reason the use of extensions are generally avoided (Fig. 4b).

- 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.

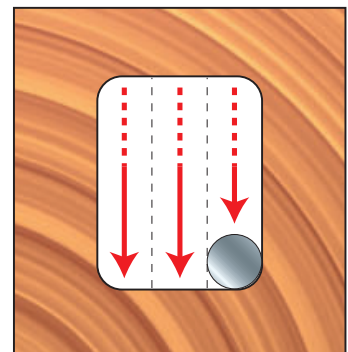
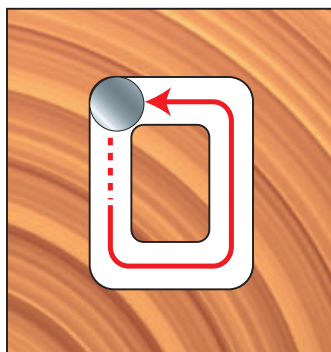
6



7



8

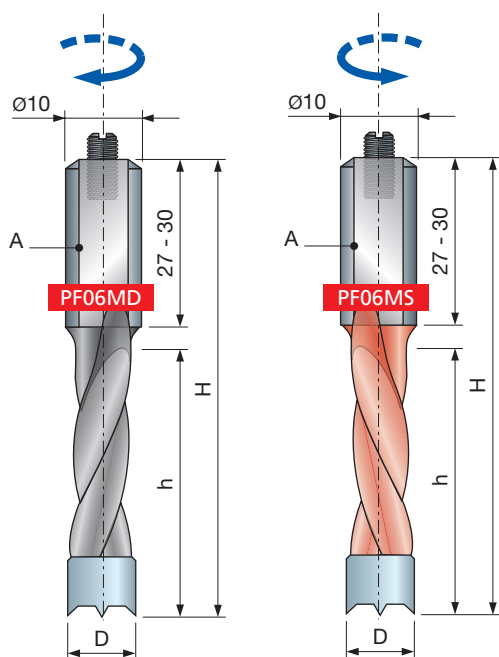




# PF06MD PF06MS

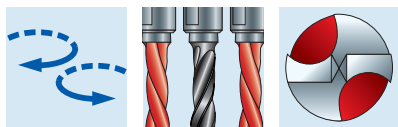
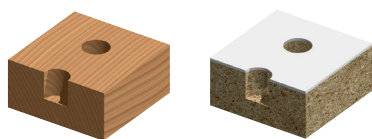
## PUNTE PER FORATRICI MULTIPLE - FORI CIECHI

## 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.



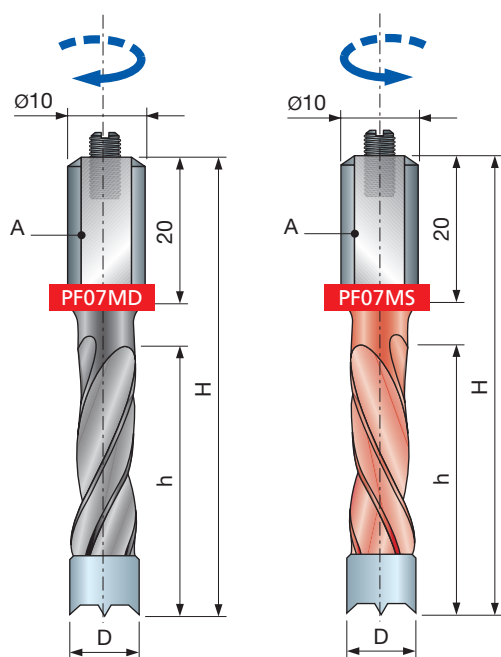
| D  | h  | H    | A     | Z | Codice     |
|----|----|------|-------|---|------------|
| mm | mm | mm   | mm    |   | Code       |
| 4  | 27 | 57,5 | 10x27 |   | PF06MD ZA3 |
| 5  | 27 | 57,5 | 10x27 |   | PF06MD AA3 |
| 5  | 35 | 70   | 10x30 |   | PF06MD AC3 |
| 5  | 42 | 77   | 10x30 |   | PF06MD 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

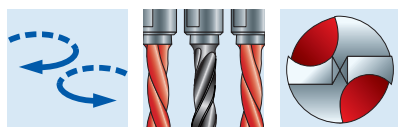
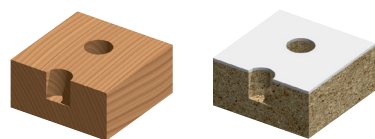


■ Per macchine foratrici con l'uso di mandrini o adattatori. Adatta all'esecuzione di fori ciechi su legno massiccio, derivati e laminati. Cuspide in HW, punta di centraggio e vite di regolazione M5x10 mm. Attacco Ø10x20 mm.

■ 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.

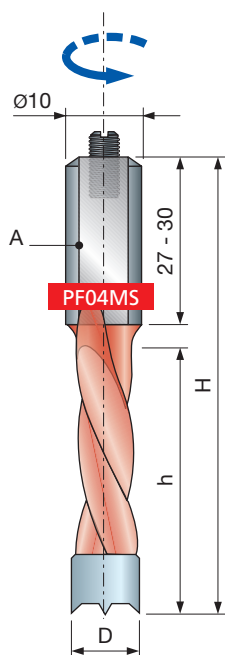
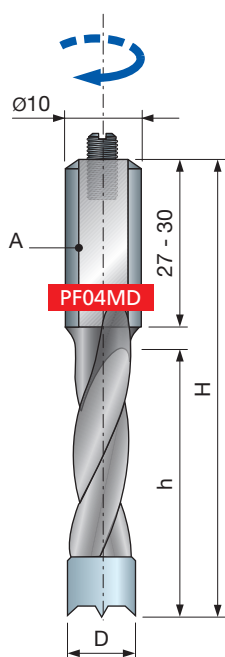
| D  | h  | H    | A     | Z | Codice<br>Code |
|----|----|------|-------|---|----------------|
| 4  | 30 | 57,5 | 10x20 |   | PF07MD ZA3     |
| 5  | 30 | 57,5 | 10x20 |   | PF07MD AA3     |
| 5  | 43 | 70   | 10x20 |   | PF07MD AC3     |
| 6  | 30 | 57,5 | 10x20 |   | PF07MD BA3     |
| 6  | 43 | 70   | 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<br>Spare parts | Dimensioni<br>Dimensions                                                                    | Codice<br>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



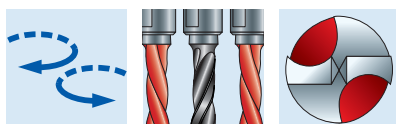
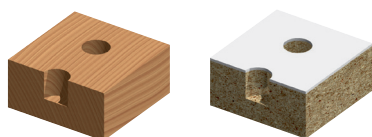
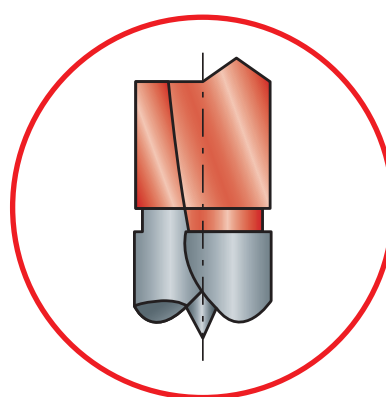
| D  | h    | H    | A     | Z | Codice     |
|----|------|------|-------|---|------------|
| mm | mm   | mm   | mm    |   | Code       |
| 5  | 30,5 | 57,5 | 10x27 |   | PF04MD AA3 |
| 5  | 40   | 70   | 10x30 |   | PF04MD AC3 |
| 6  | 30,5 | 57,5 | 10x27 |   | PF04MD BA3 |
| 6  | 40   | 70   | 10x30 |   | 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

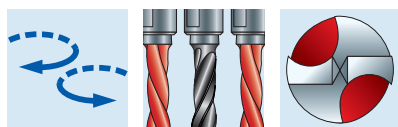
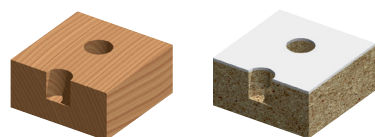
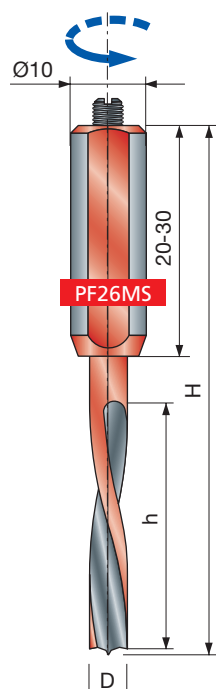
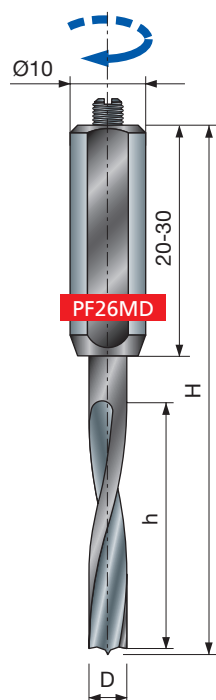
### GEOMETRY OF THE TIP





# 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.

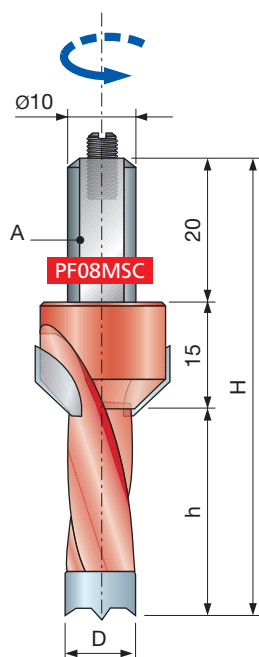
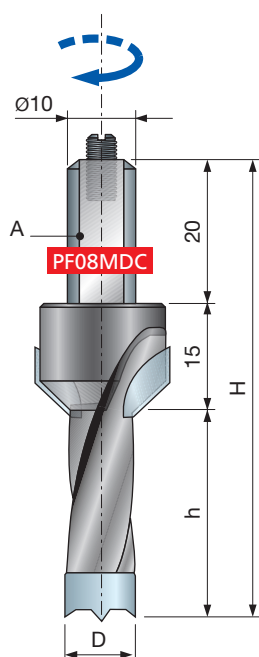
**N.B.** Per dimensioni diverse, chiedere preventivo.

■ 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

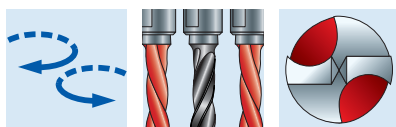
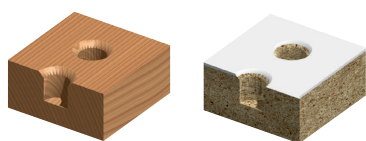
## PUNTE PER FORATRICI MULTIPLE CON SVASATORE CARBIDE BORING BITS FOR HOLES WITH COUNTERSINK



| D  | h  | H  | A     | Z | Codice<br>Code |
|----|----|----|-------|---|----------------|
| mm | mm | mm | mm    |   |                |
| 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 |   | PF08MSDCB3     |
| 10 | 20 | 55 | 10x20 |   | PF08MSDCDC3    |

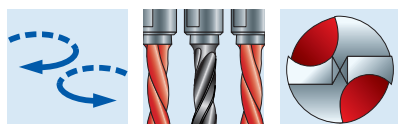
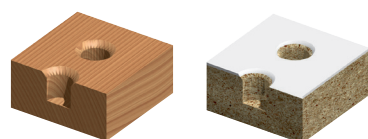
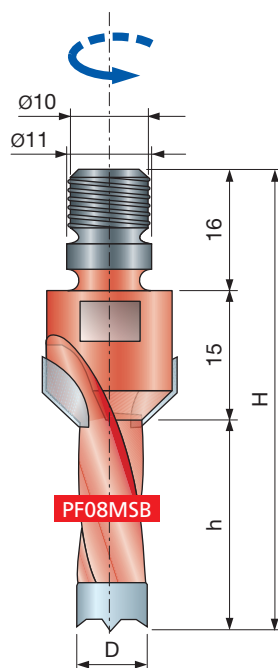
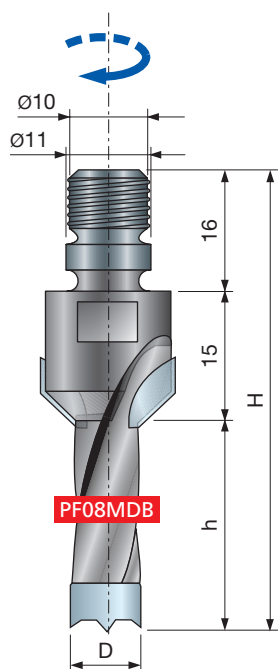
| Parti di ricambio<br>Spare parts | Dimensioni<br>Dimensions                                                                  | Codice<br>Code |
|----------------------------------|-------------------------------------------------------------------------------------------|----------------|
| Vite / 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<br>Code |
|----|----|----|---|---|----------------|
| 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:

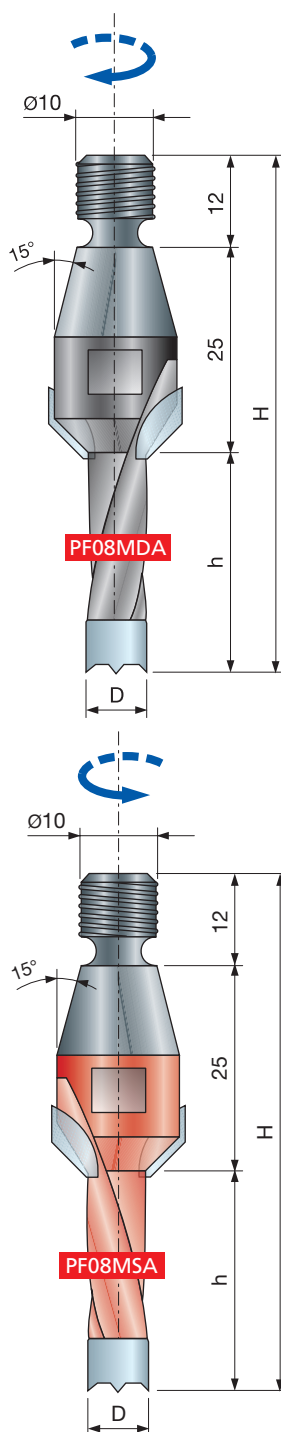
#### Shanks for:

Alberti, Balestrini, Biesse, 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



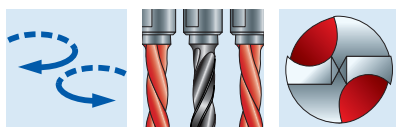
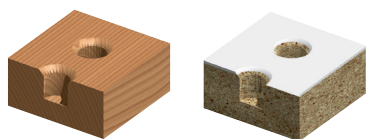
| D  | h  | H  | A  | Z | Codice<br>Code |
|----|----|----|----|---|----------------|
| mm | mm | mm | mm |   |                |
| 5  | 30 | 67 |    |   | PF08MDAAB3     |
| 5  | 40 | 77 |    |   | PF08MDAAC3     |
| 5  | 50 | 87 |    |   | PF08MDAAD3     |
| 6  | 30 | 67 |    |   | PF08MDABB3     |
| 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

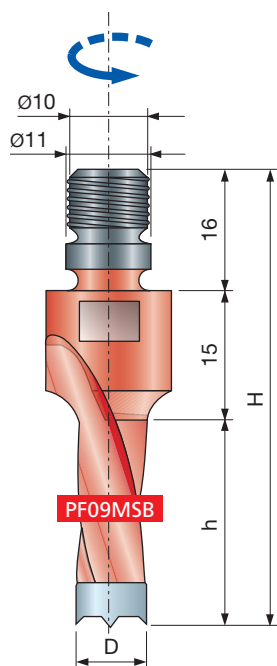
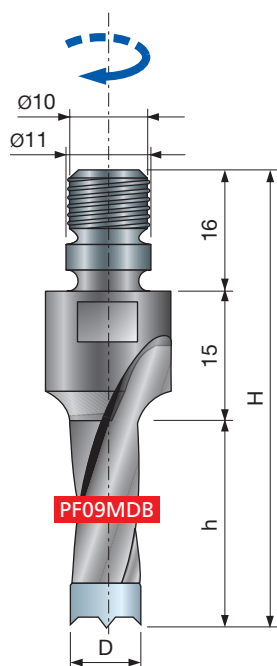
- Per l'esecuzione su macchine foratrici di fori ciechi svasati su legno, suoi derivati, laminati e simili. Cuspide in HW e punta di centraggio.
- For multiboring machines. Suitable for blind holes with countersinks on solid wood and laminates. HW tip with center point.





# PF09MDB PF09MSB

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



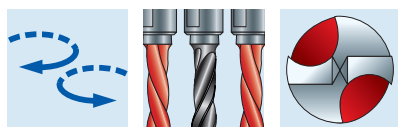
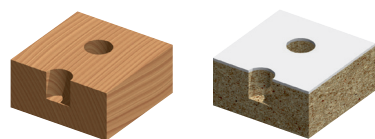
| D  | h  | H  | A  | Z | Codice<br>Code |
|----|----|----|----|---|----------------|
| mm | mm | mm | mm |   |                |
| 5  | 30 | 61 |    |   | PF09MDBAB3     |
| 5  | 40 | 71 |    |   | PF09MDBAC3     |
| 5  | 50 | 81 |    |   | PF09MDBAD3     |
| 6  | 30 | 61 |    |   | PF09MDBBB3     |
| 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:

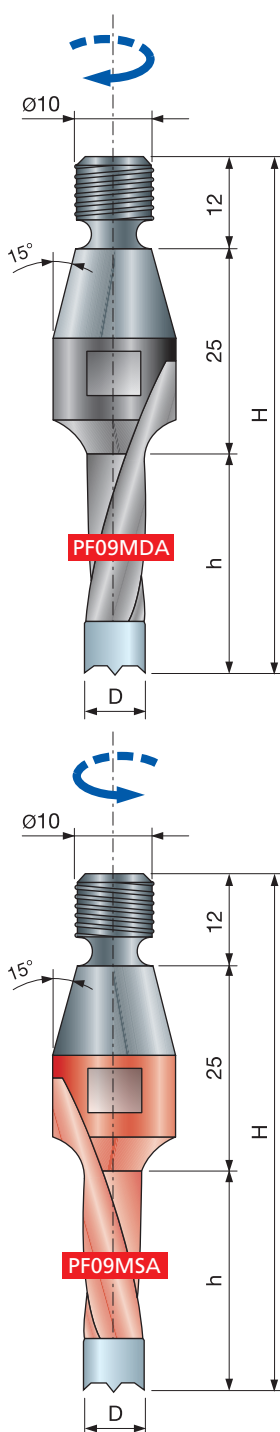
Alberti, Balestrini, Biesse, Busellato,  
Gessner, Morbidelli, Torwegge, Weeke

- 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



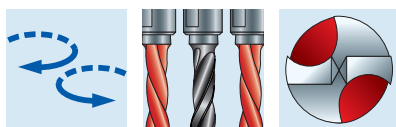
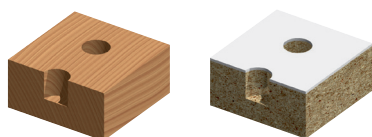
| D  | h  | H  | A  | Z | Codice<br>Code |
|----|----|----|----|---|----------------|
| mm | mm | mm | mm |   |                |
| 5  | 30 | 67 |    |   | PF09MDAAB3     |
| 5  | 40 | 77 |    |   | PF09MDAAC3     |
| 5  | 50 | 87 |    |   | PF09MDAAD3     |
| 6  | 30 | 67 |    |   | PF09MDABB3     |
| 6  | 40 | 77 |    |   | PF09MDABC3     |
| 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     |
| 14 | 30 | 67 |    |   | PF09MDAFB3     |
| 14 | 40 | 77 |    |   | PF09MDAFC3     |
| 14 | 50 | 87 |    |   | PF09MDAFD3     |
| 5  | 30 | 67 |    |   | PF09MSAAB3     |
| 5  | 40 | 77 |    |   | PF09MSAAC3     |
| 5  | 50 | 87 |    |   | PF09MSAAD3     |
| 6  | 30 | 67 |    |   | PF09MSABB3     |
| 6  | 40 | 77 |    |   | PF09MSABC3     |
| 6  | 50 | 87 |    |   | PF09MSABD3     |
| 8  | 30 | 67 |    |   | PF09MSACB3     |
| 8  | 40 | 77 |    |   | PF09MSACC3     |
| 8  | 50 | 87 |    |   | PF09MSACD3     |
| 10 | 30 | 67 |    |   | PF09MSADB3     |
| 10 | 40 | 77 |    |   | PF09MSADC3     |
| 10 | 50 | 87 |    |   | PF09MSADD3     |
| 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

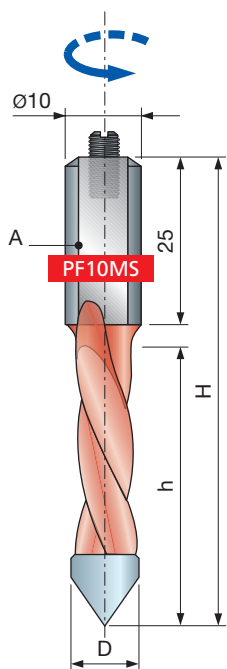
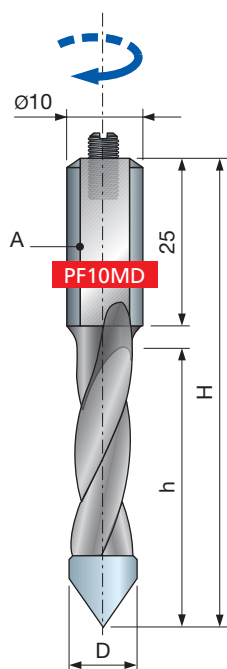
- Per l'esecuzione su macchine foratrici di fori ciechi senza svasature su legno, suoi derivati, laminati e simili. Cuspide in HW e punta di centraggio.
- For multiboring machines. Suitable for blind holes without countersinks on solid wood and laminates. HW tip with center point.



# PF10MD PF10MS

## PUNTE PER FORATRICI MULTIPLE - FORI PASSANTI

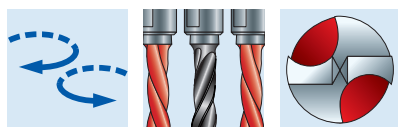
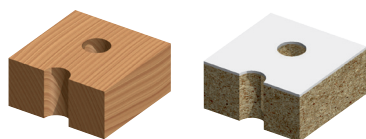
### CARBIDE BITS FOR MULTIBORING MACHINES - THROUGH HOLES



| D  | h  | H    | A     | Z | Codice<br>Code |
|----|----|------|-------|---|----------------|
| 4  | 27 | 57,5 | 10x25 |   | PF10MD ZA3     |
| 5  | 27 | 57,5 | 10x25 |   | PF10MD AA3     |
| 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<br>Spare parts | Dimensioni<br>Dimensions                                                                    | Codice<br>Code |
|----------------------------------|---------------------------------------------------------------------------------------------|----------------|
| Vite / Screw                     |  M5x10 | 2602M DC9      |

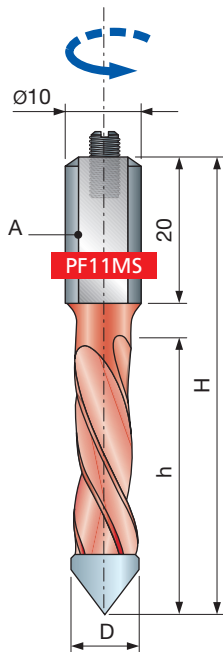
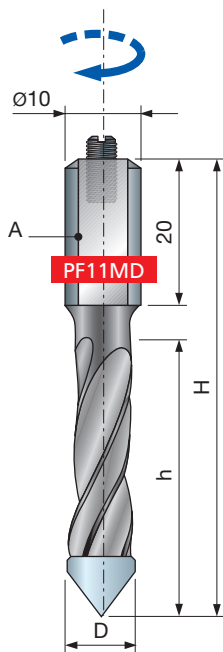
- Per macchine foratrici con l'uso di mandrini o adattatori. Adatta all'esecuzione di fori passanti su legno massiccio, derivati e laminati. Cuspide in HW e vite di regolazione M5x10 mm. Attacco Ø10x25 mm.
- For multiboring machines with chucks or adapters. Suitable for through holes on solid wood and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



# PF11MD PF11MS

## PUNTE PER FORATRICI MULTIPLE - FORI PASSANTI

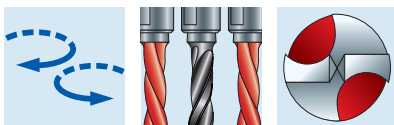
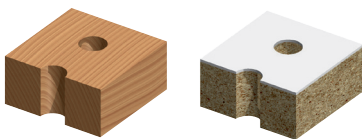
## CARBIDE BITS FOR MULTIBORING MACHINES - THROUGH HOLES



| 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 |

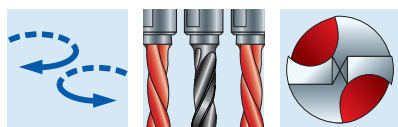
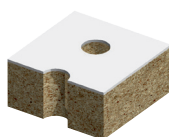
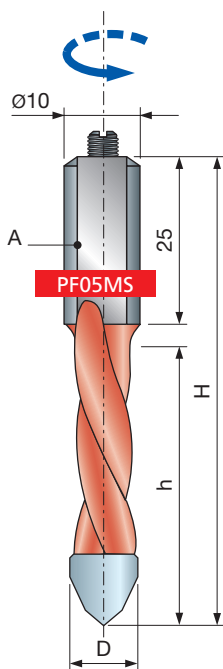
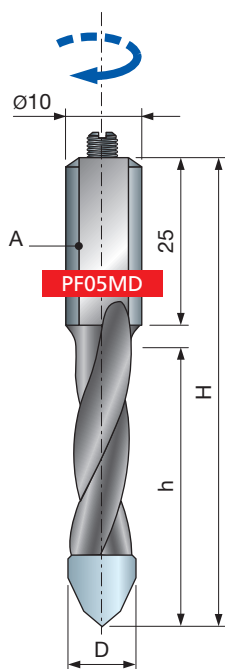
- Per macchine foratrici con l'uso di mandrini o adattatori. Adatta all'esecuzione di fori passanti su legno massiccio, derivati e laminati. Cuspide in HW e vite di regolazione M5x10 mm. Attacco Ø10x20 mm.
- For multiboring machines with chucks or adapters. Suitable for through holes on solid wood and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

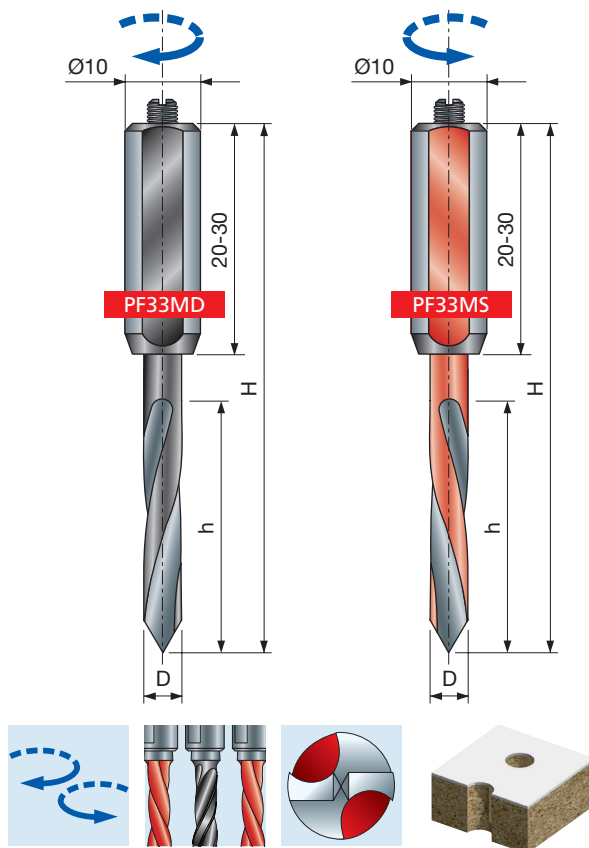
■ Use on drilling machines with chucks or adapters to make through holes on laminated and such. Double spear carbide tip, in order to avoid splintering on exit holes.

M5x10 adjusting screw.



# PF33MD PF33MS

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



| D | h  | H  | A     | Z | Codice<br>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<br>Spare parts | Dimensioni<br>Dimensions | Codice<br>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.

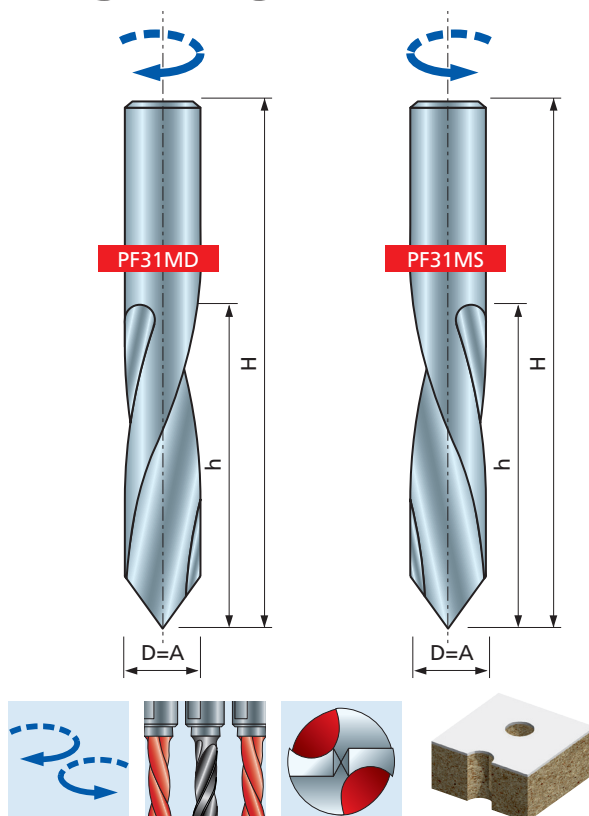
**N.B.** Per dimensioni diverse, chiedere preventivo.

■ 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<br>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.

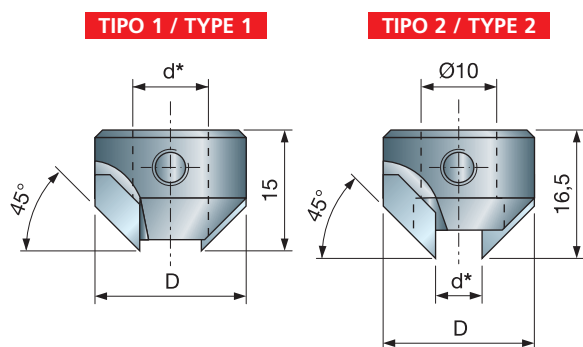
**N.B.** Per dimensioni diverse, chiedere preventivo.

■ 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 componibili 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 |

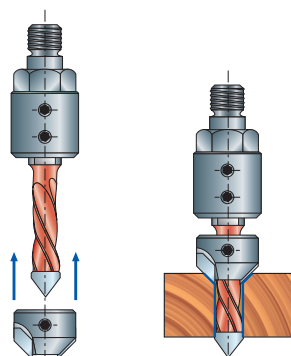
| D  | d*    | H    | A             | Z | Codice     |
|----|-------|------|---------------|---|------------|
| mm | mm    | mm   | mm            |   | Code       |
| 14 | 4     | 15   | tipo / type 1 | 2 | SV05MS ZA3 |
| 16 | 5     | 15   | tipo / type 1 | 2 | SV05MS AA3 |
| 16 | 6     | 15   | tipo / 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 |

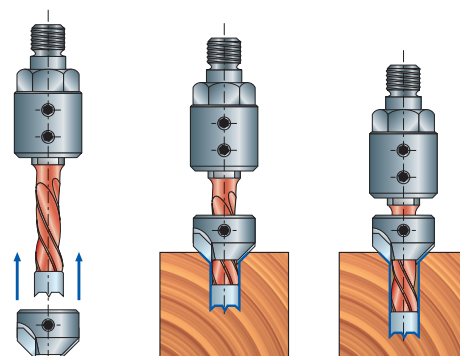
### ESEMPI DI ASSEMBLAGGIO

#### ASSEMBLING EXAMPLES

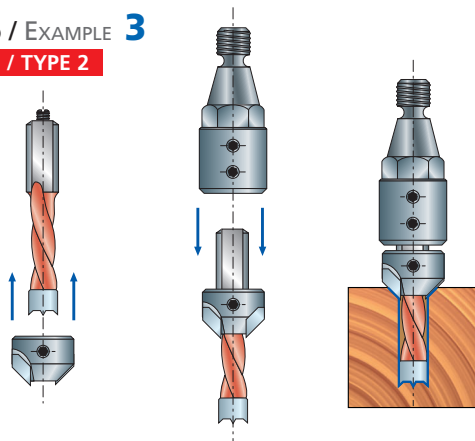
##### ESEMPIO / EXAMPLE 1 TIPO 1 / TYPE 1



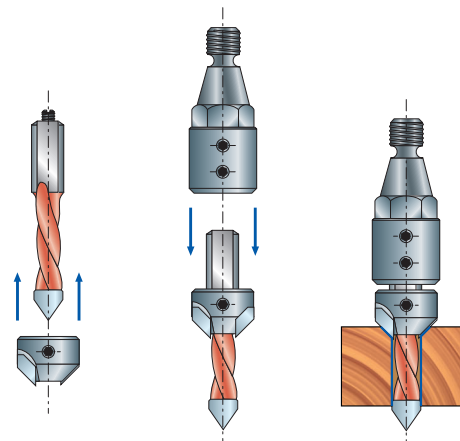
##### ESEMPIO / EXAMPLE 2 TIPO 1 / TYPE 1



##### ESEMPIO / EXAMPLE 3 TIPO 2 / TYPE 2



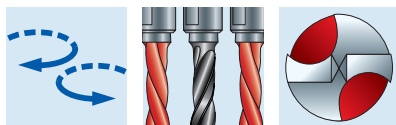
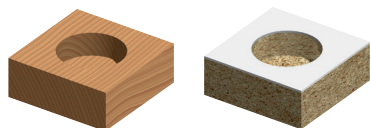
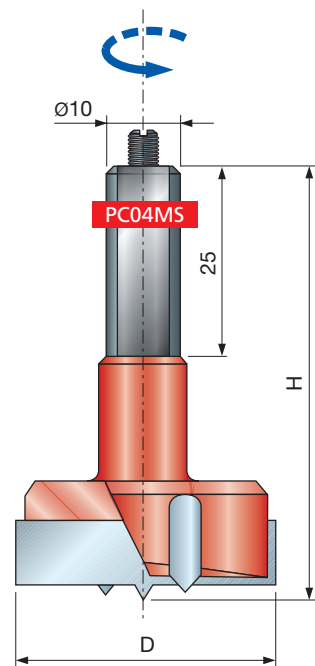
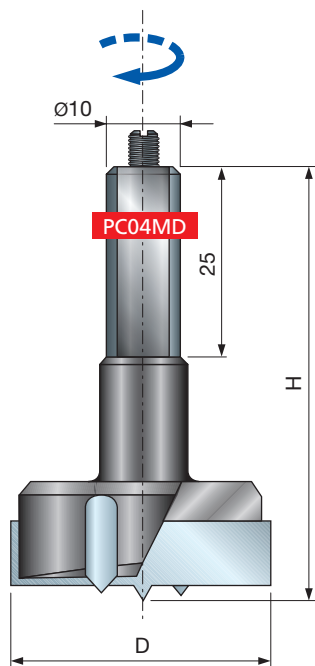
##### ESEMPIO / EXAMPLE 4 TIPO 2 / TYPE 2



# PC04MD PC04MS

## PUNTE PER CERNIERE

### CARBIDE BORING BITS FOR HINGES



| D  | h  | H    | A     | Z   | Codice     |
|----|----|------|-------|-----|------------|
| mm | mm | mm   | mm    |     | Code       |
| 12 |    | 57,5 | 10x25 | 2+2 | PC04MD 123 |
| 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 |

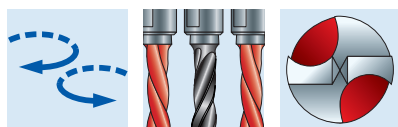
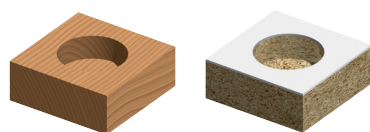
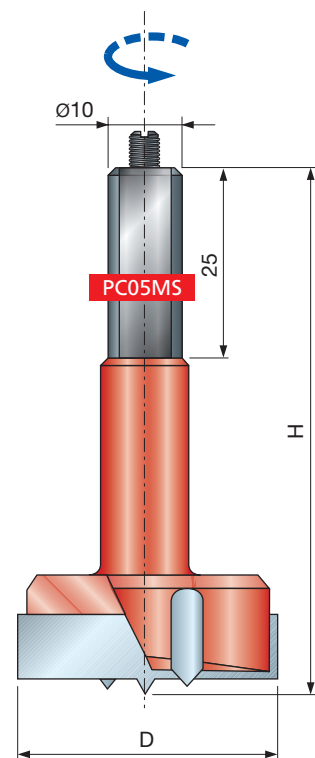
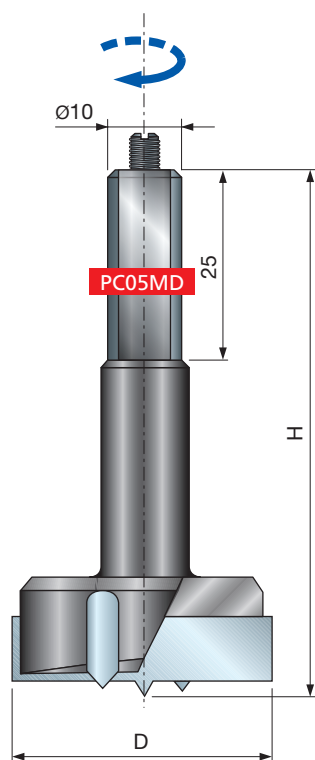
■ Da montare su macchine foratrici con l'impiego di mandrini o adattatori, per l'esecuzione di sedi per cerniere o di fori ciechi su legno, suoi derivati, laminati e simili. Cuspide in HW e vite di regolazione M5x10 mm. Attacco Ø10x25 mm.

■ 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

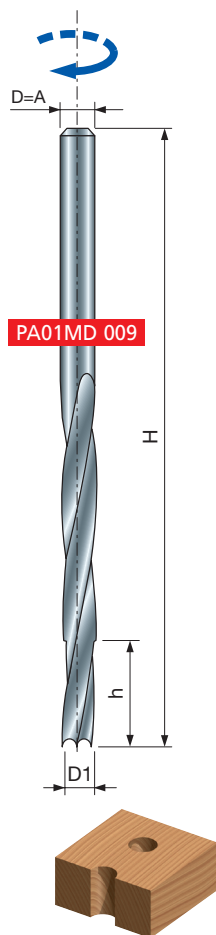
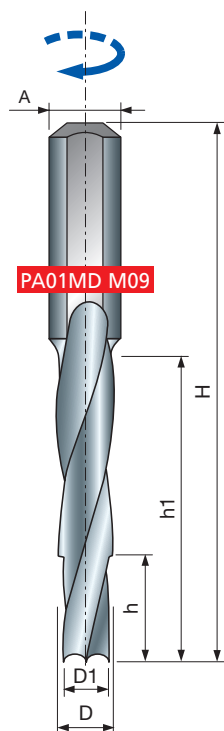
### CARBIDE BORING BITS FOR HINGES



| D  | h  | H  | A     | Z   | Codice     |
|----|----|----|-------|-----|------------|
| mm | mm | mm | mm    |     | Code       |
| 12 |    | 70 | 10x25 | 2+2 | PC05MD 123 |
| 14 |    | 70 | 10x25 | 2+2 | PC05MD 143 |
| 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.



| 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.

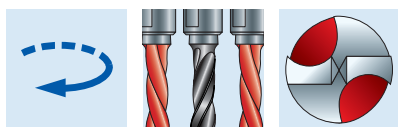
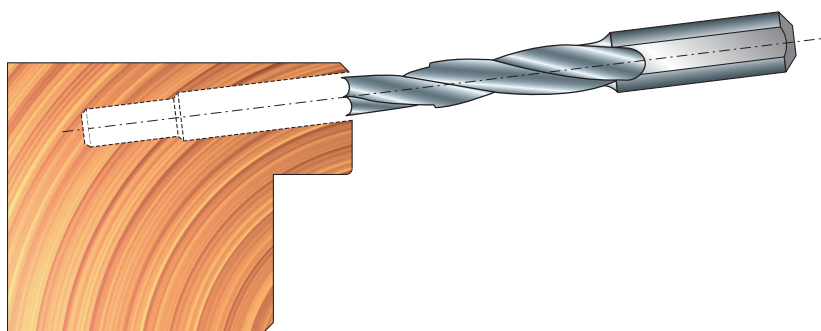
| D1   | D    | h  | h1 | H   | A    | Anuba | Codice     |
|------|------|----|----|-----|------|-------|------------|
| mm   | mm   | mm | mm | mm  | mm   |       | Code       |
| 4,5  | 5,25 | 10 |    | 86  | 5,25 | 9     | PA01MD 009 |
| 5    | 5,75 | 15 |    | 95  | 5,75 | 11    | PA01MD 011 |
| 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

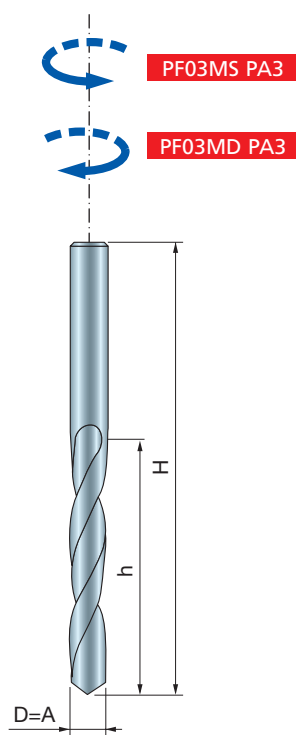




# PF03MD PF03MS

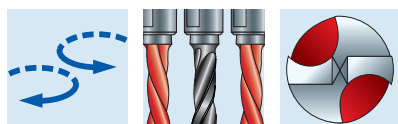
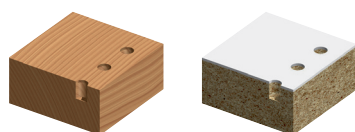
## PUNTE INTEGRALI PER FORI VITE

### SOLID CARBIDE ROUTER BITS FOR SCREW HOLES



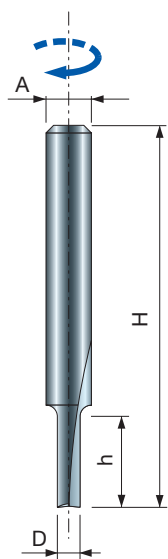
| D   | h  | H  | A   | Z | Codice<br>Code |
|-----|----|----|-----|---|----------------|
| 2   | 24 | 49 | 2   | 2 | PF03MD PA3     |
| 2,5 | 24 | 49 | 2,5 | 2 | PF03MD QA3     |
| 3   | 25 | 49 | 3   | 2 | PF03MD RA3     |
| 3,2 | 25 | 49 | 3,2 | 2 | PF03MD SA3     |
| 3,5 | 33 | 55 | 3,5 | 2 | PF03MD 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.



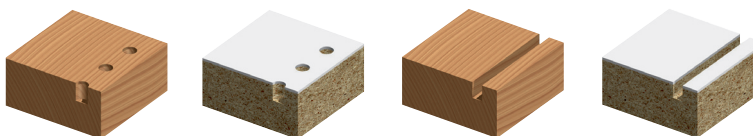
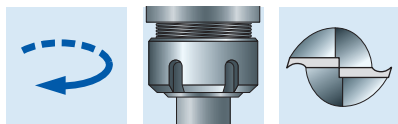
# R006M

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



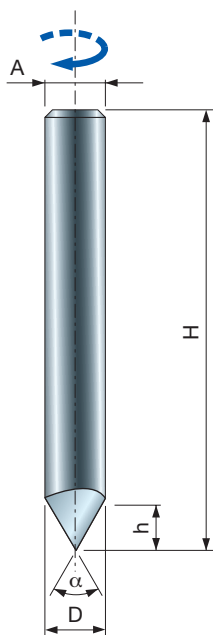
| D  | h  | H  | A  | Z | Codice     |
|----|----|----|----|---|------------|
| mm | mm | mm | mm |   | Code       |
| 3  | 12 | 50 | 6  | 2 | R006M03006 |
| 4  | 12 | 49 | 6  | 2 | R006M05006 |
| 5  | 12 | 49 | 6  | 2 | R006M07006 |
| 5  | 16 | 51 | 6  | 2 | R006M07406 |
| 6  | 16 | 57 | 6  | 2 | R006M09406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



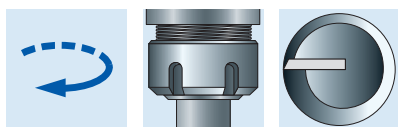
# PI01MD

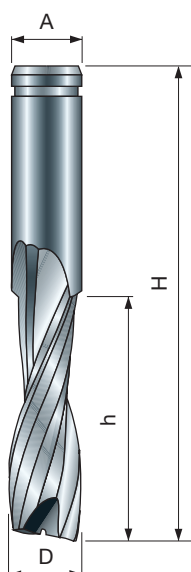
## PUNTA IN HW INTEGRALE PER INTAGLI E SCANALATURE SOLID CARBIDE ENGRAVING ROUTER BIT



| D  | h  | H  | A  | $\alpha$ | 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 vining work.





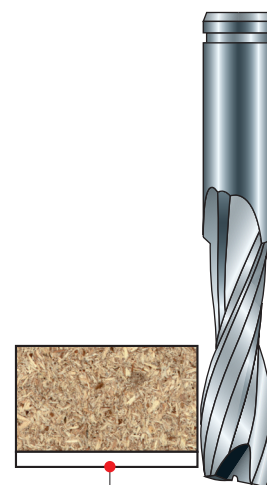
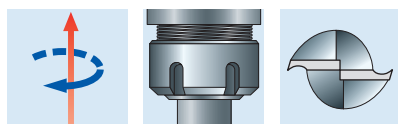
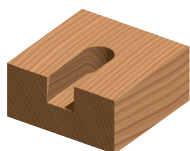
| D  | h  | H   | A  | Z | Codice<br>Code |
|----|----|-----|----|---|----------------|
| mm | mm | mm  | mm |   |                |
| 4  | 15 | 50  | 4  | 2 | PI02MD BB3     |
| 5  | 17 | 50  | 5  | 2 | PI02MD CC3     |
| 6  | 17 | 60  | 6  | 2 | PI02MD DC3     |
| 6  | 22 | 60  | 6  | 2 | PI02MD DD3     |
| 8  | 22 | 70  | 8  | 2 | PI02MD ED3     |
| 8  | 32 | 70  | 8  | 2 | PI02MD EE3     |
| 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.

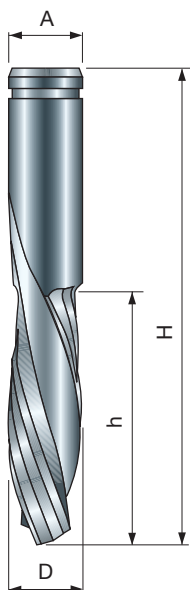
**N.B.** Per dimensioni diverse o rotazione sinistra, chiedere preventivo.

■ 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



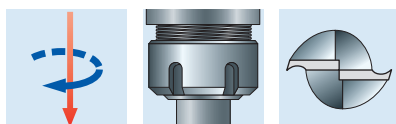
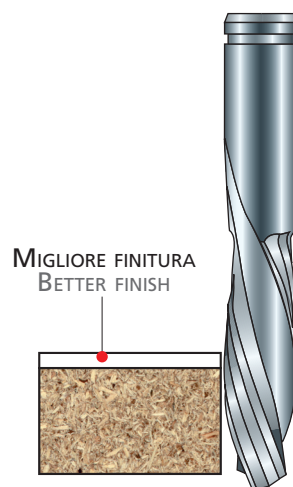
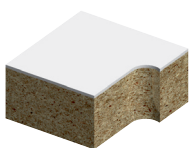
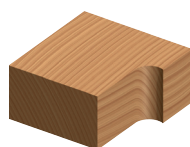
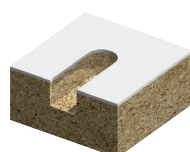
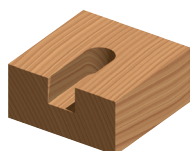
| D  | h  | H   | A  | Z | Codice     |
|----|----|-----|----|---|------------|
| mm | mm | mm  | mm |   | Code       |
| 4  | 15 | 50  | 4  | 2 | PI02ME BB3 |
| 5  | 17 | 50  | 5  | 2 | PI02ME CC3 |
| 6  | 17 | 60  | 6  | 2 | PI02ME DC3 |
| 6  | 22 | 60  | 6  | 2 | PI02ME DD3 |
| 8  | 22 | 70  | 8  | 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 |

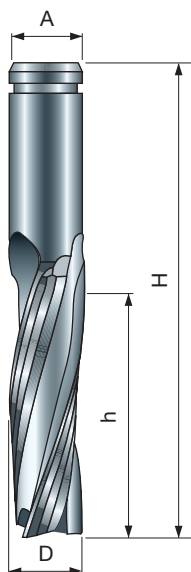
■ Per centri di lavoro con l'uso di mandrini o adattatori e per pantografi CNC. Adatte alla contornatura, foratura e finitura su legno massiccio, derivati e laminati. Garantiscono una elevata velocità di avanzamento su materiale ben fissato al piano di lavoro. La geometria dell'elica porta l'espulsione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





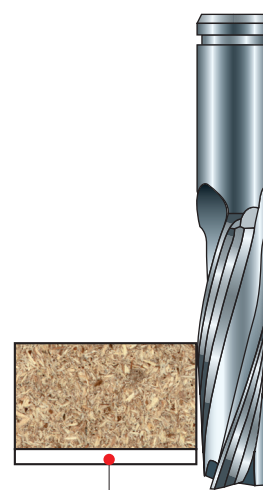
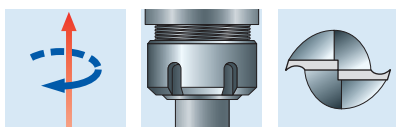
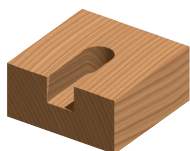
| D  | h   | H   | A  | Z | Codice<br>Code |
|----|-----|-----|----|---|----------------|
| mm | mm  | mm  | mm |   |                |
| 8  | 22  | 70  | 8  | 3 | PI03MD ED3     |
| 8  | 32  | 70  | 8  | 3 | PI03MD EE3     |
| 10 | 32  | 70  | 10 | 3 | PI03MD FE3     |
| 10 | 42  | 100 | 10 | 3 | PI03MD 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.

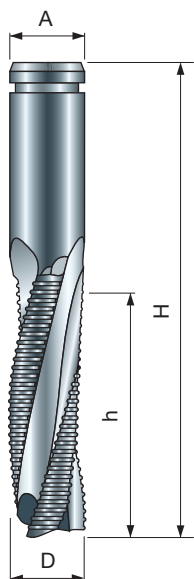
■ For automatic machining centres and for CNC routers. Suitable for sizing, plunging and finishing solid wood and laminates. Allows high feed rates on materials that are fixed to the machines work table. The tools' helical forces eject the chips upwards, therefore the panels best finish is on the lower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

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



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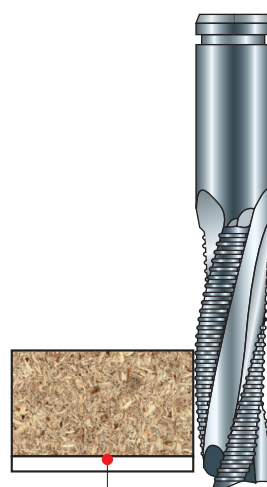
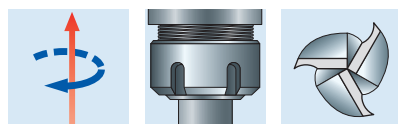
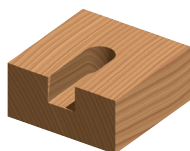
| D  | h   | H   | A  | Z | Codice     |
|----|-----|-----|----|---|------------|
| mm | mm  | mm  | mm |   | Code       |
| 8  | 22  | 70  | 8  | 3 | PI04MD ED3 |
| 8  | 32  | 70  | 8  | 3 | PI04MD EE3 |
| 10 | 32  | 70  | 10 | 3 | PI04MD FE3 |
| 10 | 42  | 100 | 10 | 3 | PI04MD FF3 |
| 12 | 32  | 80  | 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 |

■ **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 l'alto e quindi una miglior finitura sulla parte inferiore del pannello.

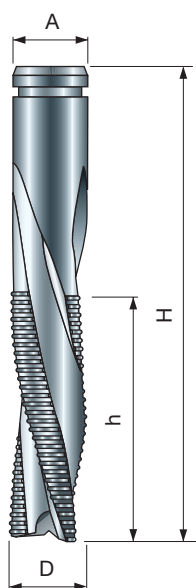
**N.B.** Per dimensioni diverse o rotazione sinistra, chiedere preventivo.

■ **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.



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BETTER FINISH



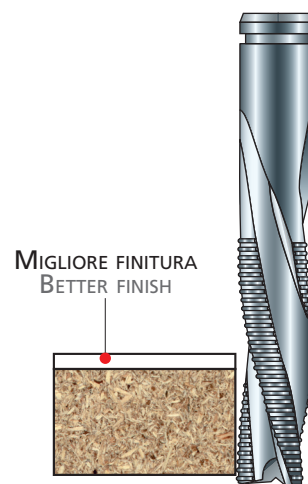
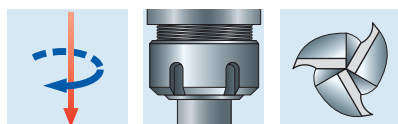
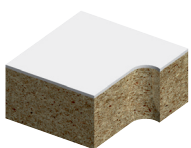
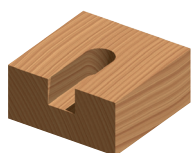
| D  | h  | H   | A  | Z | Codice<br>Code |
|----|----|-----|----|---|----------------|
| mm | mm | mm  | mm |   |                |
| 10 | 32 | 70  | 10 | 3 | PI04ME FE3     |
| 12 | 32 | 80  | 12 | 3 | PI04ME GE3     |
| 12 | 42 | 100 | 12 | 3 | PI04ME GF3     |
| 14 | 42 | 100 | 14 | 3 | PI04ME HF3     |
| 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.

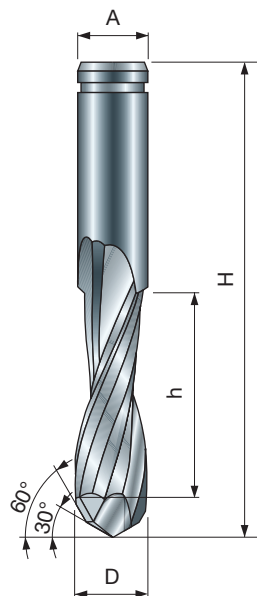
■ **Router bits with chip breaker.** For automatic machining centres and for CNC routers. Suitable for sizing, plunging and roughing solid wood and laminates. Allows high feed rates on materials that are fixed to the machines work table. The tools' helical forces eject the chips downwards, therefore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

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



# PI09MD

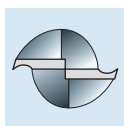
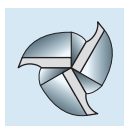
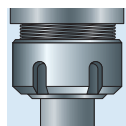
## PUNTA A TAGLIENTI ELICOIDALI IN HW INTEGRALE SOLID CARBIDE SPIRAL ROUTER BIT



| 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.



\* PI09MD GG3

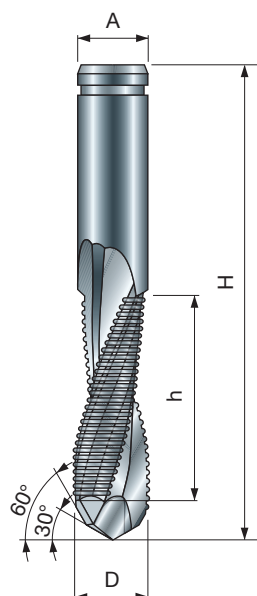


■ **N.B.** Per dimensioni diverse o rotazione sinistra, chiedere preventivo.

■ **Note:** for other dimensions or for left-hand rotation ask for a quote.

# PI10MD

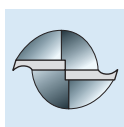
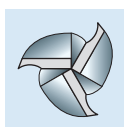
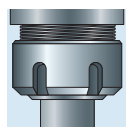
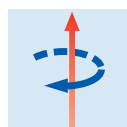
## PUNTA A TAGLIENTI ELICOIDALI IN HW INTEGRALE SOLID CARBIDE SPIRAL ROUTER BIT



| 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.



\* PI10MD GG3



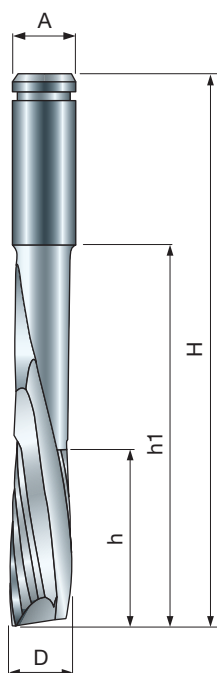
■ **N.B.** Per dimensioni diverse o rotazione sinistra, chiedere preventivo.

■ **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



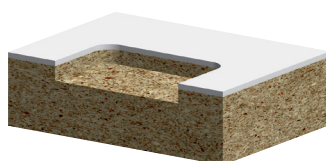
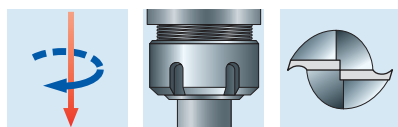
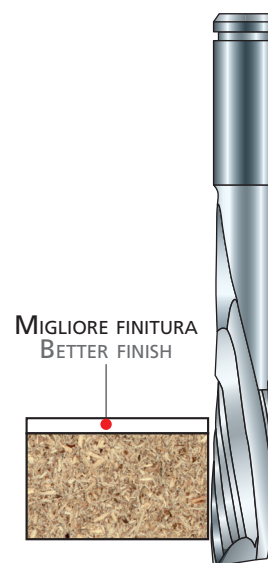
| D  | h  | H     | h1 | A  | Z | Codice<br>Code |
|----|----|-------|----|----|---|----------------|
| 14 | 45 | 116   | 75 | 14 | 2 | PI05MD AA3     |
| 14 | 45 | 136,5 | 95 | 14 | 2 | PI05MD AB3     |
| 16 | 45 | 150   | 95 | 16 | 2 | PI05MD CC3     |

■ 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.

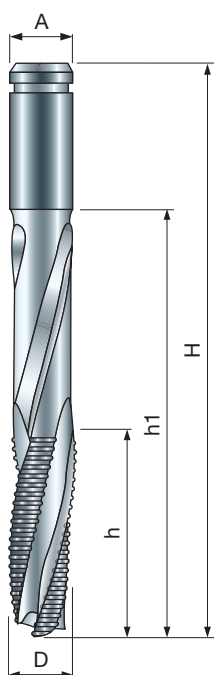
**Note:** for dimensions not included or for left-hand rotation ask for a quote.



# PI06MD

## PUNTA IN HW INTEGRALE PER SEDI DI SERRATURE

### SOLID CARBIDE SPIRAL ROUTER BIT FOR HARDWARE SLOTS



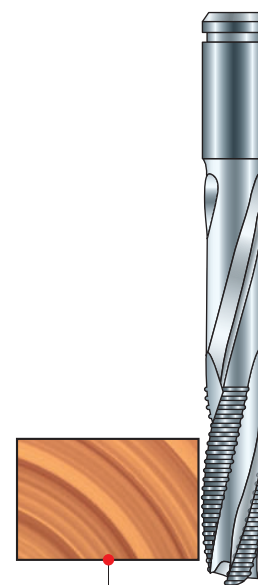
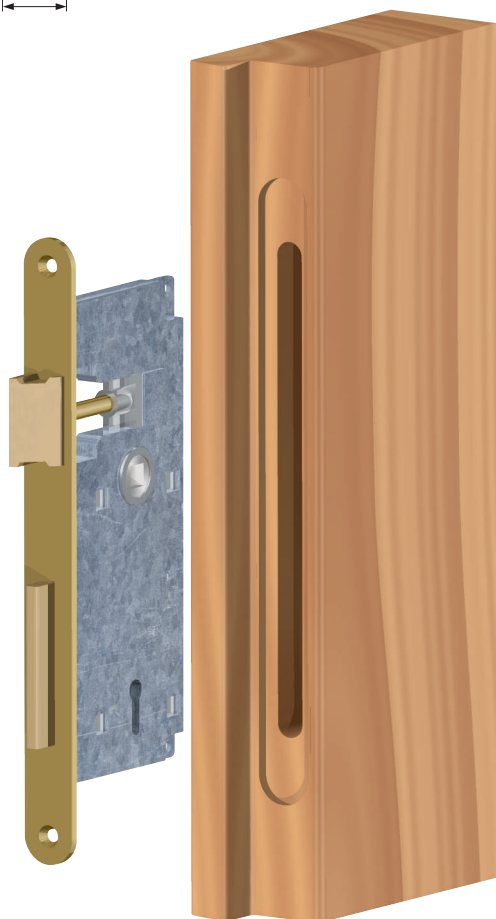
| D  | h  | H   | h1 | A  | Z | Codice<br>Code |
|----|----|-----|----|----|---|----------------|
| 16 | 45 | 150 | 95 | 16 | 2 | PI06MD BC3*    |
| 16 | 45 | 150 | 95 | 16 | 3 | PI06MD CC3     |
| 18 | 45 | 150 | 95 | 18 | 3 | PI06MD DC3     |
| 20 | 45 | 150 | 95 | 20 | 3 | PI06MD EC3     |

■ 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.

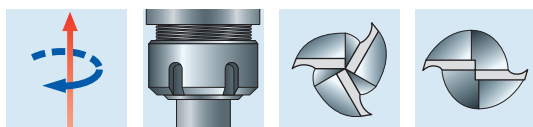
**N.B.** Per dimensioni diverse o rotazione sinistra, chiedere preventivo.

■ 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.

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

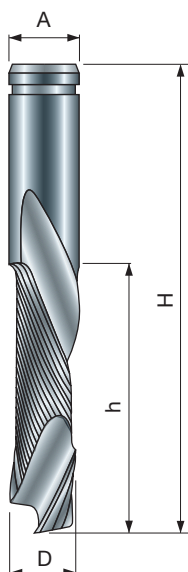


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\* PI06MD BC3





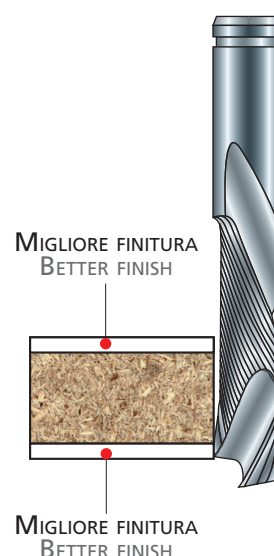
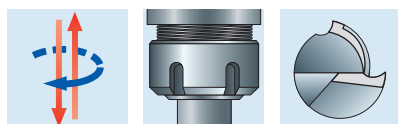
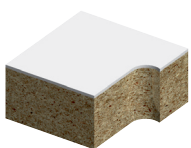
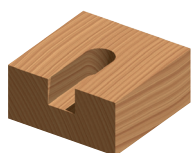
| D  | h  | H   | A  | Z   | Codice<br>Code |
|----|----|-----|----|-----|----------------|
| mm | mm | mm  | mm |     |                |
| 8  | 32 | 70  | 8  | 1+1 | PI07MD EE3     |
| 10 | 32 | 70  | 10 | 1+1 | PI07MD FE3     |
| 12 | 32 | 80  | 12 | 1+1 | PI07MD GE3     |
| 12 | 42 | 100 | 12 | 1+1 | 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.

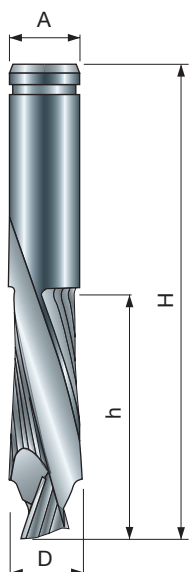
**N.B.** Per dimensioni diverse o rotazione sinistra, chiedere preventivo.

■ 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.







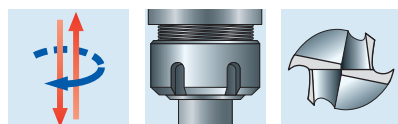
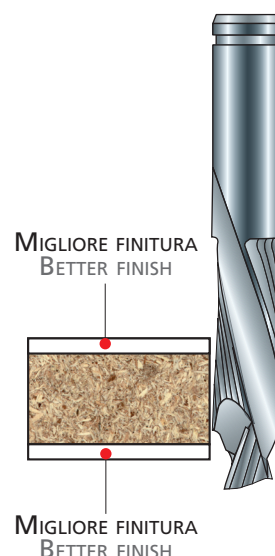
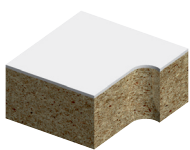
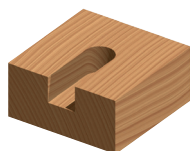
| D  | h  | H   | A  | Z   | Codice<br>Code |
|----|----|-----|----|-----|----------------|
| mm | mm | mm  | mm |     |                |
| 10 | 32 | 80  | 10 | 2+2 | PI08MD FE3     |
| 12 | 42 | 100 | 12 | 2+2 | PI08MD GF3     |
| 16 | 52 | 100 | 16 | 2+2 | PI08MD LG3     |
| 18 | 52 | 100 | 18 | 2+2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

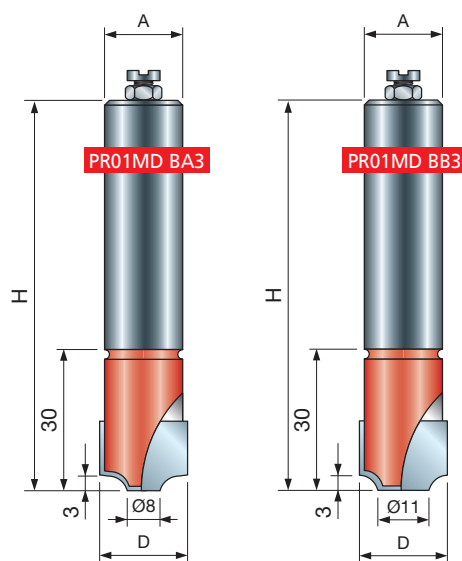
■ Per centri di lavoro con l'uso di mandrini o adattatori e per pantografi a CNC. Particolarmente adatte alla contornatura e alla foratura di pannelli impiallacciati o bilaminati. Garantiscono una elevata velocità di avanzamento su materiale ben fissato al piano di lavoro. La particolare geometria delle 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.

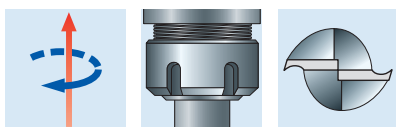
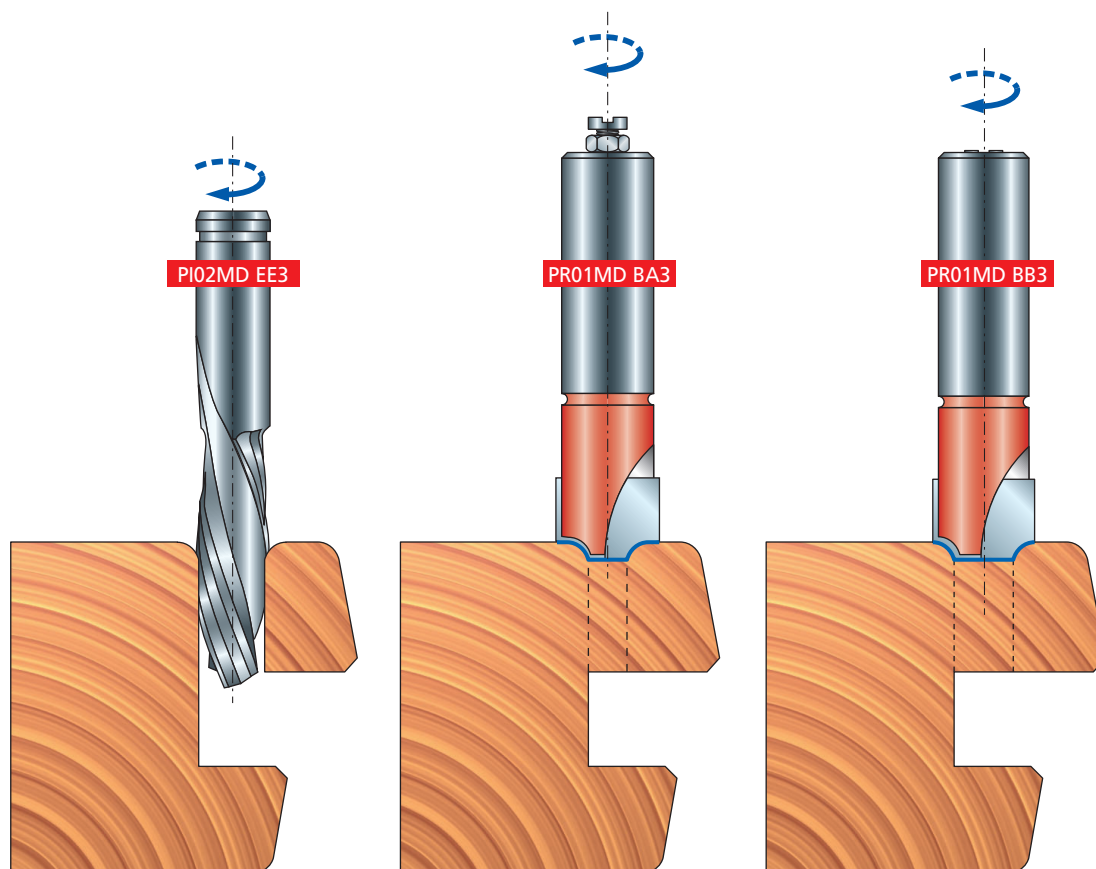
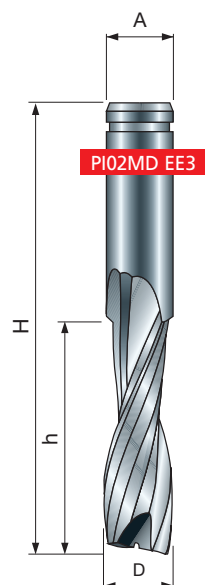


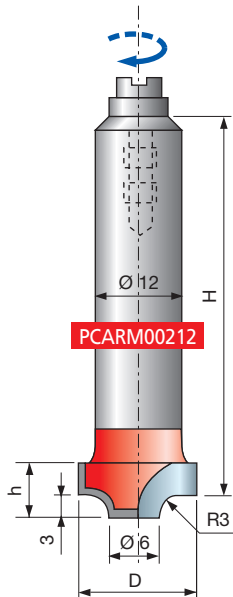
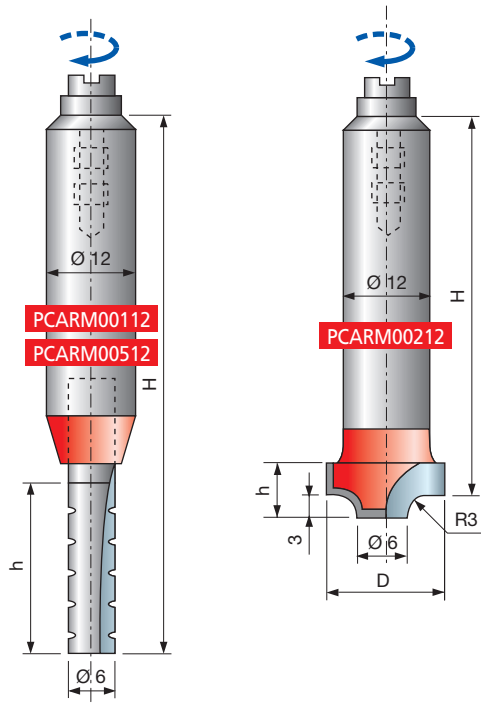


| D  | h  | H  | A  | Z | Codice<br>Code |
|----|----|----|----|---|----------------|
| 8  | 32 | 70 | 8  | 2 | PI02MD EE3     |
| 20 |    | 80 | 20 | 2 | PR01MD BA3     |
| 20 |    | 80 | 20 | 2 | PR01MD BB3     |

■ 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 reporti 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.



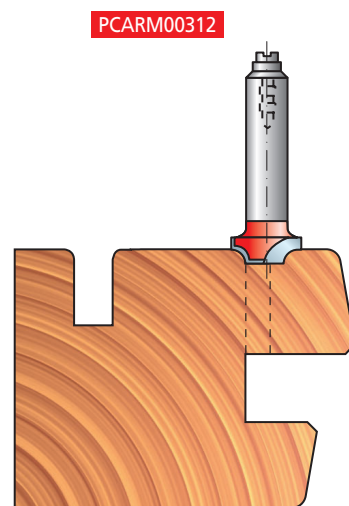
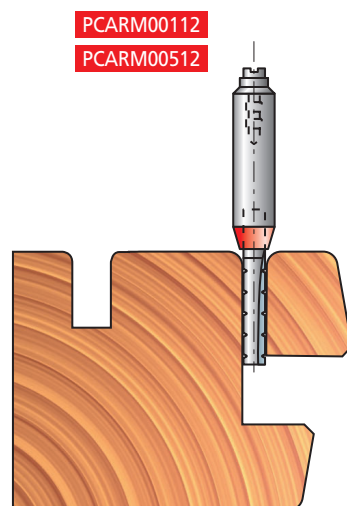


| D  | h    | H  | A  | Z | Codice<br>Code |
|----|------|----|----|---|----------------|
| 6  | 23,5 | 71 | 12 | 1 | PCARM00112     |
| 6  | 30   | 80 | 12 | 1 | PCARM00512     |
| 16 | 8    | 56 | 12 | 2 | PCARM00212     |
| 19 | 8    | 56 | 12 | 2 | PCARM00312     |
| 20 | 26   | 71 | 12 | 2 | PCARM00412     |

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

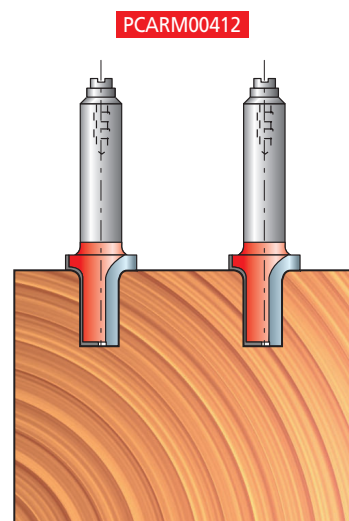
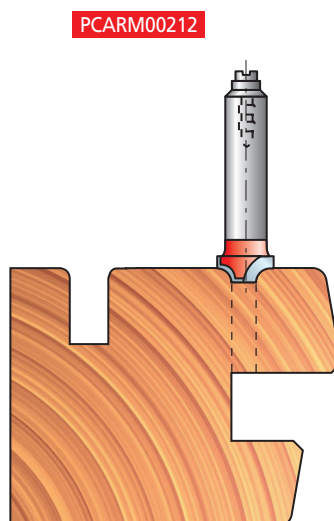
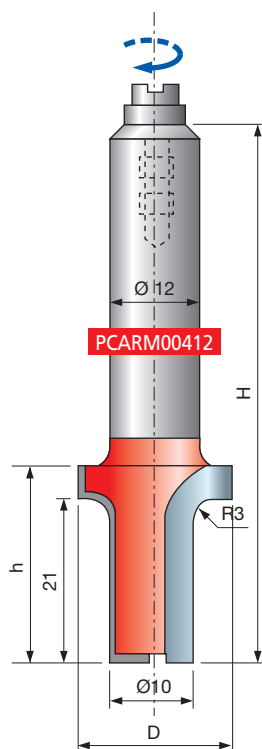
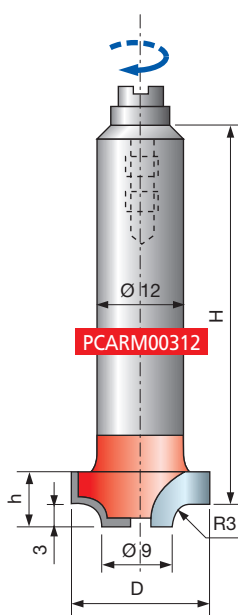
**PCARM00512:** Taglio per listello 28 mm  
28 mm bead recovery bit

**PCARM00212:** Raggiatura del listello  
Bead profiling bit



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

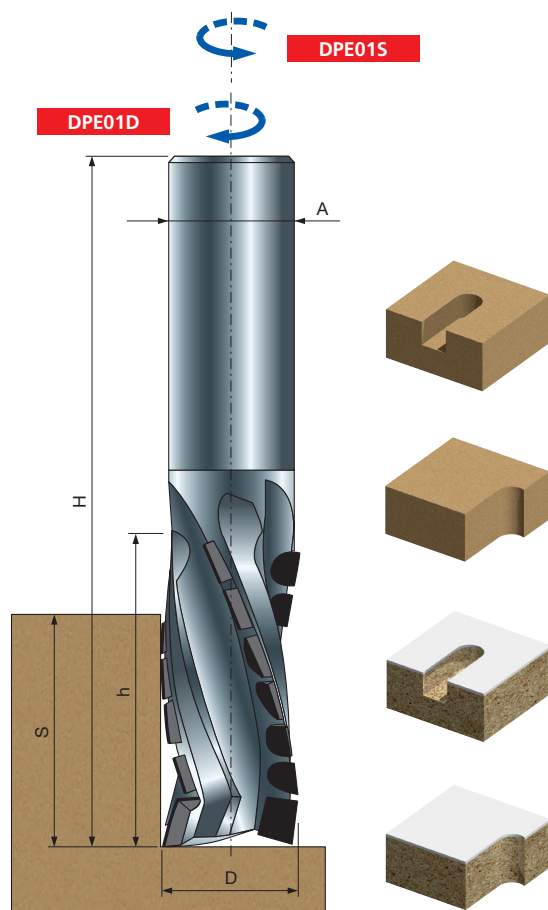
**PCARM00412:** Tracciatura dell'arco  
Arch tracing bit



# 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 avanzamento 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 |
| 22 | 30 | 20 | 90  | 25x50 | 3 | 9+3        | DPE01DTPE5 |
| 22 | 35 | 25 | 95  | 20x50 | 3 | 12+3       | DPE01DRPF5 |
| 22 | 35 | 25 | 95  | 25x50 | 3 | 12+3       | DPE01DTPF5 |
| 22 | 40 | 30 | 100 | 20x50 | 3 | 15+3       | DPE01DRPG5 |
| 22 | 40 | 30 | 100 | 25x50 | 3 | 15+3       | DPE01DTPG5 |
| 22 | 45 | 35 | 105 | 20x50 | 3 | 17+3       | DPE01DRPH5 |
| 22 | 45 | 35 | 105 | 25x50 | 3 | 17+3       | DPE01DTPH5 |
| 22 | 50 | 40 | 110 | 20x50 | 3 | 18+3       | DPE01DRPI5 |
| 22 | 50 | 40 | 110 | 25x50 | 3 | 18+3       | DPE01DTPI5 |
| 22 | 55 | 45 | 115 | 20x50 | 3 | 21+3       | DPE01DRPJ5 |
| 22 | 55 | 45 | 115 | 25x50 | 3 | 21+3       | DPE01DTPJ5 |
| 22 | 60 | 50 | 120 | 20x50 | 3 | 24+3       | DPE01DRPK5 |
| 22 | 60 | 50 | 120 | 25x50 | 3 | 24+3       | DPE01DTPK5 |
| 22 | 65 | 55 | 125 | 20x50 | 3 | 26+3       | DPE01DRPL5 |
| 22 | 65 | 55 | 125 | 25x50 | 3 | 26+3       | DPE01DTPL5 |
| 22 | 30 | 20 | 90  | 20x50 | 3 | 9+3        | DPE01SRPE5 |
| 22 | 30 | 20 | 90  | 25x50 | 3 | 9+3        | DPE01STPE5 |
| 22 | 35 | 25 | 95  | 20x50 | 3 | 12+3       | DPE01SRPF5 |
| 22 | 35 | 25 | 95  | 25x50 | 3 | 12+3       | DPE01STPF5 |
| 22 | 40 | 30 | 100 | 20x50 | 3 | 15+3       | DPE01SRPG5 |
| 22 | 40 | 30 | 100 | 25x50 | 3 | 15+3       | DPE01STPG5 |
| 22 | 45 | 35 | 105 | 20x50 | 3 | 17+3       | DPE01SRPH5 |
| 22 | 45 | 35 | 105 | 25x50 | 3 | 17+3       | DPE01STPH5 |
| 22 | 50 | 40 | 110 | 20x50 | 3 | 18+3       | DPE01SRPI5 |
| 22 | 50 | 40 | 110 | 25x50 | 3 | 18+3       | DPE01STPI5 |
| 22 | 55 | 45 | 115 | 20x50 | 3 | 21+3       | DPE01SRPJ5 |
| 22 | 55 | 45 | 115 | 25x50 | 3 | 21+3       | DPE01STPJ5 |
| 22 | 60 | 50 | 120 | 20x50 | 3 | 24+3       | DPE01SRPK5 |
| 22 | 60 | 50 | 120 | 25x50 | 3 | 24+3       | DPE01STPK5 |
| 22 | 65 | 55 | 125 | 20x50 | 3 | 26+3       | DPE01SRPL5 |
| 22 | 65 | 55 | 125 | 25x50 | 3 | 26+3       | DPE01STPL5 |

### Punte speciali - Special router bits

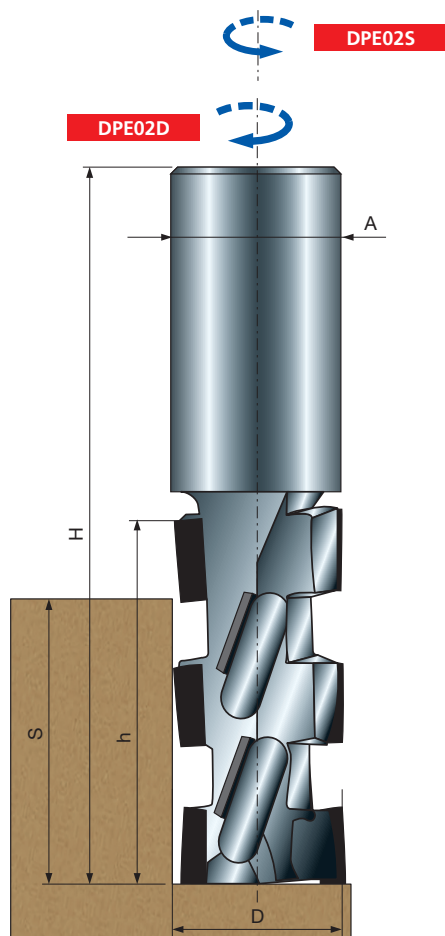
| D     | h  | S  | H   | A     | Z | Placchette | Codice     |
|-------|----|----|-----|-------|---|------------|------------|
| mm    | mm | mm | mm  | mm    |   | Tips       | Code       |
| 18-25 | 30 | 20 | 90  | 20x50 | 3 | 9+3        | DPE01DRQE5 |
| 18-25 | 35 | 25 | 95  | 20x50 | 3 | 12+3       | 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 |

# DPE02D DPE02S

DESTRA  
RIGHT  
SINISTRA  
LEFT

PCD - PUNTE ECONOMICHE A 4 PRINCIPI - 2 TAGLIENTI PER PUNTO

PCD - ROUTER BITS WITH 4 PRINCIPLES, 2 CUTTING EDGE FOR POINT



| 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 |

■ Punte 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.

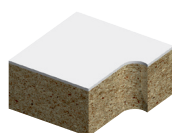
■ Router bits in PCD with HW tip, with 4 principles and 2 cutting edges on all working points for drilling and edging (at medium speed) of hard solid wood (without knots), veneered or coated MDF. These bits work with material with a thickness of up to 66 mm. Feed rate: 8 -10 m/min.

## 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 | 4 | 6+1 HW     | DPE02DRQD5 |
| 20-25 | 36   | 31 | 96    | 20x50 | 4 | 8+1 HW     | DPE02DRQF5 |
| 20-25 | 44,5 | 40 | 104,5 | 20x50 | 4 | 10+1 HW    | DPE02DRQH5 |
| 20-25 | 53   | 49 | 113   | 20x50 | 4 | 12+1 HW    | DPE02DRQI5 |
| 20-25 | 61,5 | 57 | 121,5 | 20x50 | 4 | 14+1 HW    | DPE02DRQK5 |
| 20-25 | 70   | 66 | 130   | 20x50 | 4 | 16+1 HW    | DPE02DRQM5 |
| 20-25 | 27,5 | 22 | 87,5  | 20x50 | 4 | 6+1 HW     | DPE02SRQD5 |
| 20-25 | 36   | 31 | 96    | 20x50 | 4 | 8+1 HW     | DPE02SRQF5 |
| 20-25 | 44,5 | 40 | 104,5 | 20x50 | 4 | 10+1 HW    | DPE02SRQH5 |
| 20-25 | 53   | 49 | 113   | 20x50 | 4 | 12+1 HW    | DPE02SRQI5 |
| 20-25 | 61,5 | 57 | 121,5 | 20x50 | 4 | 14+1 HW    | DPE02SRQK5 |
| 20-25 | 70   | 66 | 130   | 20x50 | 4 | 16+1 HW    | DPE02SRQM5 |

■ 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**).

■ 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**).



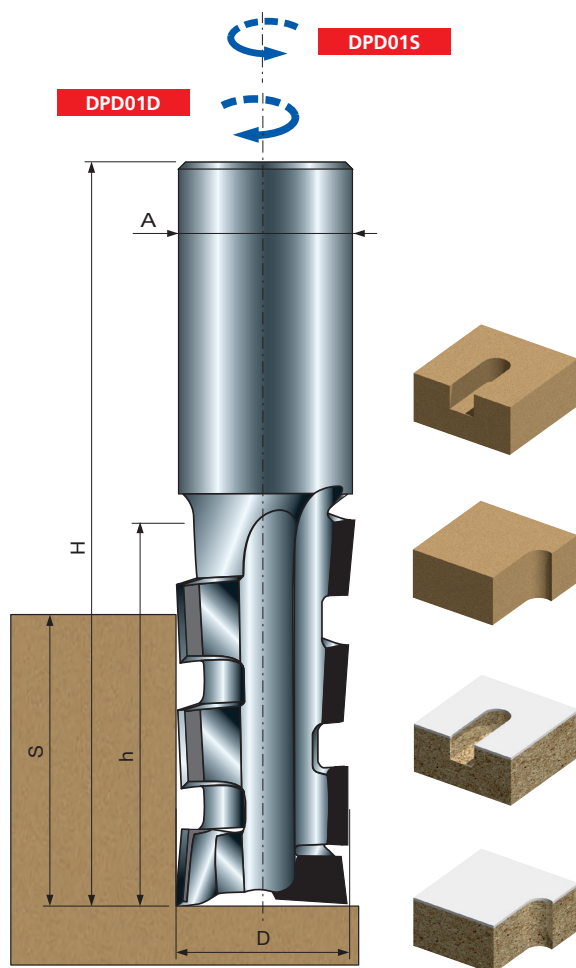


# DPD01D DESTRA DPD01S SINISTRA

DESTRA  
RIGHT  
SINISTRA  
LEFT

PCD - PUNTE A 2 PRINCIPI - 1 TAGLIANTE PER PUNTO

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



■ 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.

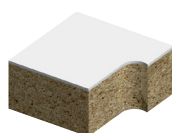
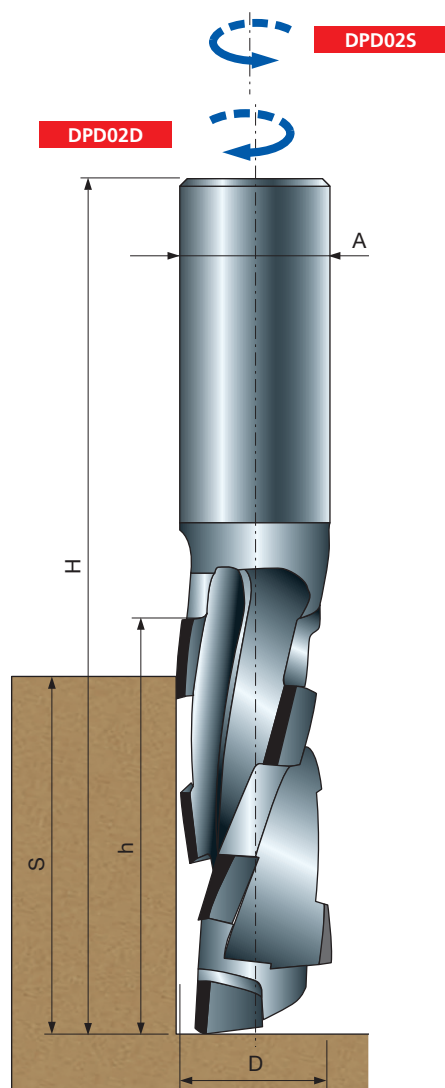
Considering the wide range of machines and possible applications, and the special nature of the product, when ordering please specify **Diameter (D)**, **Thickness of cut (S)**, **Shank (A)** and **type of material to be worked**. Also specify the **machine** and the conditions of use (**RPM and feed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

| D    | h    | S  | H     | A        | Z | Placchette | Code       |
|------|------|----|-------|----------|---|------------|------------|
| 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 |

## Punte speciali - Special router bits

| D     | h    | S  | H     | A        | Z | Placchette | Code       |
|-------|------|----|-------|----------|---|------------|------------|
| 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     | DPD02DTOI5 |
| 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 |
| 16 | 27,5 | 22 | 87,5  | 16x50 | 3 | 3+1 HW     | DPD02SPLD5 |
| 18 | 36   | 31 | 96    | 16x50 | 3 | 4+1 HW     | DPD02SPNF5 |
| 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 |

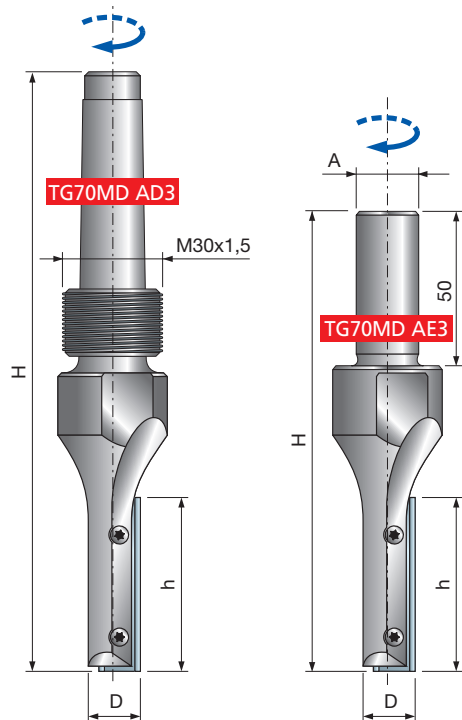
■ Punte elicoidali in PCD per la lavorazione, con ottima finitura (con medie velocità di avanzamento), di MDF, truciolare melaminico, truciolare grezzo, MDF e truciolare melaminico laccati, laminati plastici. È possibile costruire le punte con la placchetta frontale in diamante. Velocità di avanzamento 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

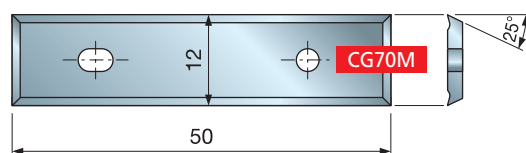
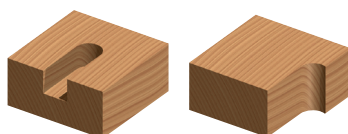
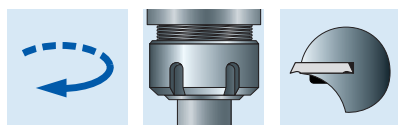


| D  | h  | H   | A   | Z | Codice     |
|----|----|-----|-----|---|------------|
| mm | mm | mm  | mm  |   | Code       |
| 16 | 50 | 179 | CM2 | 1 | TG70MD AD3 |
| 16 | 50 | 137 | 20  | 1 | TG70MD AE3 |

| Parti di ricambio      | Dimensioni  | Codice    |
|------------------------|-------------|-----------|
| Spare parts            | Dimensions  | 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.

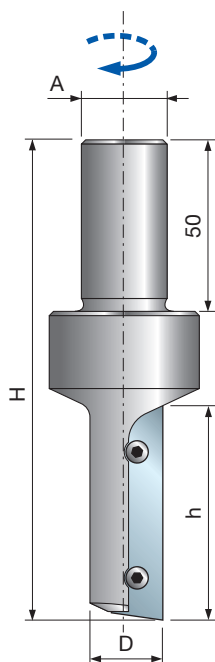
■ For normal or CNC overhead machines. Suitable for plunging and sizing soft and hard solid wood. The disposable knife guarantees a constant finish and cutting diameter. We suggest a gradual feed rate when entering into the workpiece.



# TG71MD

## PUNTA CON COLTELLO REVERSIBILE A GETTARE

### DISPOSABLE KNIFE STRAIGHT ROUTER BITS

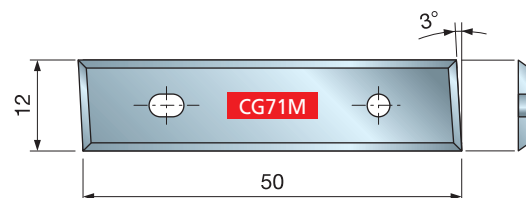
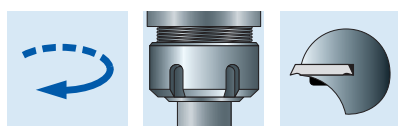


| D  | h  | H   | A  | Z | Codice     |
|----|----|-----|----|---|------------|
| mm | mm | mm  | mm |   | Code       |
| 16 | 50 | 120 | 20 | 1 | TG71MD AD3 |
| 18 | 50 | 120 | 20 | 1 | TG71MD BD3 |
| 20 | 50 | 120 | 20 | 1 | TG71MD CD3 |

| Parti di ricambio      | Dimensioni    | Codice    |
|------------------------|---------------|-----------|
| Spare parts            | Dimensions    | Code      |
| Coltello / Knife       | 50 x 12 x 1,5 | CG71M AA3 |
| Vite / Screw           | M4 x 9 x 6    | 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.

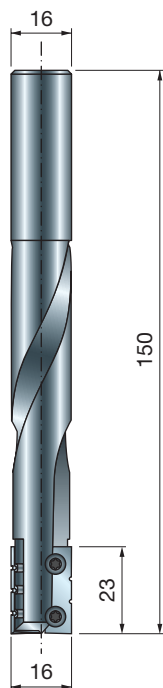
■ For normal or CNC overhead machines. Suitable for plunging and sizing chipboard, MDF, laminates and similar materials. The disposable knife guarantees a constant finish and cutting diameter. We suggest a gradual feed rate when entering into the workpiece.



# TG72MD

## PUNTA IN METALLO PESANTE

### HEAVY METAL BIT

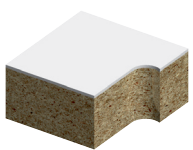
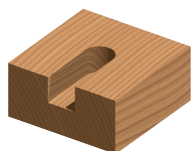
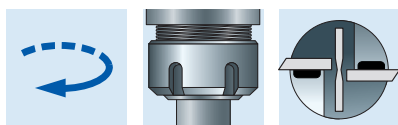


| D  | h  | H   | A  | Z | Codice     |
|----|----|-----|----|---|------------|
| mm | mm | mm  | mm |   | Code       |
| 16 | 23 | 150 | 16 | 2 | TG72MD AA3 |

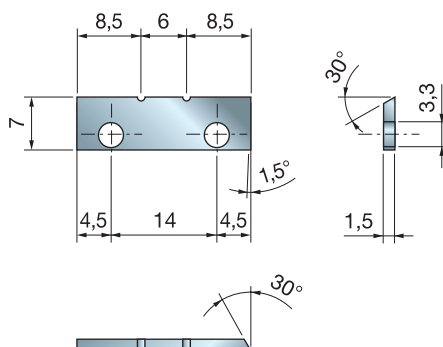
| Parti di ricambio                         | Dimensioni   | Codice    |
|-------------------------------------------|--------------|-----------|
| Spare parts                               | Dimensions   | Code      |
| Colt. a 2 intagli / Knife with 2 carvings | 23 x 7 x 1,5 | CG72M AB3 |
| Colt. a 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.

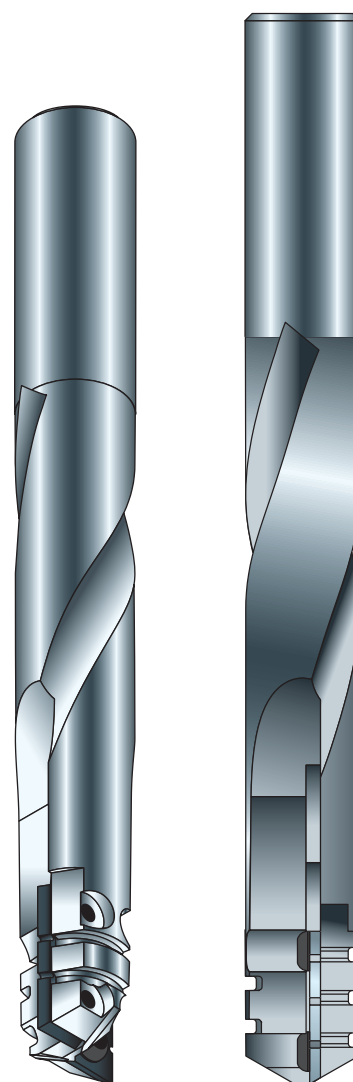
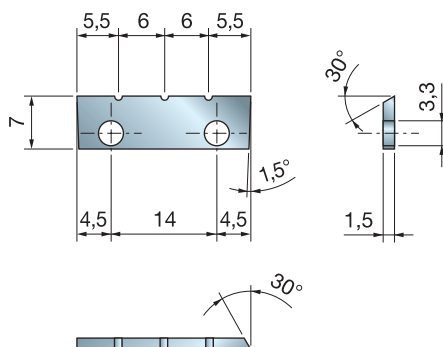
■ To use on CNC routers. Suitable for lock and hinge seats on windows and doors. The bit's design and construction material allow great vibration reductions when the tool is working while guaranteeing a high quality cutting performance.



CG72M AB3



CG72M AA3



# TM10MD

## PUNTA MULTITAGLIENTI CON COLTELLI REVERSIBILI A GETTARE DISPOSABLE KNIVES STRAIGHT ROUTER CUTTER

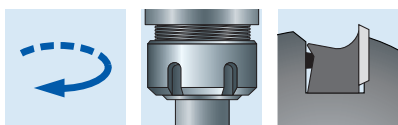


| D  | h  | H   | A  | Z  | Codice<br>Code |
|----|----|-----|----|----|----------------|
| 50 | 56 | 108 | 20 | 10 | TM10MD AA3     |
| 50 | 78 | 130 | 20 | 14 | TM10MD AC3     |

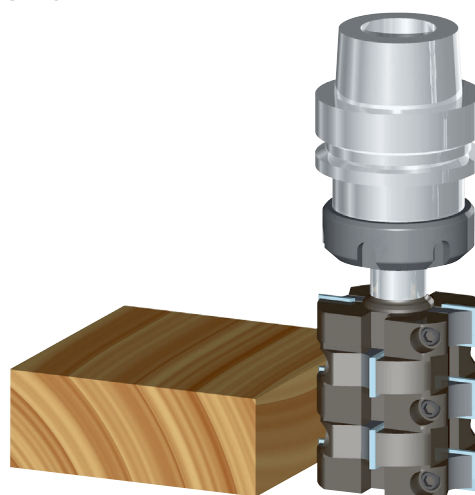
| Parti di ricambio<br>Spare parts | Dimensioni<br>Dimensions | Codice<br>Code |
|----------------------------------|--------------------------|----------------|
| Coltello / Knife                 | 12 x 12 x 1,5            | CG01M BA3      |
| Cuneo / Wedge                    | 15 x 10 x 8              | 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.

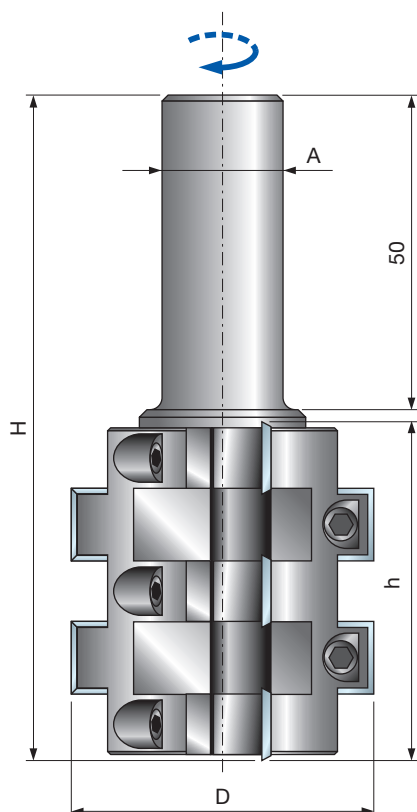
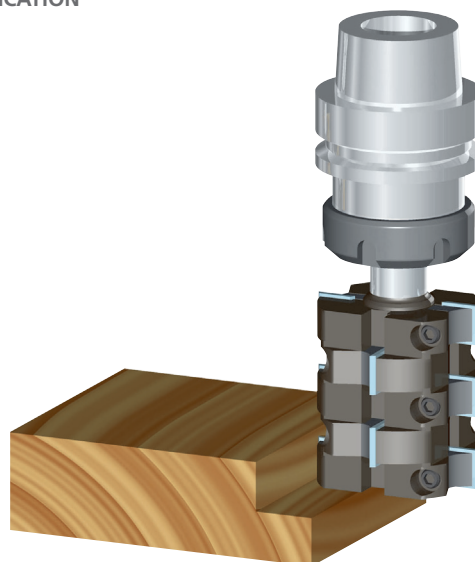
■ For overhead CNC machines. Ideal for roughing and sizing on wood and similar materials. Also suitable for cutting rebates. The multiple edge guarantees low noise running and optimum chip discharge.



### 1 ESEMPIO DI APPLICAZIONE EXAMPLE OF APPLICATION

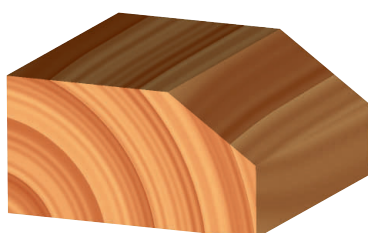
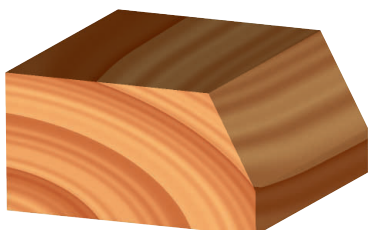
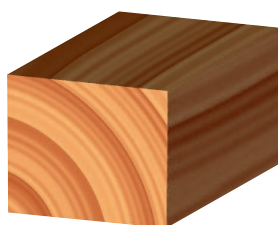
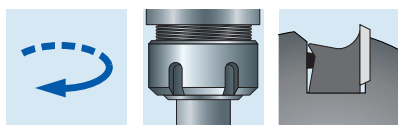


### 2 ESEMPIO DI APPLICAZIONE EXAMPLE OF APPLICATION



# 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 |

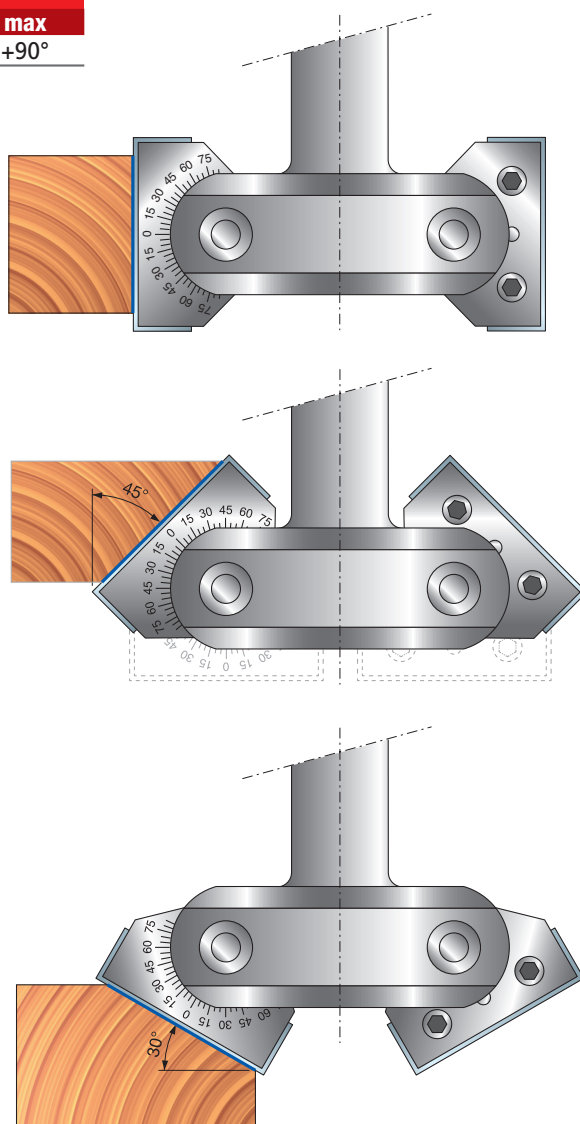
| Parti di ricambio                      | Dimensioni                                                                                        | Codice     |
|----------------------------------------|---------------------------------------------------------------------------------------------------|------------|
| 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°.

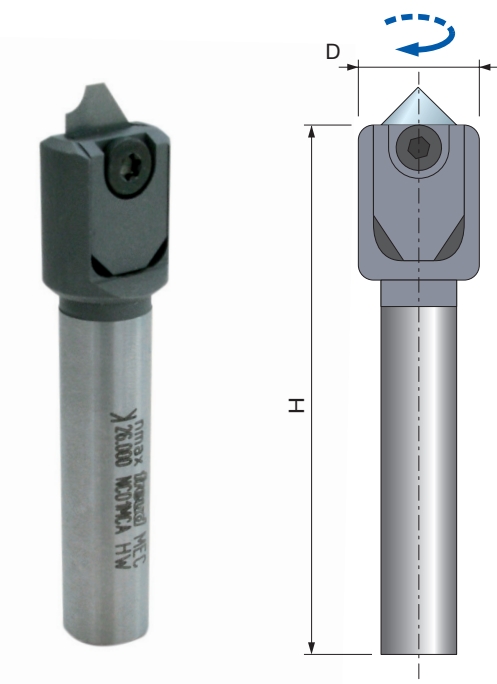
■ For overhead CNC machines. Ideal for bevelling on wood and similar materials. The special locking system of the cutting edges allows to accomplish bevels with angle adjustment over 90°

### Inclinaz. / Inclination

| min. | max  |
|------|------|
| -45° | +90° |



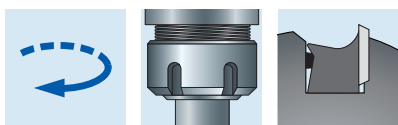




| D  | H  | A     | Codice    |
|----|----|-------|-----------|
| mm | mm | mm    | Code      |
| 16 | 70 | 12x50 | NC01MCA*  |
| 16 | 70 | 12x50 | NC01M-A** |

| Parti di ricambio      | Dimensioni | Codice    |
|------------------------|------------|-----------|
| Spare parts            | Dimensions | Code      |
| Vite / Screw           | M3,5 x 8   | VT71M BB9 |
| 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).

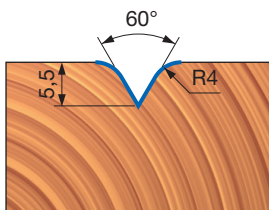
\*\*Per eseguire un solo tipo di profilo è sufficiente ordinare il corpo punta **NC01M-A** e n.1 coltello del profilo desiderato.

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

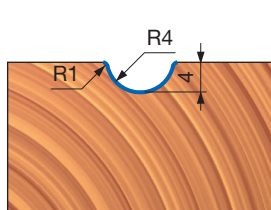
\*Item **NC01MCA** includes the router bit body and 10 knives (1 for each profile).

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

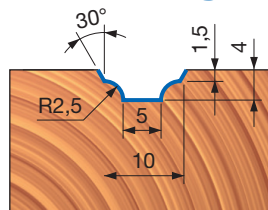
PROFILO / PROFILE 1



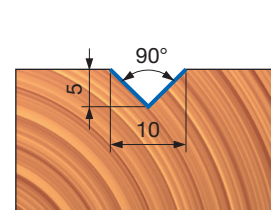
PROFILO / PROFILE 2



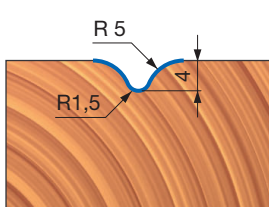
PROFILO / PROFILE 3



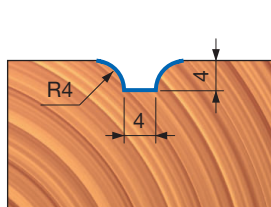
PROFILO / PROFILE 4



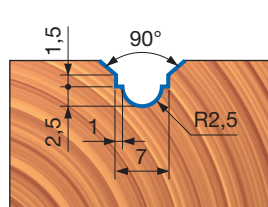
PROFILO / PROFILE 5



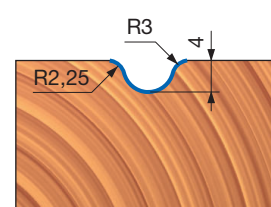
PROFILO / PROFILE 6



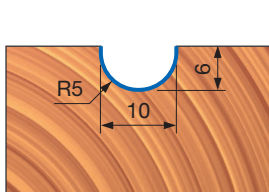
PROFILO / PROFILE 7



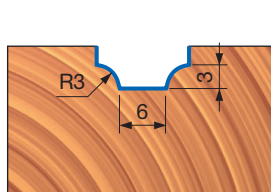
PROFILO / PROFILE 8



PROFILO / PROFILE 9



PROFILO / PROFILE 10

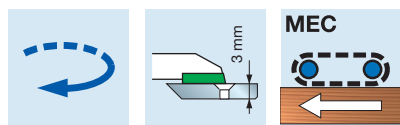




| D  | B  | A              | Max RPM | Codice      |
|----|----|----------------|---------|-------------|
| mm | mm | mm             | U/min.  | Code        |
| 50 | 35 | vedi / see (1) | 25.000  | NC02M...(1) |

| 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 |

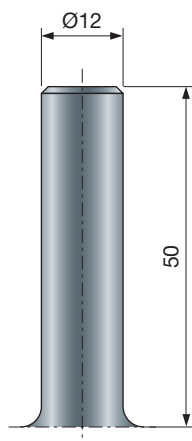
| Coltelli di ricambio | Dimensioni    | Codice     |
|----------------------|---------------|------------|
| Spare knives         | Dimensions    | Code       |
| 1                    | 17,5 x 35 x 3 | CC02M 110A |
| 2                    | 17,5 x 35 x 3 | CC02M 110B |
| 3                    | 17,5 x 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 |



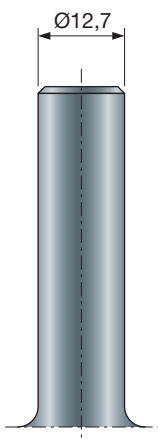
**PERFORMANCE**  
Coltelli Riaffilabili  
**SYSTEM**  
Resharpenable Knives

- 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).

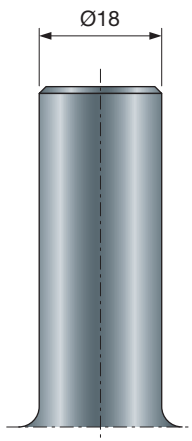
- (1) Le punte **NC02M** sono disponibili con i seguenti attacchi e rispettivi codici, che andranno riportati sull'ordine.
- (1) Router Bits **NC02M** are available with the following shanks. Please use the indicated shank code numbers when ordering.



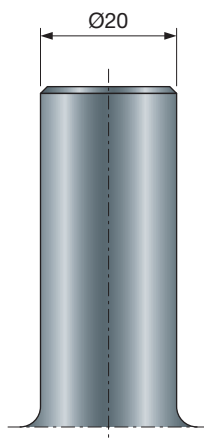
NC02M11012



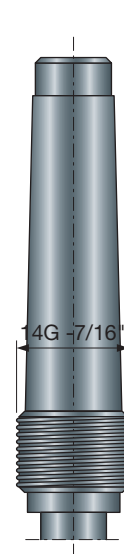
NC02M11050



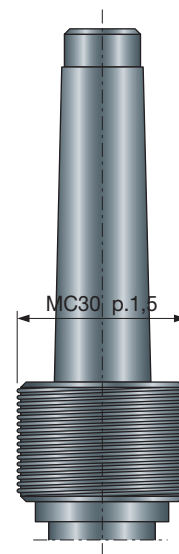
NC02M11018



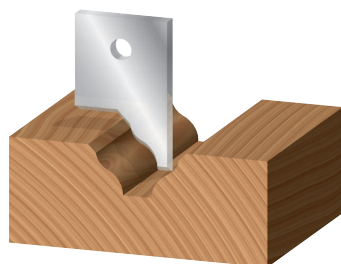
NC02M11020



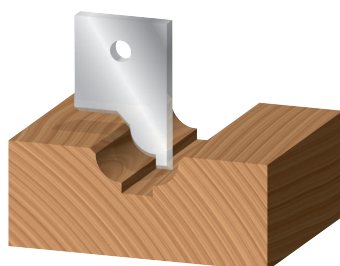
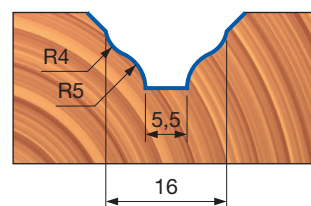
NC02M110DE



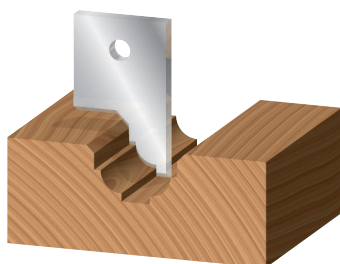
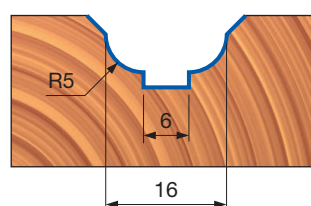
NC02M110DG



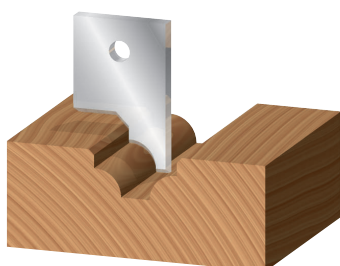
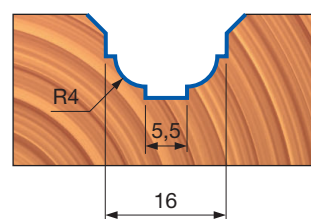
PROFILO / PROFILE 1



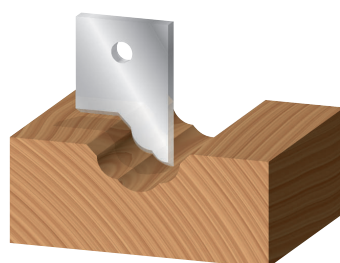
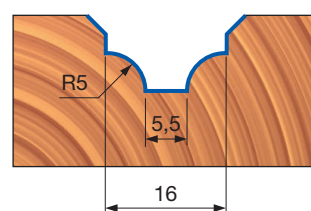
PROFILO / PROFILE 2



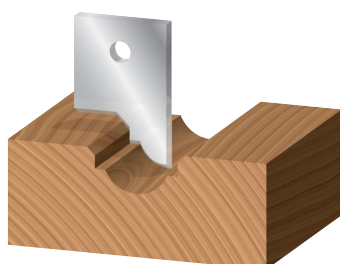
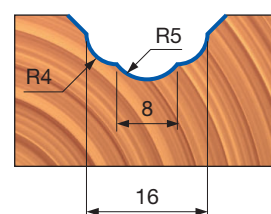
PROFILO / PROFILE 3



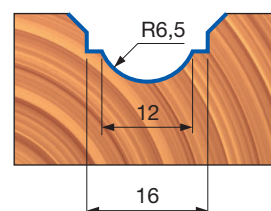
PROFILO / PROFILE 4



PROFILO / PROFILE 5



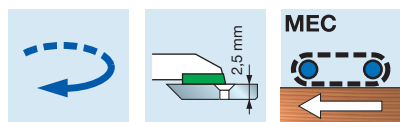
PROFILO / PROFILE 6



# 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.

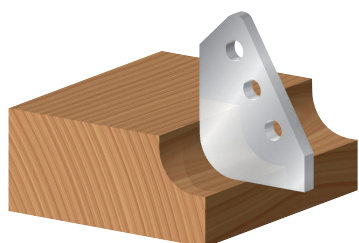
\*L'articolo **NC21MCA** è composto dal corpo punta e da n. 6 coltelli (2 per ogni tipo di profilo illustrato).

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

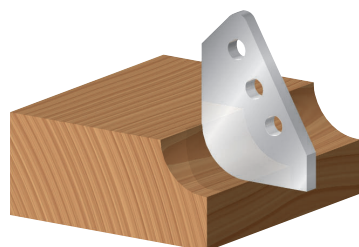
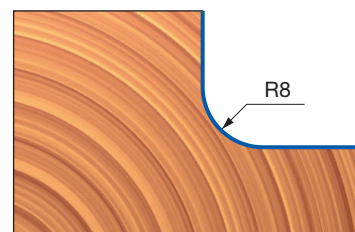
■ For profiling soft and hard solid woods, exotic woods, chipboard and MDF on normal and CNC overhead routing machines.

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

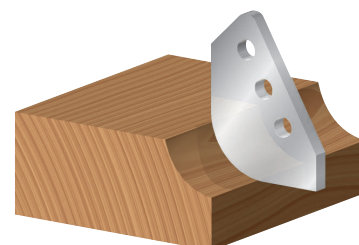
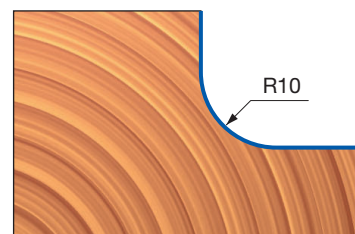
\*\*For making one profile only, please order the router bit body **NC21M-A** and 2 knives with the desired profile.



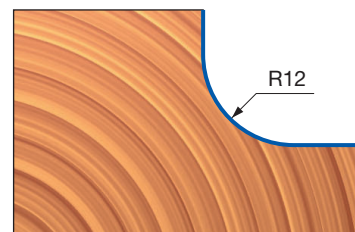
PROFILO / PROFILE 1



PROFILO / PROFILE 2



PROFILO / PROFILE 3

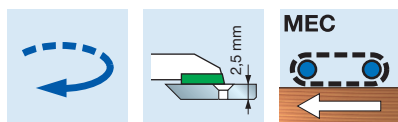




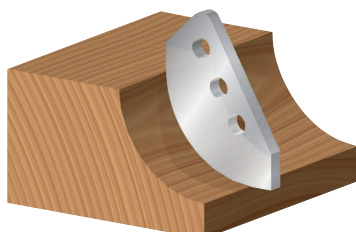
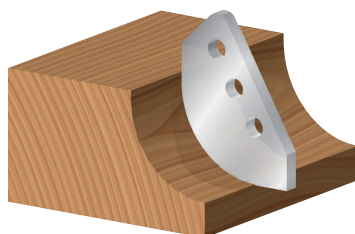
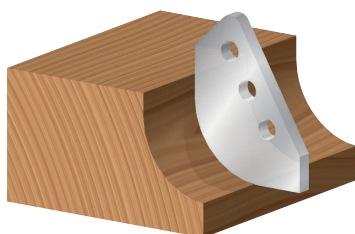
# NC23MCA

## PUNTA PORTACOLTELLI PROFILATI

## CNC ROUTER CUTTER WITH PROFILED KNIVES



**PERFORMANCE**  
Coltelli Riaffilabili  
**SYSTEM**  
Resharpenable 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).

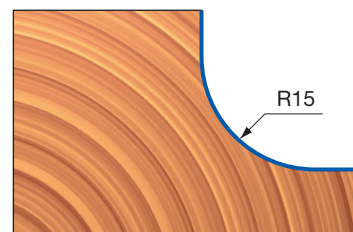
\*\*Per eseguire un solo tipo di profilo è sufficiente ordinare il corpo punta **NC23M-A** e 2 coltelli del profilo desiderato.

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

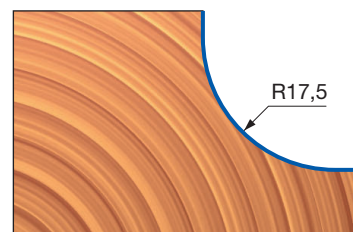
\*Item **NC23MCA** includes the router bit body and 6 knives (2 for each profile).

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

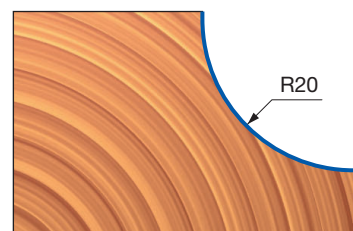
PROFILO / PROFILE 1



PROFILO / PROFILE 2



PROFILO / PROFILE 3

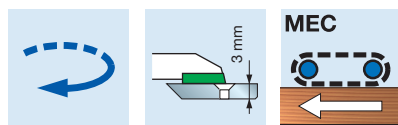




# NC30MCA

## PUNTA PORTACOLTELLI MULTIRAGGIO

## CNC ROUTER CUTTER WITH MULTIRADIUS KNIVES



**PERFORMANCE**  
Coltelli Riaffilabili  
**SYSTEM**  
Resharpenable 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 |

■ 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).

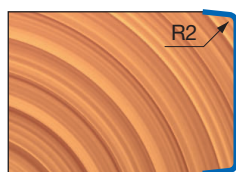
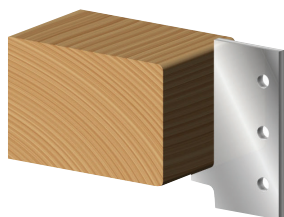
\*\*Per eseguire un solo tipo di profilo è sufficiente ordinare il corpo punta **NC30M-A** e 2 coltelli del profilo desiderato.

■ 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.

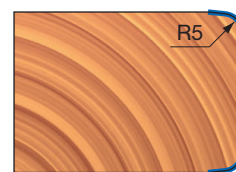
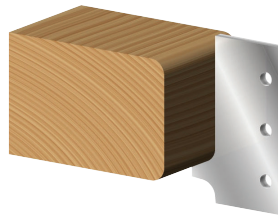
\*Item **NC30MCA** includes the router bit body and 12 knives (2 for each profile).

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

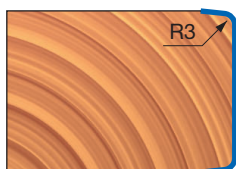
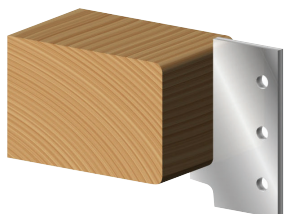
PROFILO / PROFILE 1



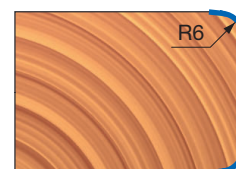
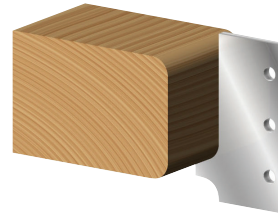
PROFILO / PROFILE 4



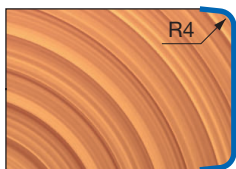
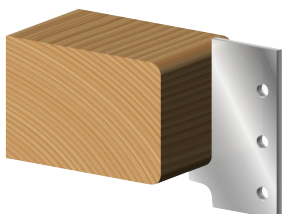
PROFILO / PROFILE 2



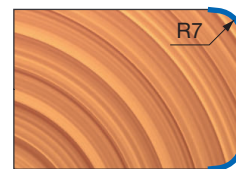
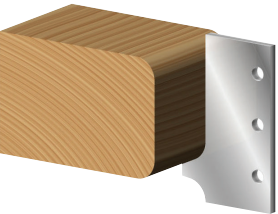
PROFILO / PROFILE 5



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.

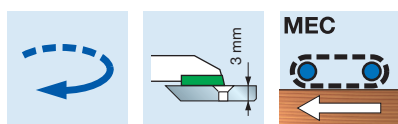
\*L'articolo **NC30MCB** è composto dal corpo punta e da n. 12 coltelli (2 per ogni tipo di profilo illustrato).

\*\*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.

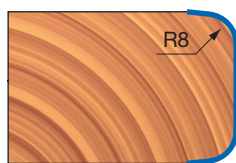
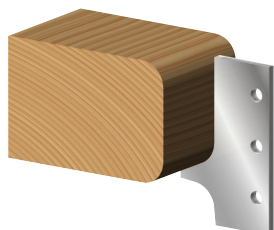
\*Item **NC30MCB** includes the router bit body and 12 knives (2 for each profile).

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

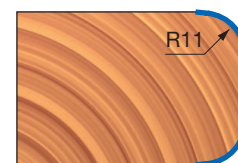
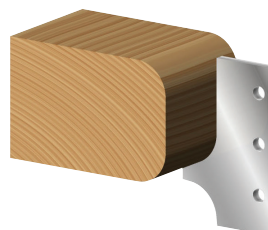


**PERFORMANCE**  
Coltelli Riaffilabili  
**SYSTEM**  
Resharpenable Knives

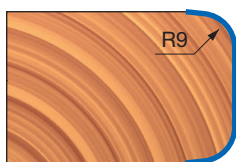
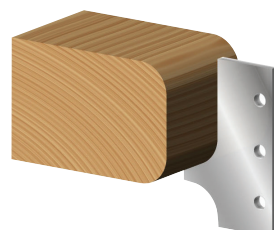
PROFILO / PROFILE 1



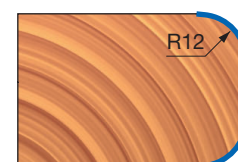
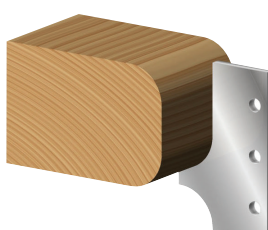
PROFILO / PROFILE 4



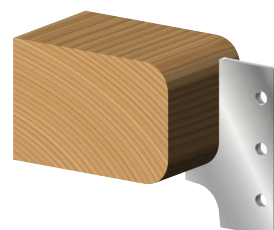
PROFILO / PROFILE 2



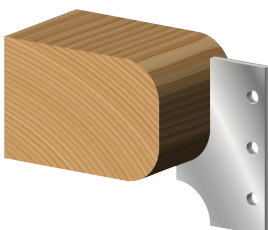
PROFILO / PROFILE 5



PROFILO / PROFILE 3



PROFILO / PROFILE 6



# NC33MCA

## PUNTA PORTACOLTELLI PROFILATI

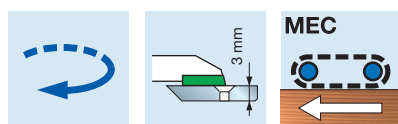
## CNC ROUTER CUTTER WITH PROFILED KNIVES



| 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).

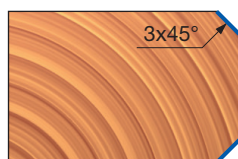
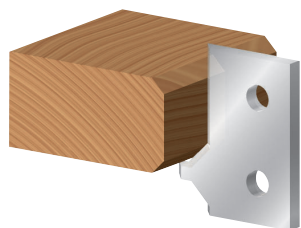
\*\*Per eseguire un solo tipo di profilo è sufficiente ordinare il corpo punta **NC33M-A** e 2 coltelli del profilo desiderato.

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

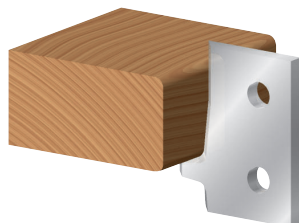
\*Item **NC33MCA** includes the router bit body and 10 knives (2 for each profile).

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

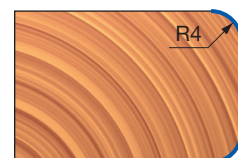
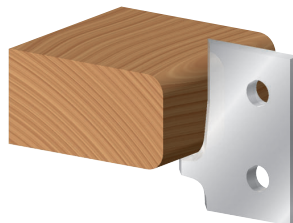
PROFILO / PROFILE 1



PROFILO / PROFILE 2



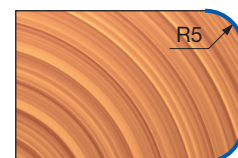
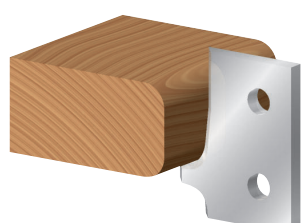
PROFILO / PROFILE 4



PROFILO / PROFILE 3



PROFILO / PROFILE 5





# NC40MCA

## PUNTA PORTACOLTELLI PROFILATI

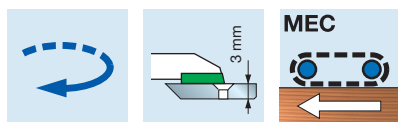
## CNC ROUTER CUTTER WITH PROFILED KNIVES



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

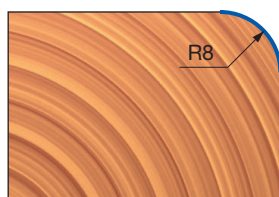
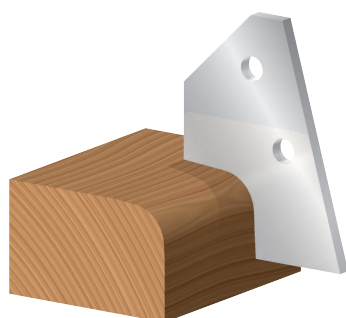
\*\*Per eseguire un solo tipo di profilo è sufficiente ordinare il corpo punta **NC40M-A** e 2 coltelli del profilo desiderato.

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

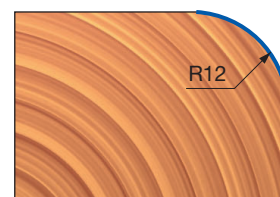
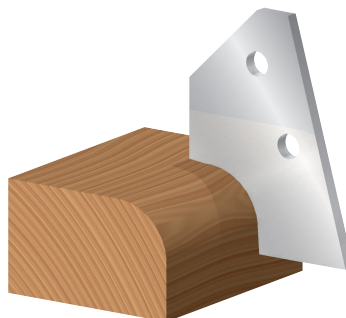
\*Item **NC40MCA** includes the router bit body and 8 knives (2 for each profile).

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

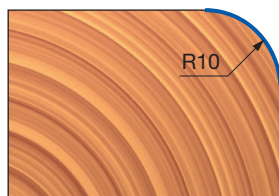
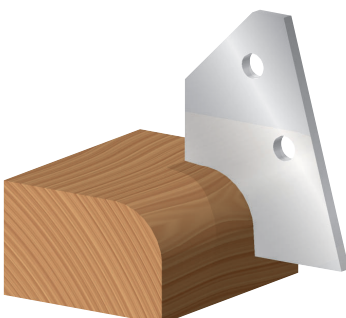
PROFILO / PROFILE 1



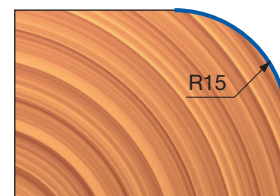
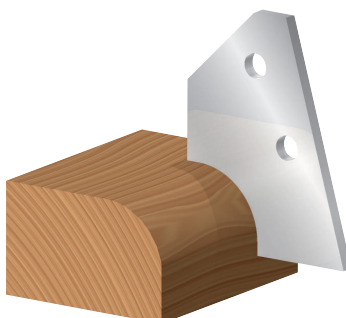
PROFILO / PROFILE 3



PROFILO / PROFILE 2



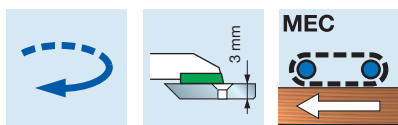
PROFILO / PROFILE 4



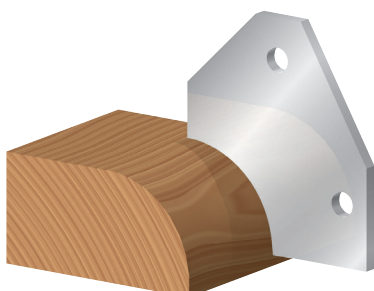
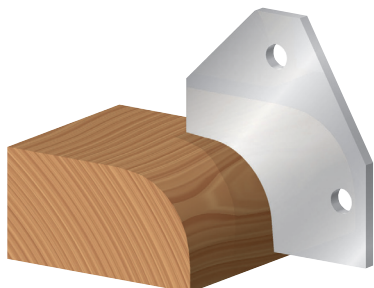
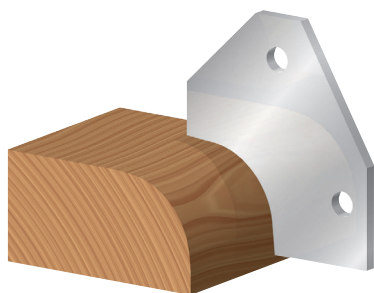
# NC50MCA

## PUNTA PORTACOLTELLI PROFILATI

## CNC ROUTER CUTTER WITH PROFILED KNIVES



**PERFORMANCE**  
Coltelli Riaffilabili  
**SYSTEM**  
Resharpenable 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 |

■ 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).

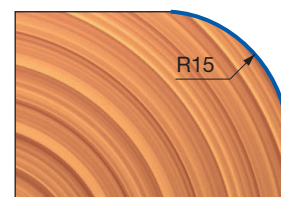
\*\*Per eseguire un solo tipo di profilo è sufficiente ordinare il corpo punta **NC50M-A** e 2 coltelli del profilo desiderato.

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

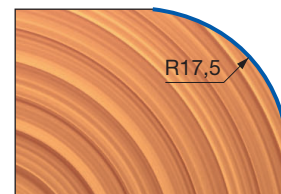
\*Item **NC50MCA** includes the router bit body and 6 knives (2 for each profile).

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

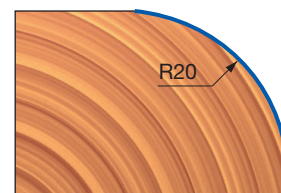
PROFILO / PROFILE **1**



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 |

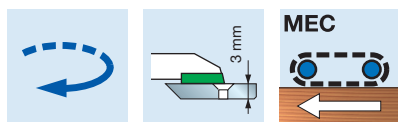
| Coltelli di ricambio                                                              | Dimensioni  | Codice    |
|-----------------------------------------------------------------------------------|-------------|-----------|
| Spare knives                                                                      | 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.

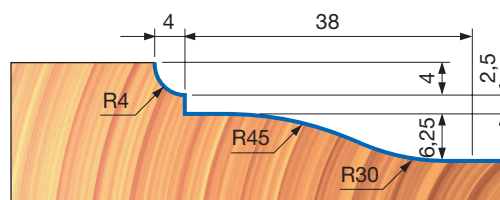
\*L'articolo **NC60MCA** è composto dal corpo punta e da n. 2 coltelli.

■ 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 |

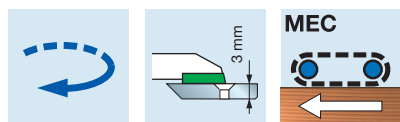
| Coltelli di ricambio                                                              | Dimensioni  | Codice    |
|-----------------------------------------------------------------------------------|-------------|-----------|
| Spare knives                                                                      | 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.

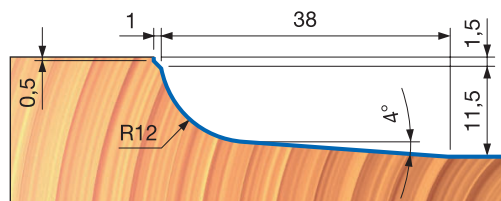
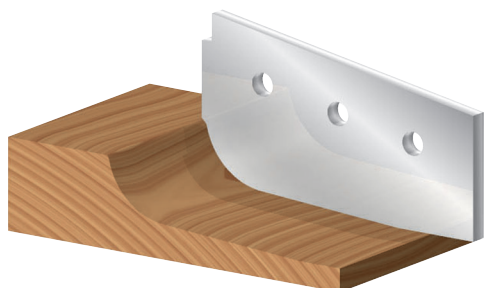
\*L'articolo **NC62MCA** è composto dal corpo punta e da n. 2 coltelli.

■ 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 |

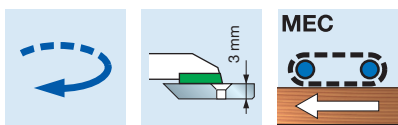
| Coltelli di ricambio | Dimensioni  | Codice    |
|----------------------|-------------|-----------|
| Spare knives         | Dimensions  | Code      |
| 1                    | 60 x 36 x 3 | CC64M D01 |
| 2                    | 60 x 36 x 3 | CC64M D02 |
| 3                    | 60 x 36 x 3 | CC64M D03 |
| 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.

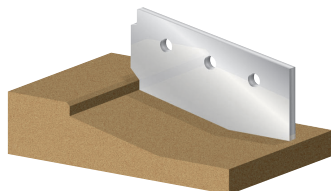
■ For profiling hard wood, chipboard and MDF on normal and CNC overhead routing machines.

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

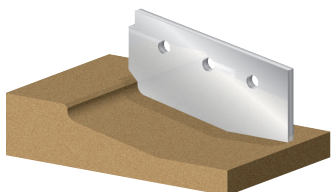
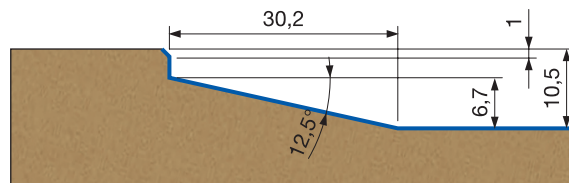
\*\*For making one profile only, please order the router bit body NC64M-A and 2 knives with the desired profile.



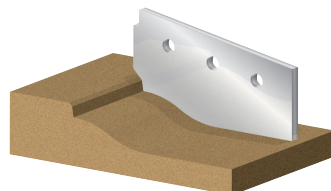
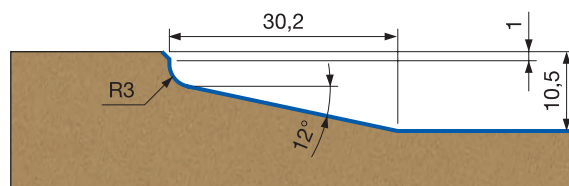
**PERFORMANCE**  
Coltelli Riaffilabili  
**SYSTEM**  
Resharpenable Knives



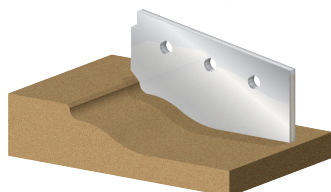
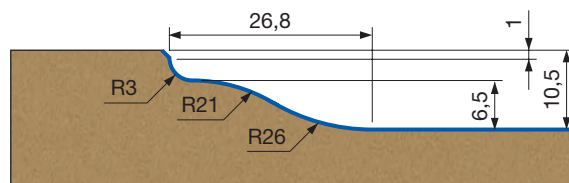
PROFILO / PROFILE 1



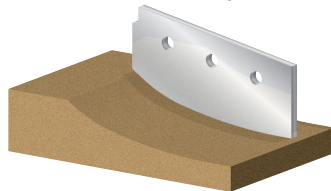
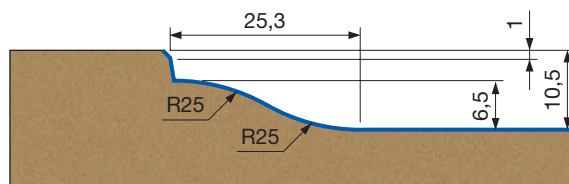
PROFILO / PROFILE 2



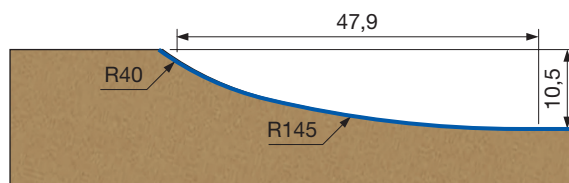
PROFILO / PROFILE 3



PROFILO / PROFILE 4



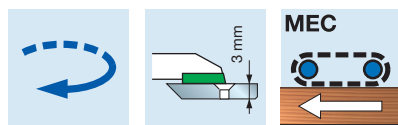
PROFILO / PROFILE 5



**freud**

# TD54MD

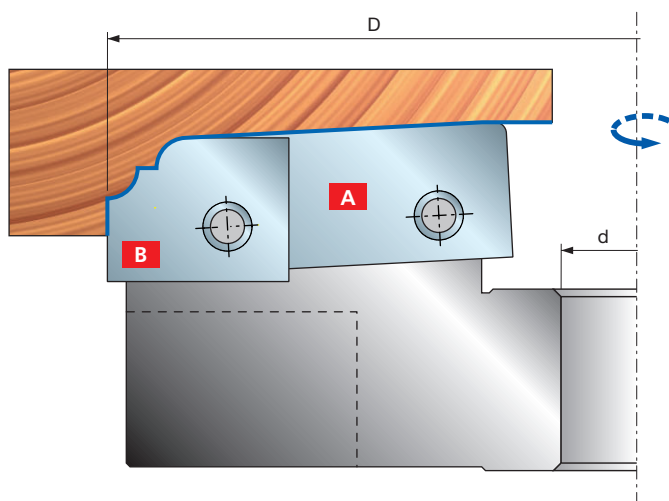
## PIATTABANDE MULTIPROFILO PER SPECCHIETTI DI ANTINA CNC MULTIPROFILE RAISED PANEL ROUTER CUTTER



### PERFORMANCE Coltelli Riaffilabili SYSTEM 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      | CN54M AA9 |
|                   | Cuneo / Wedge      | CN54M AB9 |
| BA3               | Cuneo / Wedge      | CN54M BA9 |
|                   | Cuneo / Wedge      | CN54M BB9 |
|                   | Vite / Screw       | VT03M CC9 |
|                   | Vite / Screw       | VT08M AD9 |
|                   | Vite / Screw       | VT08M AE9 |
|                   | Chiave / Allen key | CB03M EA9 |
|                   | Mandrino / Chuck   | 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.

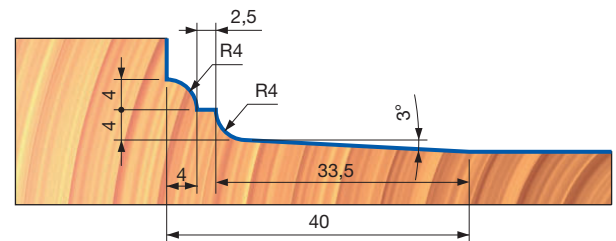
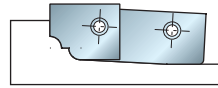
- The new **TD54MD** small panel cutterheads, thanks to their double-knives, allow for an excellent finish on all kinds of wood, from the hardest to the softest, working both with and perpendicular to the grain, regardless of the operating conditions. Their reduced size, along with the possibility of 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.



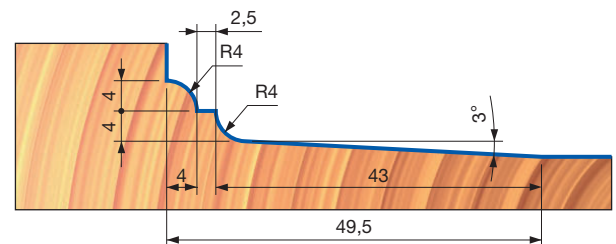
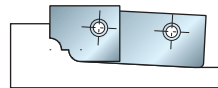
# ESEMPI DI PROFILI REALIZZABILI

## EXAMPLE OF PROFILES

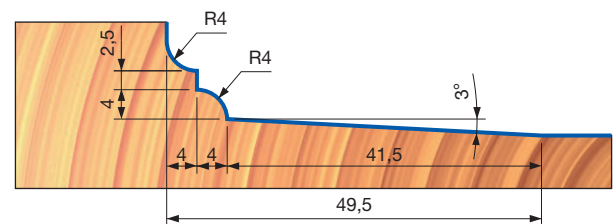
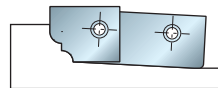
PROFILO / PROFILE 1



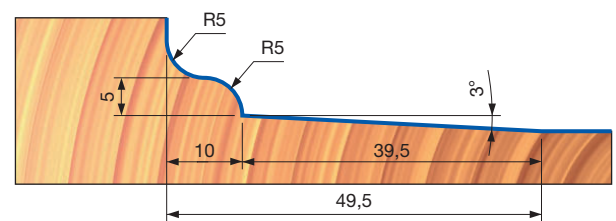
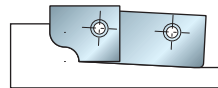
PROFILO / PROFILE 2



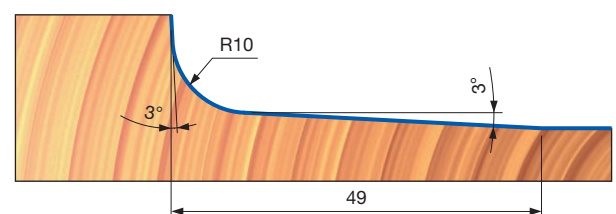
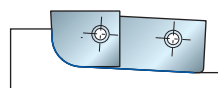
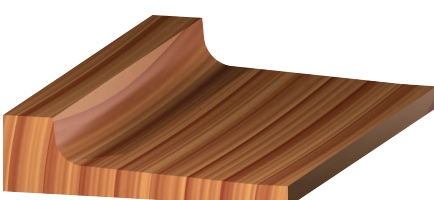
PROFILO / PROFILE 3



PROFILO / PROFILE 4



PROFILO / PROFILE 5

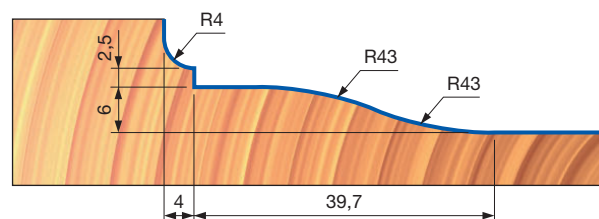
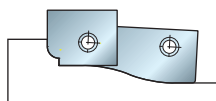
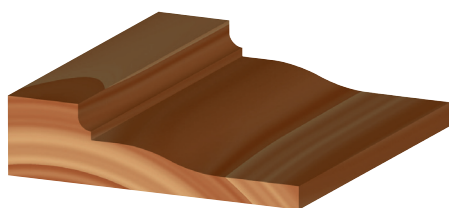




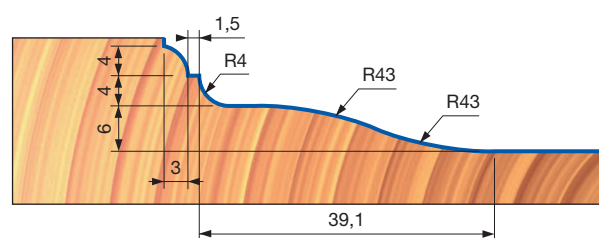
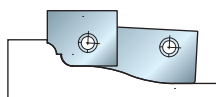
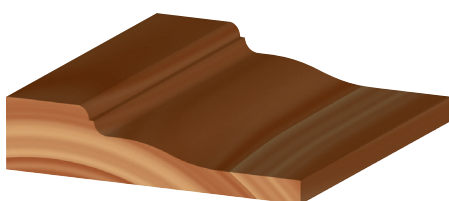
## ESEMPI DI PROFILI REALIZZABILI

### EXAMPLE OF PROFILES

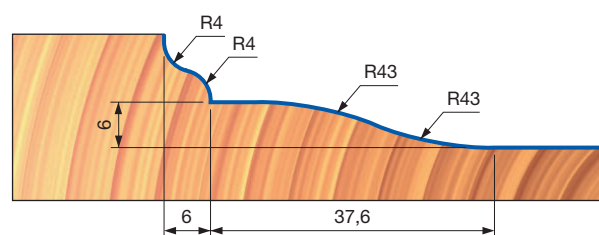
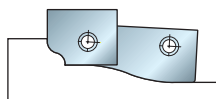
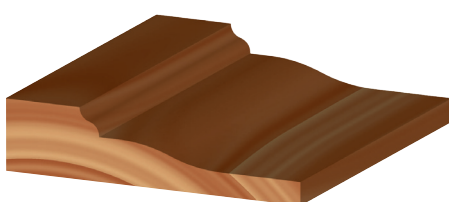
PROFILO / PROFILE **6**



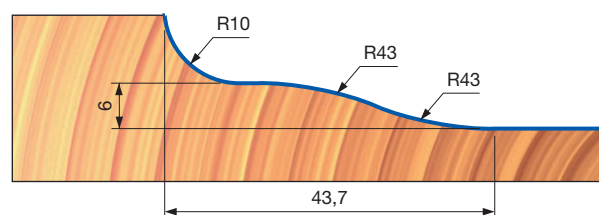
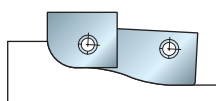
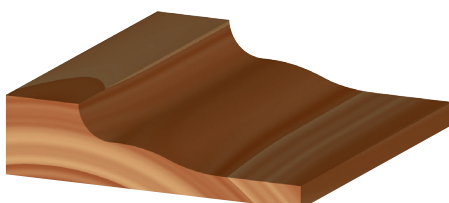
PROFILO / PROFILE **7**



PROFILO / PROFILE **8**



PROFILO / PROFILE **9**



# NC90MCA

PUNTA PER PROFILO TELAIO ANTINA

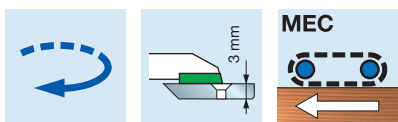
CNC CABINET DOOR ROUTER CUTTER - PROFILE



| 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 Coltelli Riaffilabili SYSTEM 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.

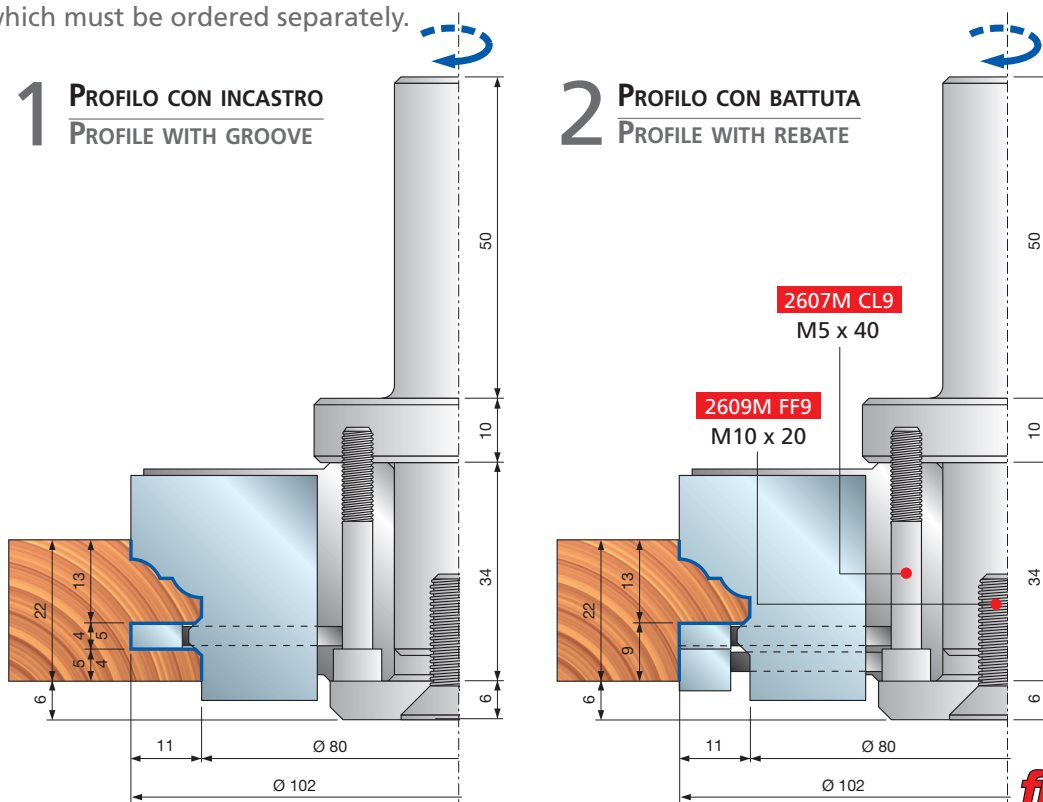
■ Ideale per l'esecuzione di specchietti per antine su legno. Ideale per l'esecuzione di profili di antine su legni naturali teneri e duri, legni esotici, truciolari e MDF con pantografi normali o CNC. \*L'articolo **NC90MCA** è composto dal corpo punta e da n. 10 coltelli (2 per ogni tipo di profilo 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**.

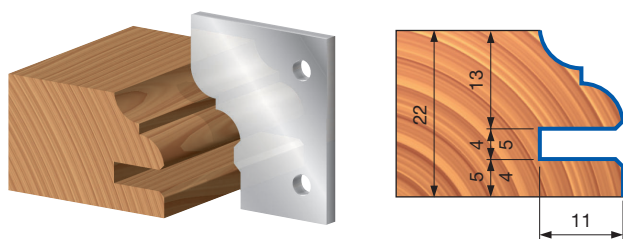
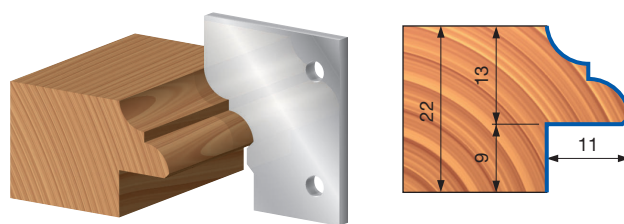
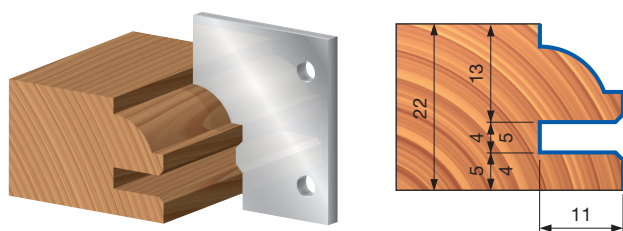
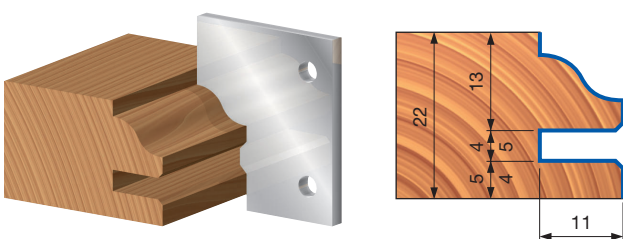
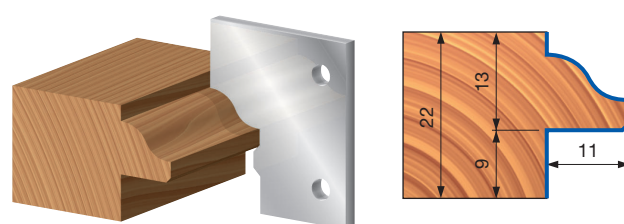
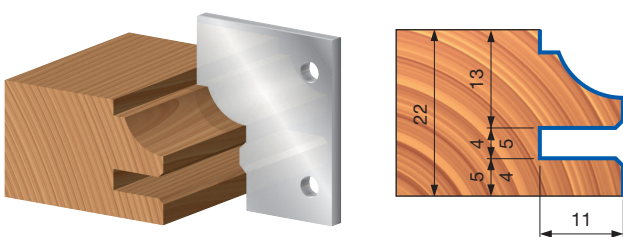
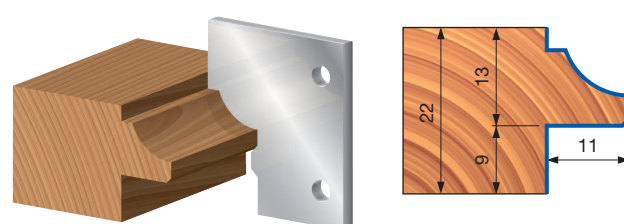
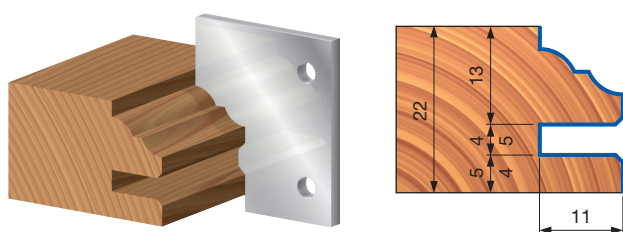
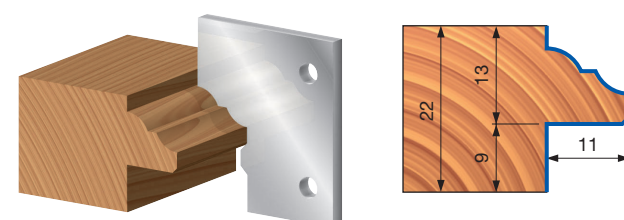
■ For profiling hard wood, chipboard and MDF on normal and CNC overhead routing machines. \*Item **NC64MCA** includes the router bit body and 10 knives (2 for each profile).

\*\*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**.



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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**

# NC91MCA

PUNTA PER CONTROPROFILO TELAIO ANTINA

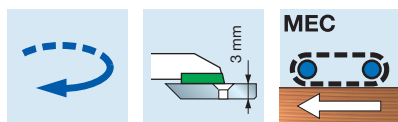
CNC CABINET DOOR ROUTER CUTTER - SCRIBE



| 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  |
| Inserto 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.

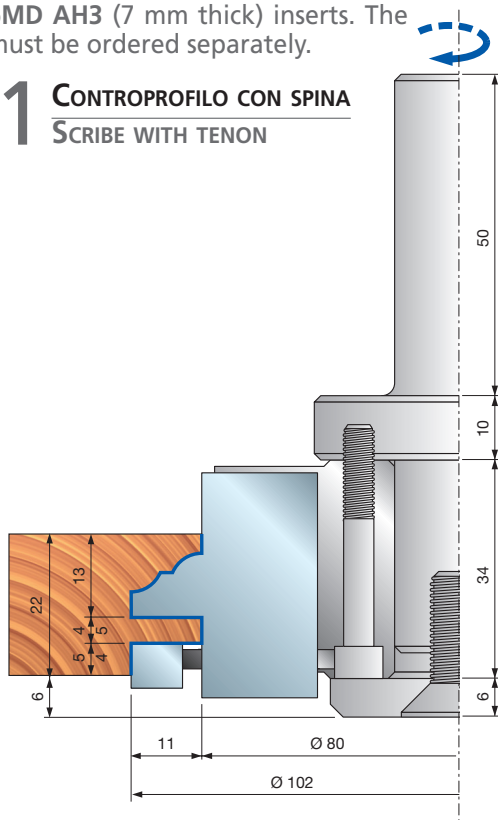
■ Ideale per l'esecuzione di controprofili di antine su legni naturali teneri e duri, legni esotici, truciolari e MDF con pantografi normali o CNC. \*L'articolo **NC91MCA** è composto dal corpo punta e da n. 10 coltelli (2 per ogni tipo di profilo illustrato). \*\*Per eseguire un solo tipo di profilo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

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

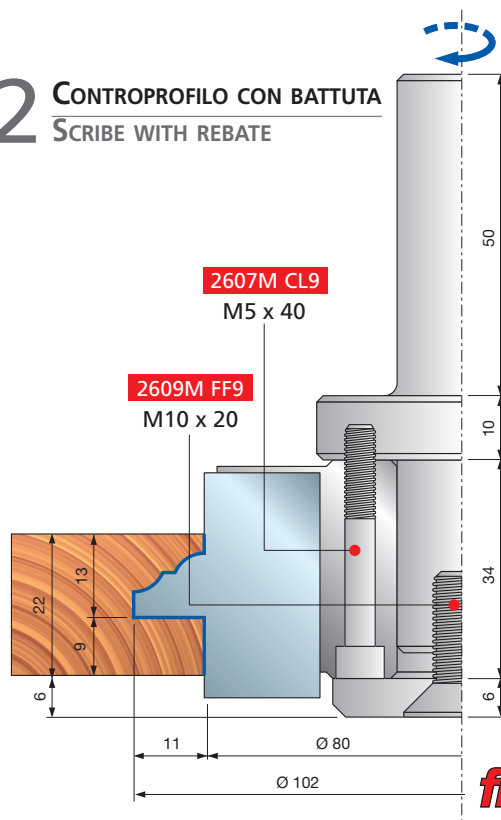
■ For profiling soft and hard solid woods, exotic woods, chipboard and MDF on normal and CNC overhead routing machines. \*Item **NC91MCA** includes the router bit body and 10 knives (2 for each profile). \*\*For making one profile only, please order the router bit body **NC91M-A** and 2 knives with the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

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

### 1 CONTROPROFILO CON SPINA SCRIBE WITH TENON

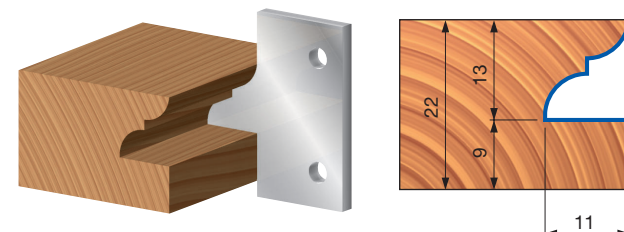
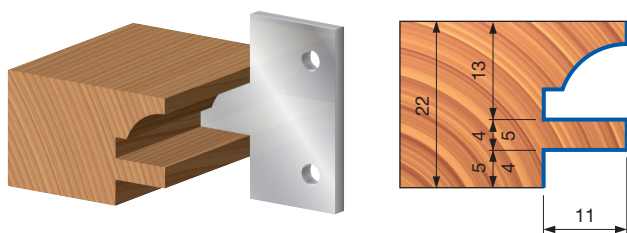
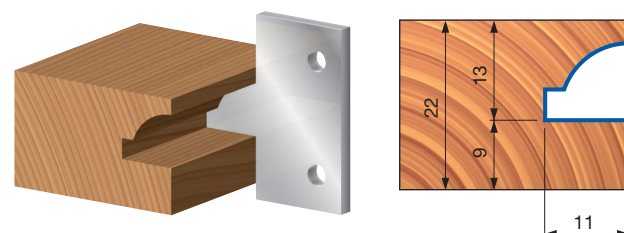
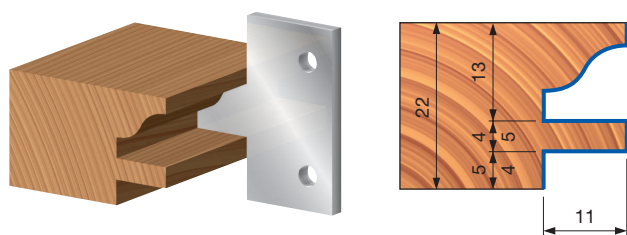
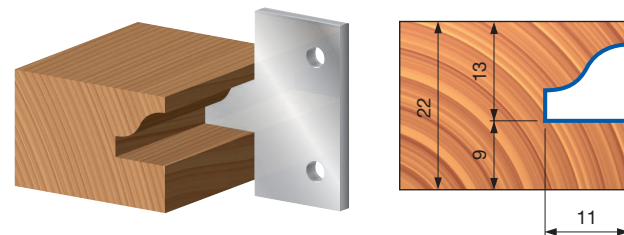
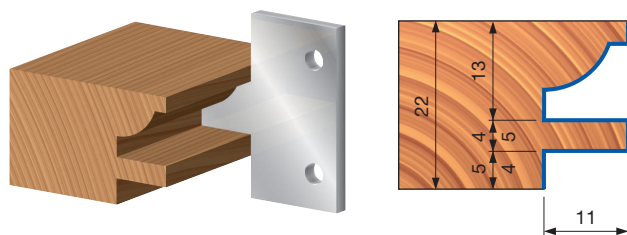
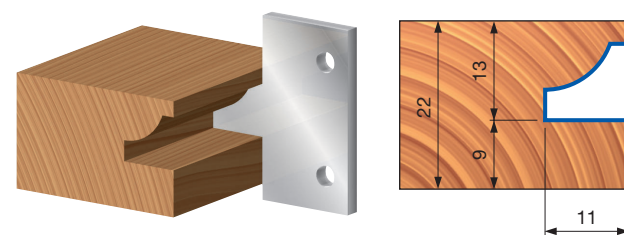
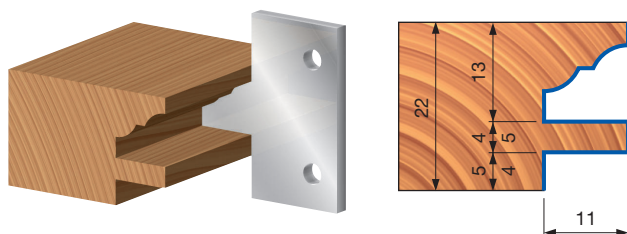
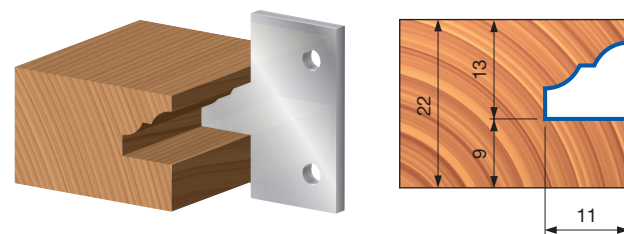


### 2 CONTROPROFILO CON BATTUTA SCRIBE WITH REBATE



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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

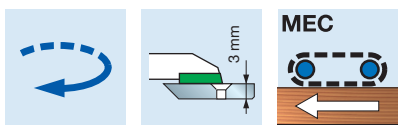
REGISTERED  
PATENT



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

| D     | B  | d  | Z | R | Codice<br>Code |
|-------|----|----|---|---|----------------|
| mm    | mm | mm |   |   |                |
| 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<br>Spare parts         | Dimensioni<br>Dimensions | Codice<br>Code |
|------------------------------------------|--------------------------|----------------|
| 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    |
| 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     |
| 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      |
| 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  
Coltelli Riaffilabili  
SYSTEM  
Resharpenable Knives

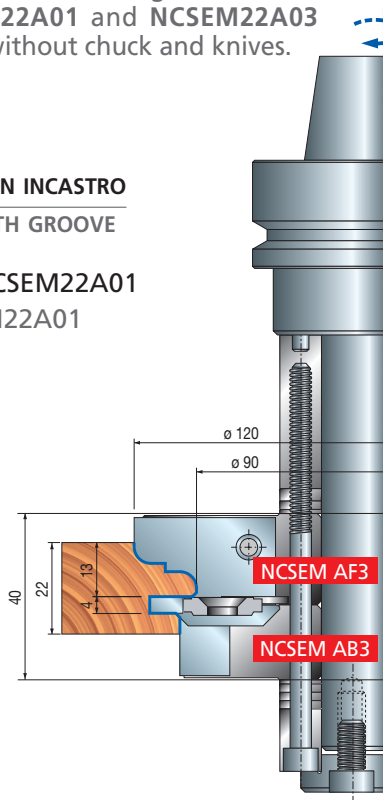
■ Corpo in lega leggera (Ergal). Per la pulizia non utilizzare prodotti contenenti soda caustica. Gli utensili NCSEM22A01 e NCSEM22A03 non comprendono il mandrino né i coltelli.

■ 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<br>Spare knives | Dimensioni<br>Dimensions | Codice<br>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      |

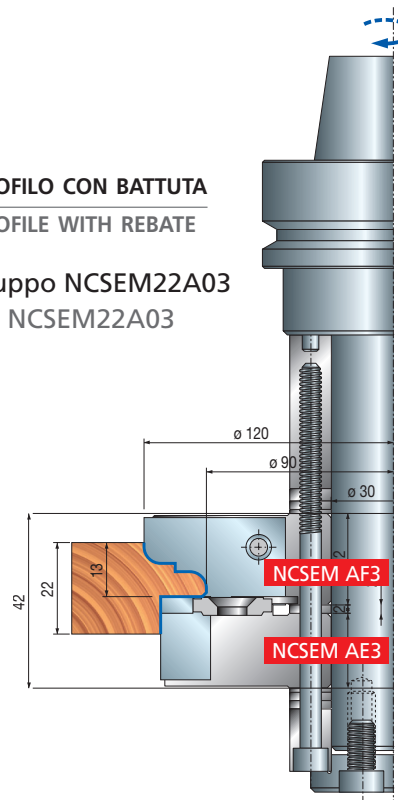
## 1 PROFILO CON INCASTRO PROFILE WITH GROOVE

- Gruppo NCSEM22A01
- Set NCSEM22A01



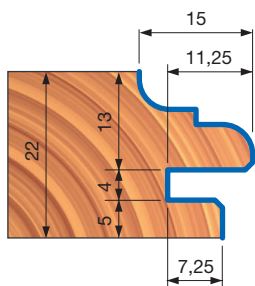
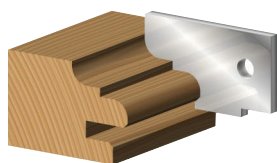
## 2 PROFILO CON BATTUTA PROFILE WITH REBATE

- Gruppo NCSEM22A03
- Set NCSEM22A03

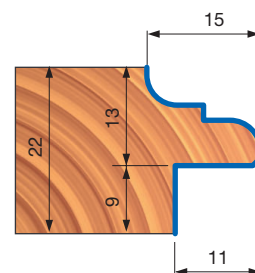
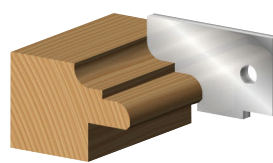


freud

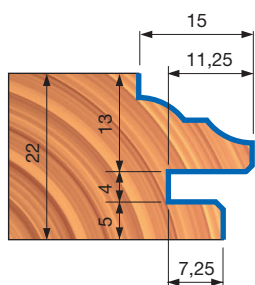
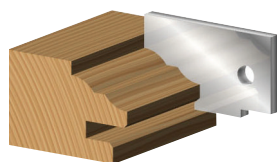
PROFILO / PROFILE 1



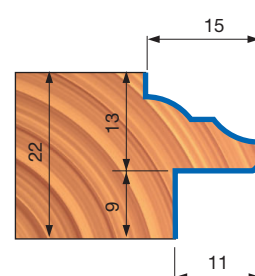
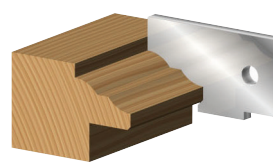
PROFILO / PROFILE 1A



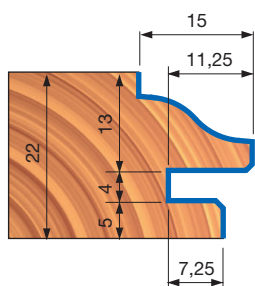
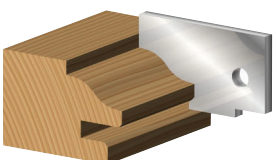
PROFILO / PROFILE 2



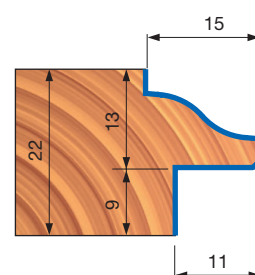
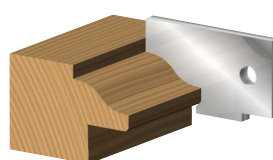
PROFILO / PROFILE 2A



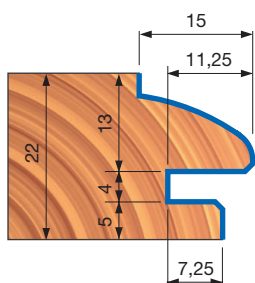
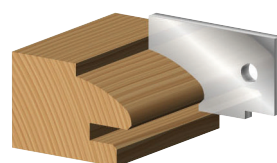
PROFILO / PROFILE 3



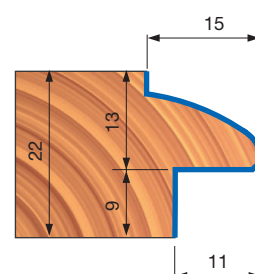
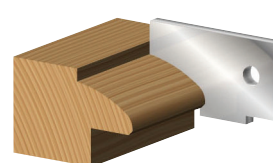
PROFILO / PROFILE 3A



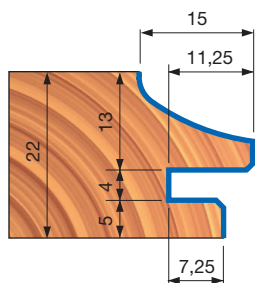
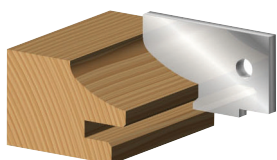
PROFILO / PROFILE 4



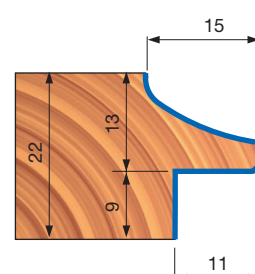
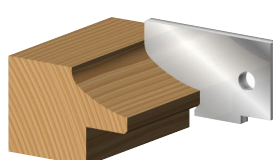
PROFILO / PROFILE 4A



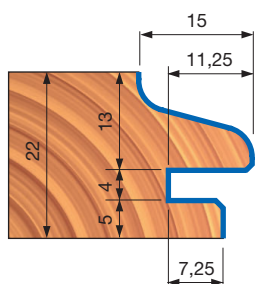
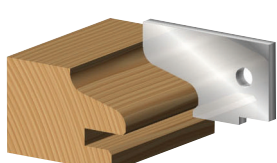
PROFILO / PROFILE 5



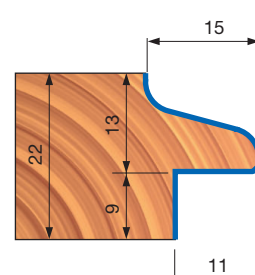
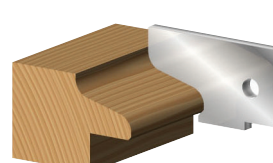
PROFILO / PROFILE 5A



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

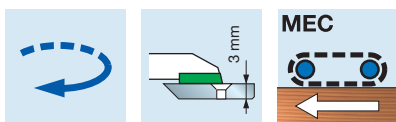
REGISTERED  
PATENT

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



| D   | B  | d  | Z | R | Codice<br>Code |
|-----|----|----|---|---|----------------|
| mm  | mm | mm |   |   |                |
| 112 | 20 | 30 | 2 | 2 | NCSEM AD3      |
| 120 | 29 | 30 | 2 | 2 | NCSEM AG3      |

| Parti di ricambio<br>Spare parts         | Dimensioni<br>Dimensions | Codice<br>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

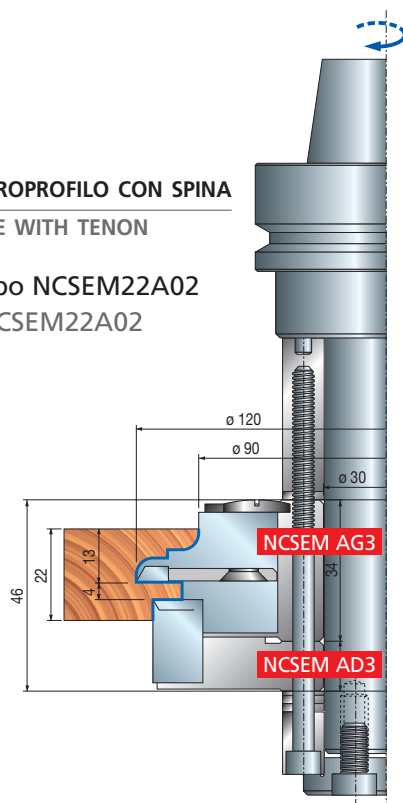
- Corpo in lega leggera (Ergal). Per la pulizia non utilizzare prodotti contenenti soda caustica.
- Light alloy body (Ergal). For cleaning do not use products containing caustic soda.

| Coltelli di ricambio<br>Spare knives | Dimensioni<br>Dimensions | Codice<br>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. 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.

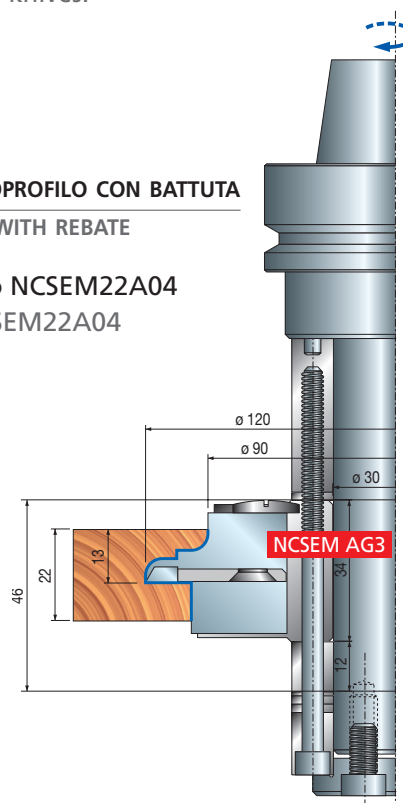
## 1 CONTROPROFILO CON SPINA SCRIBE WITH TENON

- Gruppo NCSEM22A02
- Set NCSEM22A02



## 2 CONTROPROFILO CON BATTUTA SCRIBE WITH REBATE

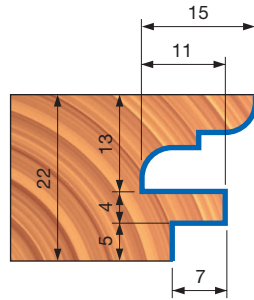
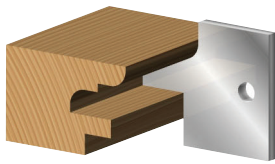
- Gruppo NCSEM22A04
- Set NCSEM22A04



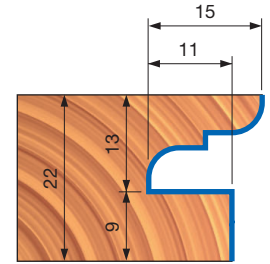
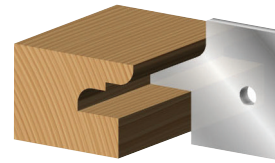
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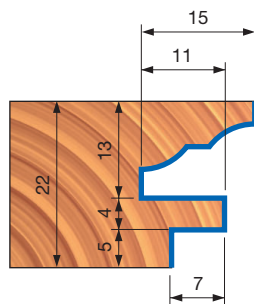
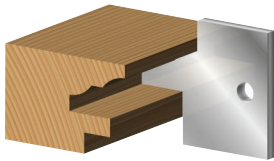
CONTROPROFILO / SCRIBE **1**



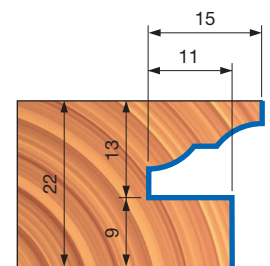
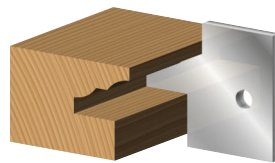
CONTROPROFILO / SCRIBE **1A**



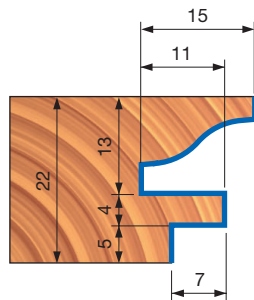
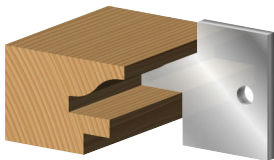
CONTROPROFILO / SCRIBE **2**



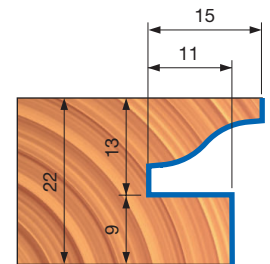
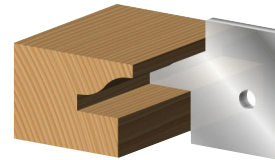
CONTROPROFILO / SCRIBE **2A**



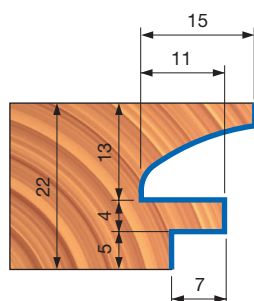
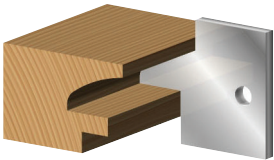
CONTROPROFILO / SCRIBE **3**



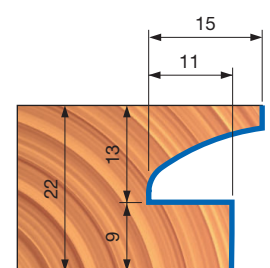
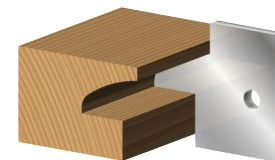
CONTROPROFILO / SCRIBE **3A**



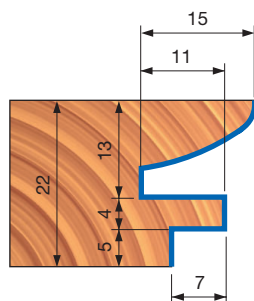
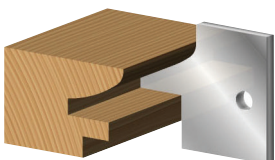
CONTROPROFILO / SCRIBE **4**



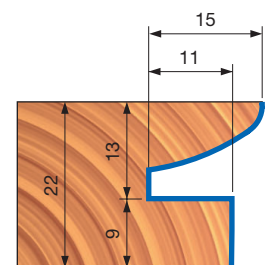
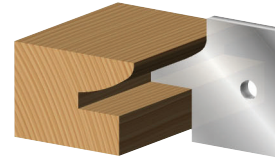
CONTROPROFILO / SCRIBE **4A**



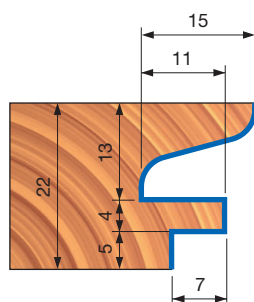
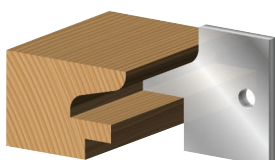
CONTROPROFILO / SCRIBE **5**



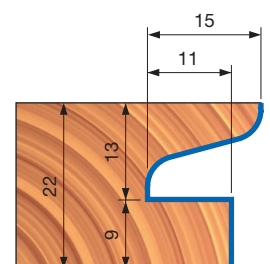
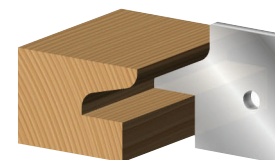
CONTROPROFILO / SCRIBE **5A**



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

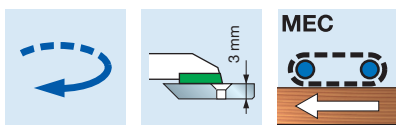
REGISTERED  
PATENT



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

| D     | B  | d  | Z | R | Codice<br>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<br>Spare parts         | Dimensioni<br>Dimensions | Codice<br>Code |
|------------------------------------------|--------------------------|----------------|
| 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      |
| 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    |
| 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     |
| 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      |



PERFORMANCE  
Coltelli Riaffilabili  
SYSTEM  
Resharpenable Knives

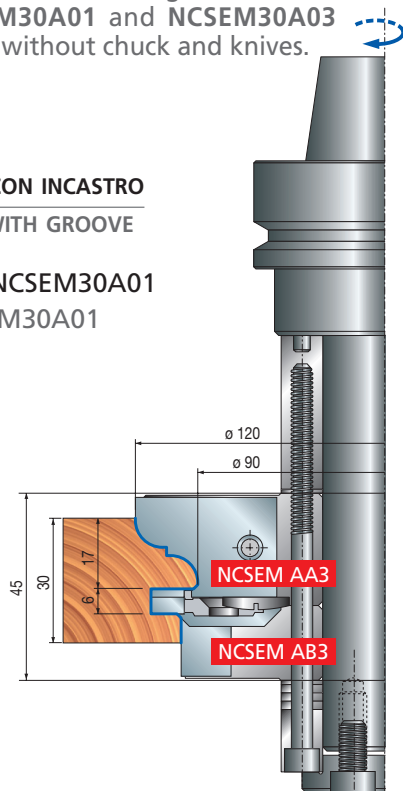
■ Corpo in lega leggera (Ergal). Per la pulizia non utilizzare prodotti contenenti soda caustica. Gli utensili NCSEM30A01 e NCSEM30A03 non comprendono il mandrino né i coltelli.

■ Light alloy body (Ergal). For cleaning do not use products containing caustic soda. Items NCSEM30A01 and NCSEM30A03 are supplied without chuck and knives.

| Coltelli di ricambio<br>Spare knives | Dimensioni<br>Dimensions | Codice<br>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      |

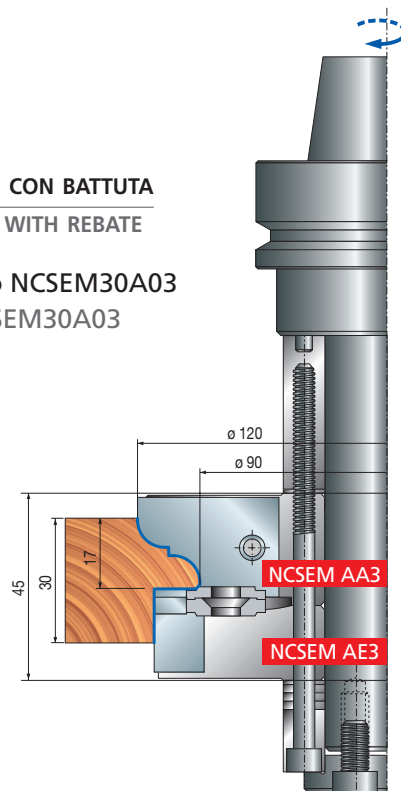
## 1 PROFILO CON INCASTRO PROFILE WITH GROOVE

- Gruppo NCSEM30A01
- Set NCSEM30A01



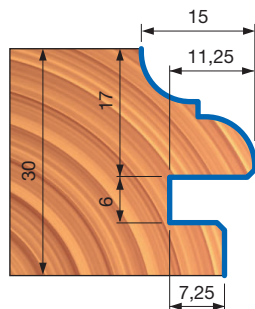
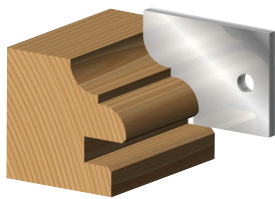
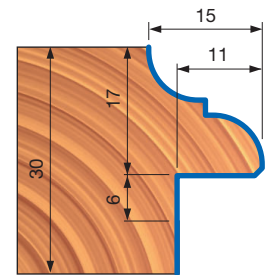
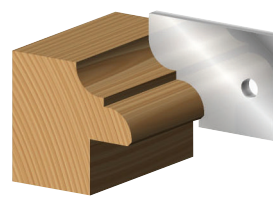
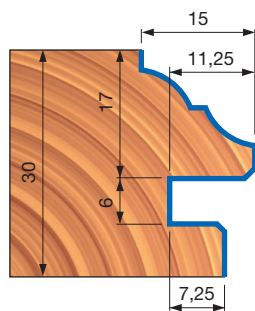
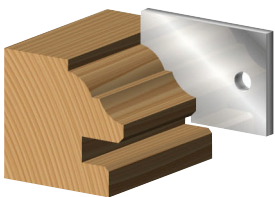
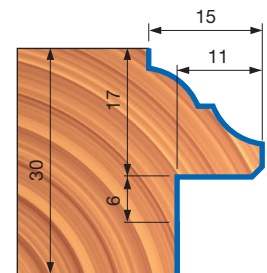
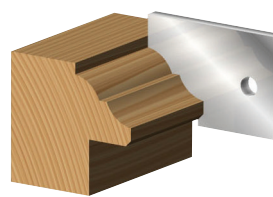
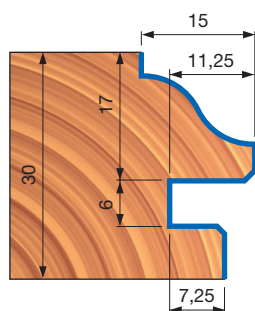
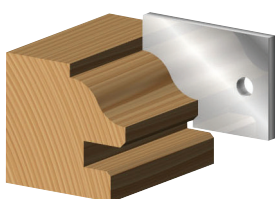
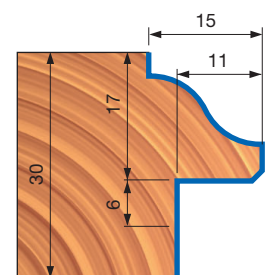
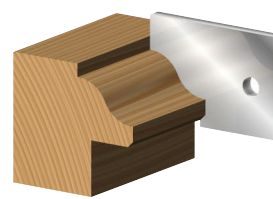
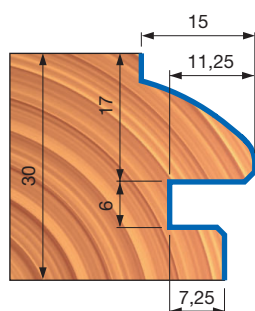
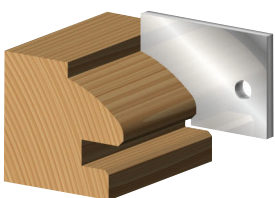
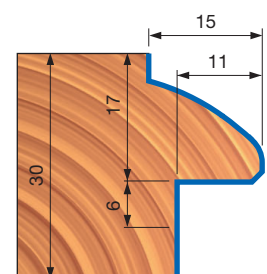
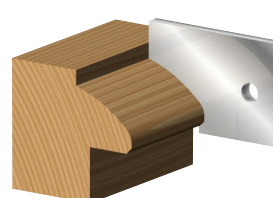
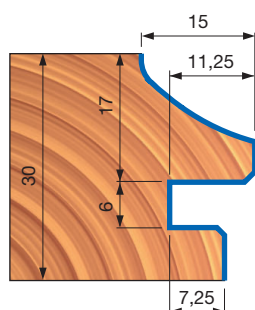
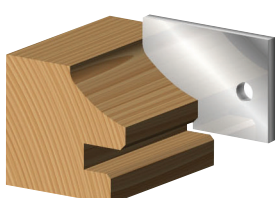
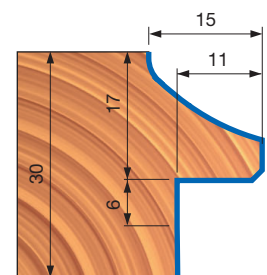
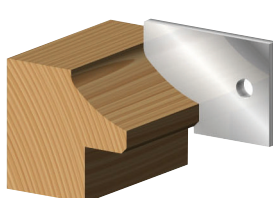
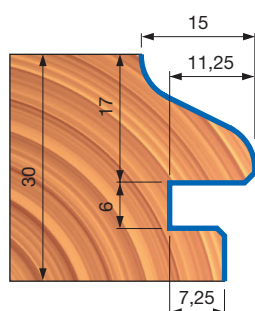
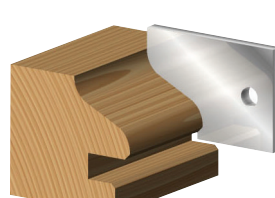
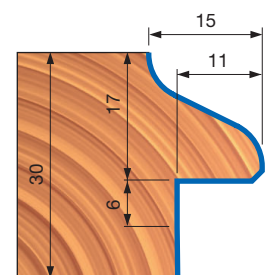
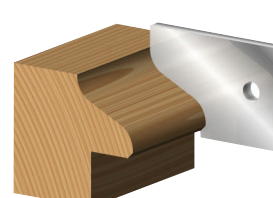
## 2 PROFILO CON BATTUTA PROFILE WITH REBATE

- Gruppo NCSEM30A03
- Set NCSEM30A03



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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**

# NCSEM30

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

ISOprofil®

BREVETTO  
REGISTRATO

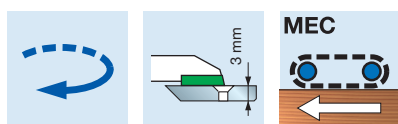
REGISTERED  
PATENT



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

| D   | B  | d  | Z | R | Codice<br>Code |
|-----|----|----|---|---|----------------|
| mm  | mm | mm |   |   |                |
| 112 | 20 | 30 | 2 | 2 | NCSEM AD3      |
| 120 | 34 | 30 | 2 | 2 | NCSEM AC3      |

| Parti di ricambio<br>Spare parts         | Dimensioni<br>Dimensions | Codice<br>Code |
|------------------------------------------|--------------------------|----------------|
| 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 x 3 x 3    | SR06MD BA3     |
| Vite / Screw                             | 6 x 11,5                 | VT16M AB9      |
| 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      |
| Inserto smussatore / Beveling insert     | 22 x 16 x 5              | IG51M BA3      |
| Vite / Screw                             | 6 x 14,5                 | VT16M AA9      |
| Inserto per incastro / Grooving insert   | 27 x 4 x 16              | IG04MS AA3T    |
| Vite / Screw                             | 6 x 14,5                 | VT16M AA9      |



PERFORMANCE  
Coltelli Riaffilabili  
SYSTEM  
Resharpenable Knives

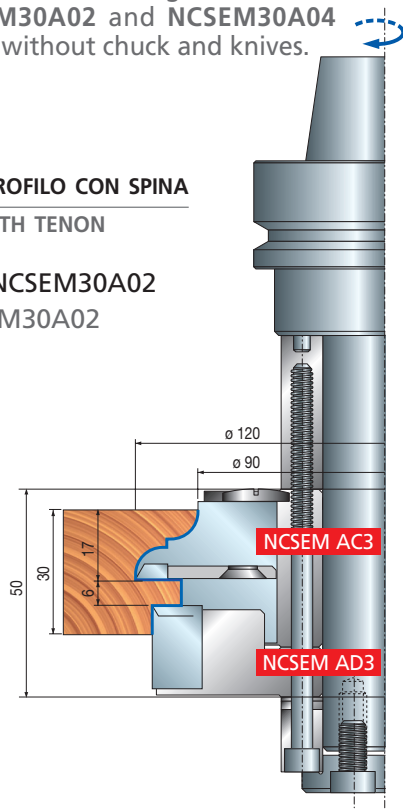
| Coltelli di ricambio<br>Spare knives | Dimensioni<br>Dimensions | Codice<br>Code |
|--------------------------------------|--------------------------|----------------|
| 1                                    | 34 x 34 x 3              | CCSEM BA3      |
| 2                                    | 34 x 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.

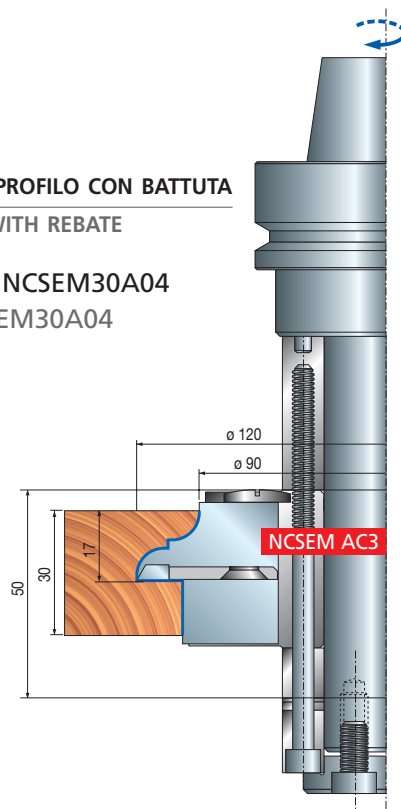
## 1 CONTROPROFILO CON SPINA SCRIBE WITH TENON

- Gruppo NCSEM30A02
- Set NCSEM30A02



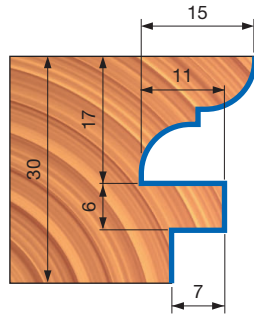
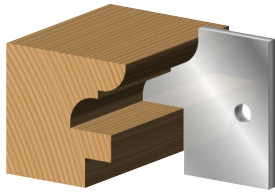
## 2 CONTROPROFILO CON BATTUTA SCRIBE WITH REBATE

- Gruppo NCSEM30A04
- Set NCSEM30A04

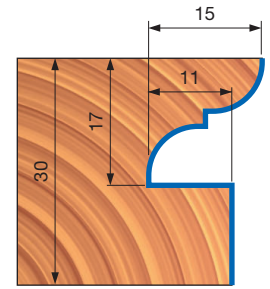
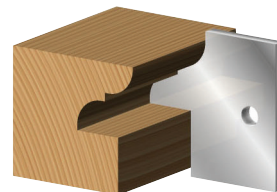


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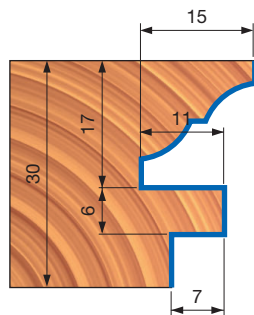
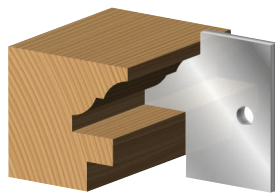
CONTROPROFILO / SCRIBE 1



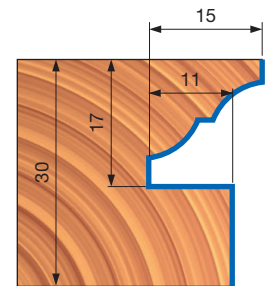
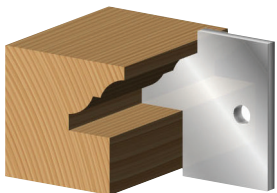
CONTROPROFILO / SCRIBE 1A



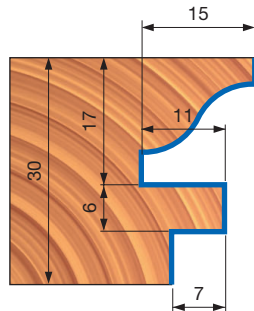
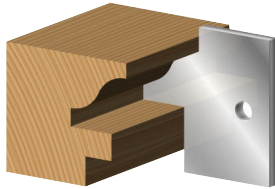
CONTROPROFILO / SCRIBE 2



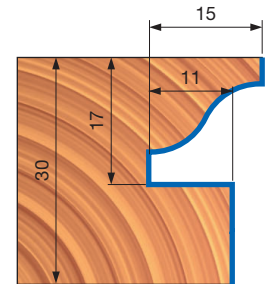
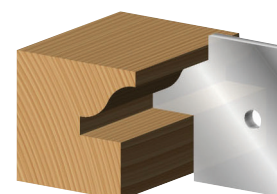
CONTROPROFILO / SCRIBE 2A



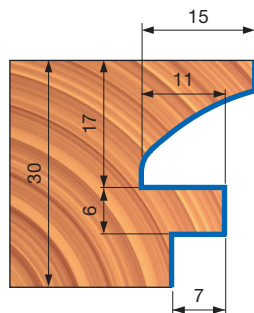
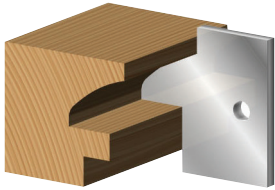
CONTROPROFILO / SCRIBE 3



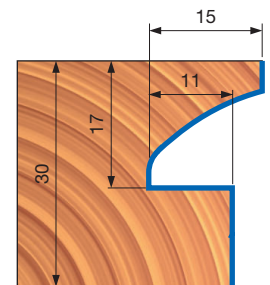
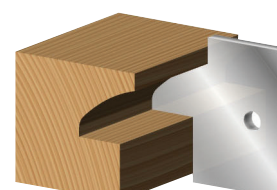
CONTROPROFILO / SCRIBE 3A



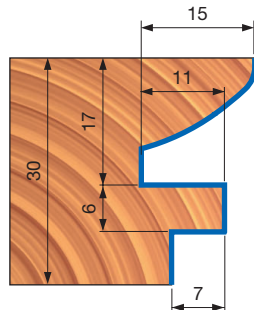
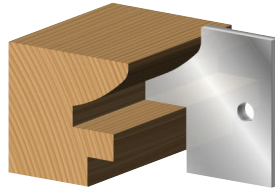
CONTROPROFILO / SCRIBE 4



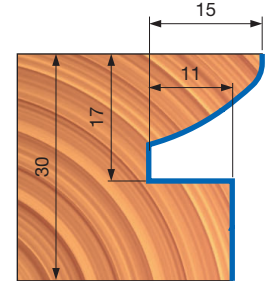
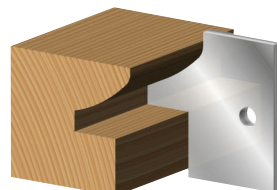
CONTROPROFILO / SCRIBE 4A



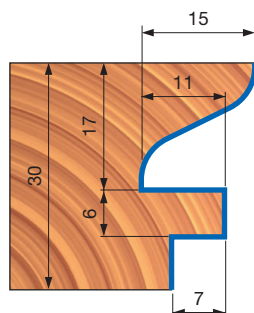
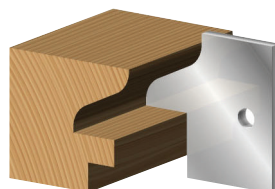
CONTROPROFILO / SCRIBE 5



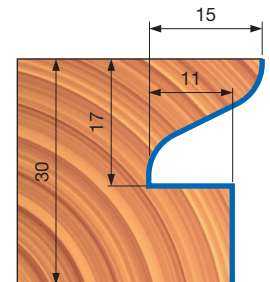
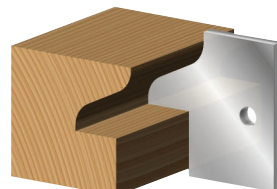
CONTROPROFILO / SCRIBE 5A



CONTROPROFILO / SCRIBE 6



CONTROPROFILO / SCRIBE 6A

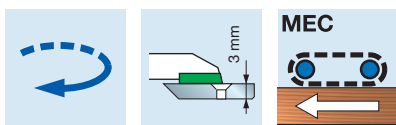




# NC92M

## PUNTA PORTACOLTELLI PROFILATI

## CNC ROUTER CUTTER WITH PROFILED KNIVES



### PERFORMANCE Coltelli Riaffilabili SYSTEM Resharpenable Knives

- 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  | 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 |

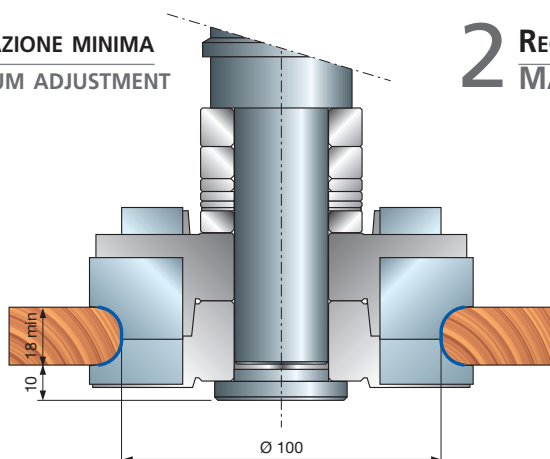
| Coltelli di ricambio | Dimensioni        | Codice     |
|----------------------|-------------------|------------|
| Spare knives         | Dimensions        | Code       |
| 1                    | 35 x 30 x 3 3x45° | CC92M1 T01 |
| 2                    | 35 x 30 x 3 5x45° | CC92M1 T02 |
| 3                    | 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 |

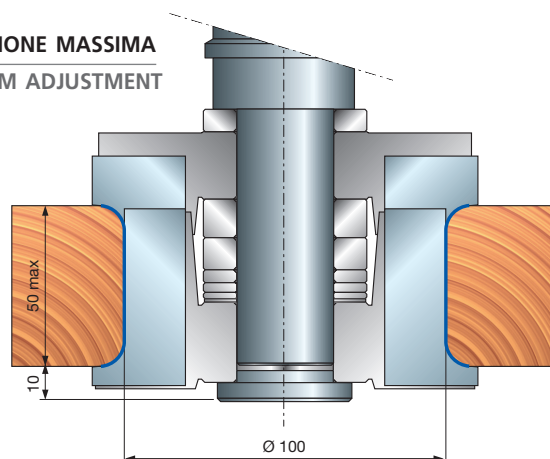
| D   | B  | d  | Z | R | Codice testa di ricambio |
|-----|----|----|---|---|--------------------------|
| mm  | mm | mm |   |   | Spare cutterhead code    |
| 120 | 52 | 30 | 2 |   | NC92M100-1               |
| 120 | 55 | 30 | 2 |   | NC92M100-2               |

- 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

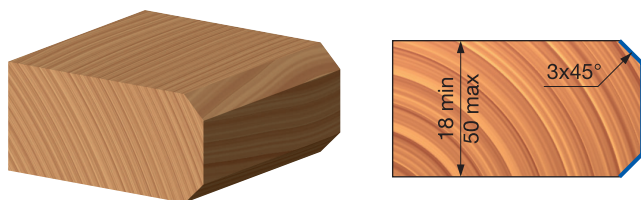


### 2 REGOLAZIONE MASSIMA MAXIMUM ADJUSTMENT



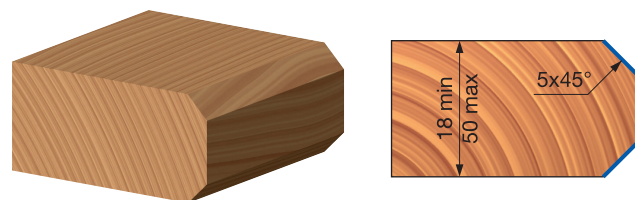


PROFILO / PROFILE 1



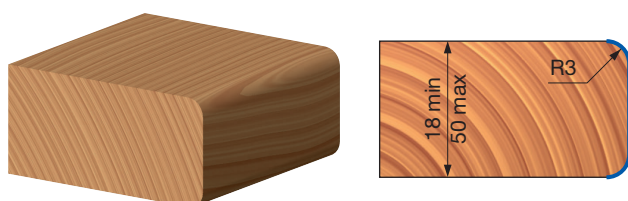
- Profilo ottenibile con i coltelli:
  - Profile obtainable with knives:
- CC92M1 T01 + CC92M2 T01**

PROFILO / PROFILE 2



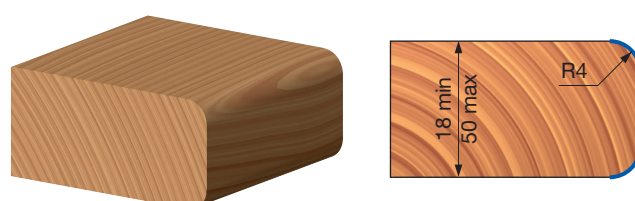
- Profilo ottenibile con i coltelli:
  - Profile obtainable with knives:
- CC92M1 T02 + CC92M2 T02**

PROFILO / PROFILE 3



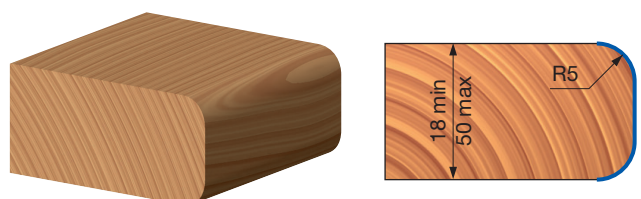
- Profilo ottenibile con i coltelli:
  - Profile obtainable with knives:
- CC92M1 T03 + CC92M2 T03**

PROFILO / PROFILE 4



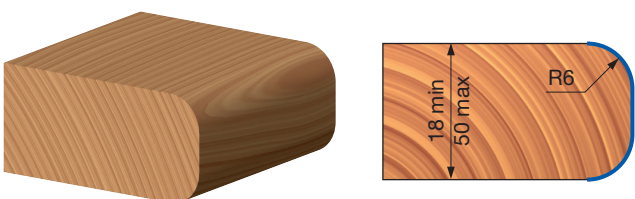
- Profilo ottenibile con i coltelli:
  - Profile obtainable with knives:
- CC92M1 T04 + CC92M2 T04**

PROFILO / PROFILE 5



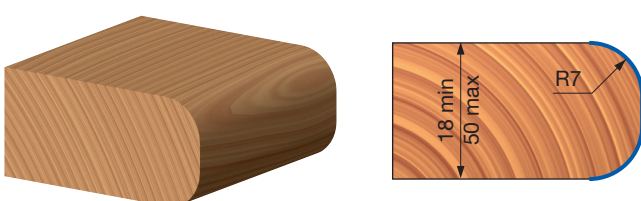
- Profilo ottenibile con i coltelli:
  - Profile obtainable with knives:
- CC92M1 T05 + CC92M2 T05**

PROFILO / PROFILE 6



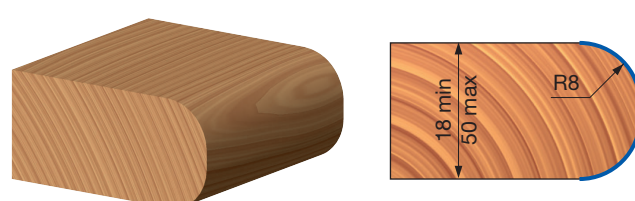
- Profilo ottenibile con i coltelli:
  - Profile obtainable with knives:
- CC92M1 T06+ CC92M2 T06**

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:

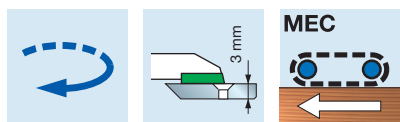
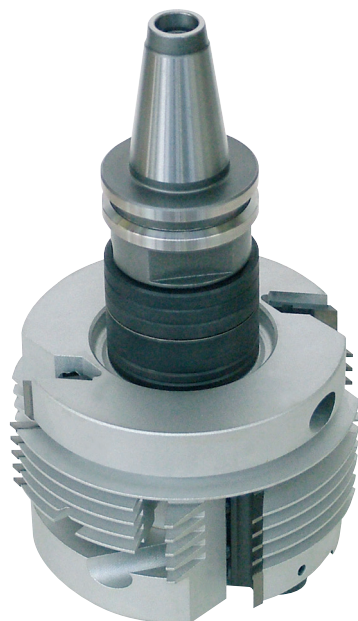
NC92M 100  
CC92M1 T01  
CC92M2 T01  
MP05M AE9

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

- 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 quest'ultimo consultare la sezione accessori. 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. For chuck ref. see the accessories section. 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**.

| 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 |

| D   | B  | d  | Z | R | Codice testa di ricambio |
|-----|----|----|---|---|--------------------------|
| mm  | mm | mm |   |   | Spare cutterhead code    |
| 120 | 52 | 30 | 2 |   | NC92M100-1               |
| 120 | 55 | 30 | 2 |   | NC92M100-2               |

- 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.

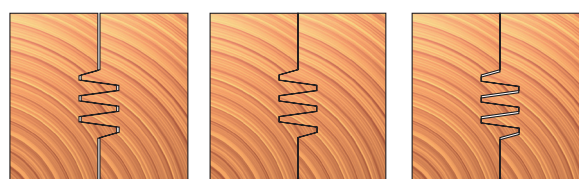
\*L'articolo **NC93M 100** è composto dalle 2 teste portacolteLLi comprensive di coltelli e da un set di anelli per la regolazione dell'ampiezza della giunzione.

- 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.

### ESEMPI DI REGOLAZIONE

### ADJUSTMENT EXAMPLES

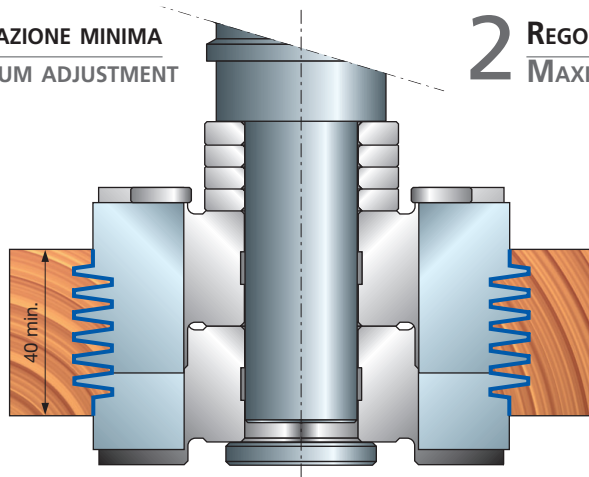


Giunzione  
forzata  
Tight joint

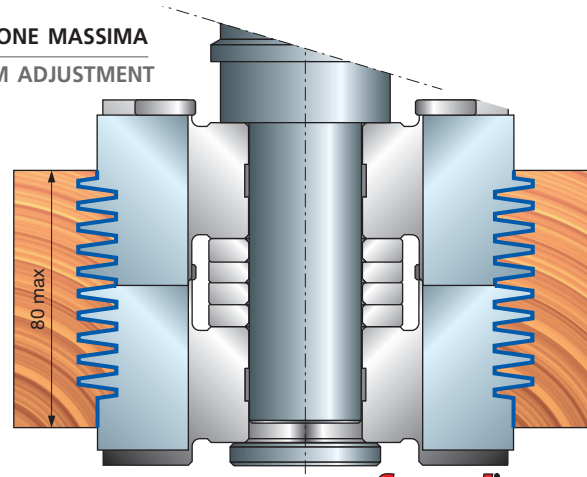
Giunzione  
normale  
Regular joint

Giunzione  
lasca  
Loose joint

### 1 REGOLAZIONE MINIMA MINIMUM ADJUSTMENT

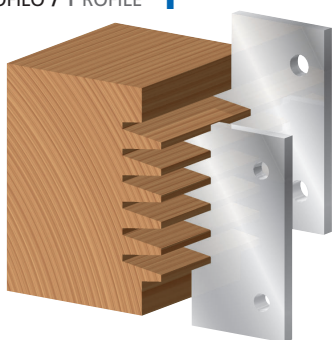


### 2 REGOLAZIONE MASSIMA MAXIMUM ADJUSTMENT

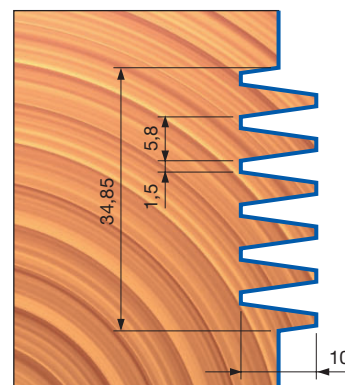


freud

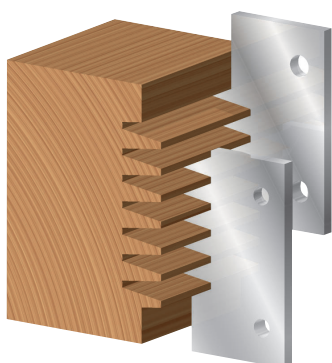
PROFILO / PROFILE 1



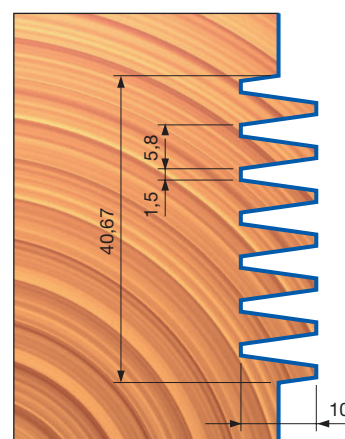
- Profilo ottenibile senza interporre anelli distanziali tra le due teste.
- Profile obtainable without spacers between the two cutterheads.



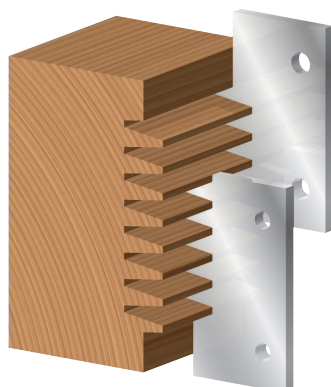
PROFILO / PROFILE 2



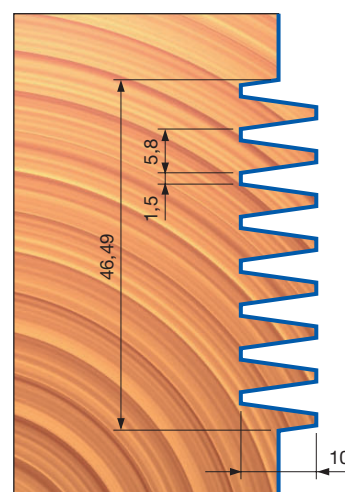
- Profilo ottenibile inserendo n. 1 anello distanziale tra le due teste.
- Profile obtainable by inserting 1 spacer between the two cutterheads.



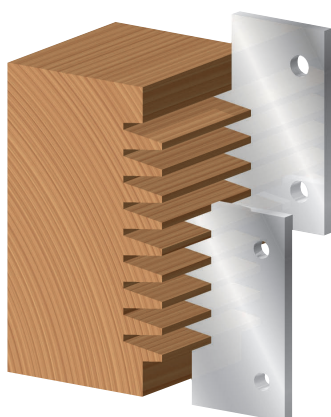
PROFILO / PROFILE 3



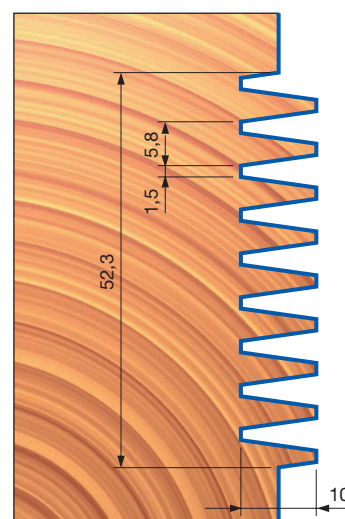
- Profilo ottenibile inserendo n. 2 anelli distanziali tra le due teste.
- Profile obtainable by inserting 2 spacers between the two cutterheads.



PROFILO / PROFILE 4



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





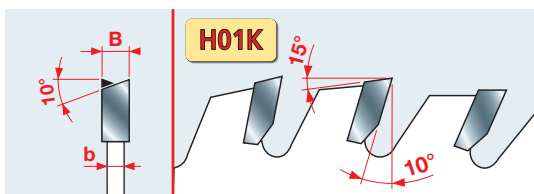
# LU34M

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

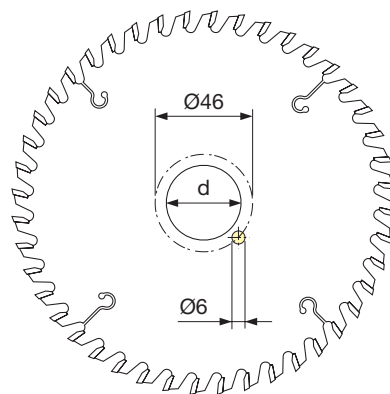


| D   | d  | B/b       | Z  | Codice     |
|-----|----|-----------|----|------------|
| mm  | mm | mm        |    | Code       |
| 120 | 20 | 4,0 / 3,0 | 30 | LU34M40EA3 |
| 120 | 30 | 4,0 / 3,0 | 18 | LU34M40AC3 |
| 120 | 30 | 5,0 / 3,0 | 18 | LU34M50AC3 |
| 120 | 30 | 6,0 / 3,0 | 18 | LU34M60AC3 |
| 120 | 35 | 4,0 / 3,0 | 30 | LU34M40EC3 |
| 120 | 35 | 5,0 / 3,0 | 30 | LU34M50EC3 |
| 120 | 35 | 6,0 / 3,0 | 30 | LU34M60EC3 |
| 180 | 35 | 4,0 / 3,0 | 44 | LU34M40NC3 |
| 180 | 35 | 5,0 / 3,0 | 44 | LU34M50NC3 |
| 180 | 35 | 6,0 / 3,0 | 44 | LU34M60NC3 |

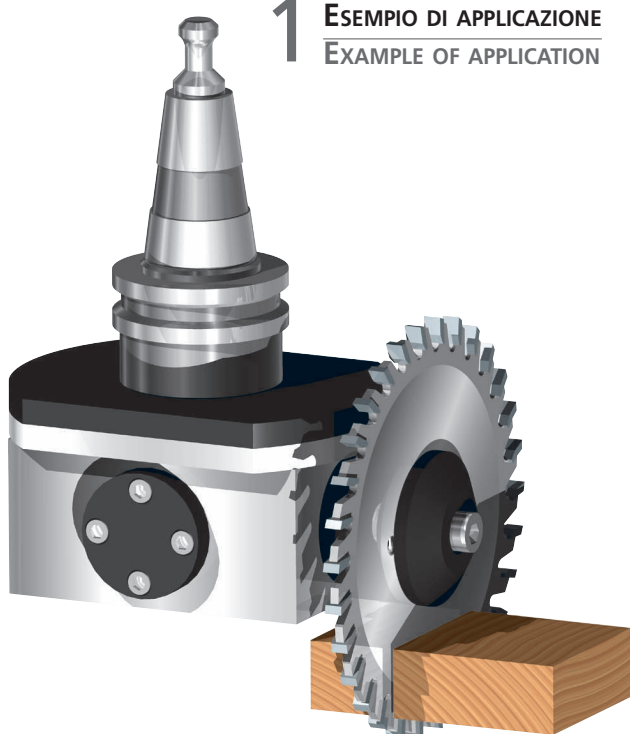
- Per l'esecuzione di scanalature lungo e trasverso vena con buona finitura su legni teneri, duri e materiali composti.
- For grooving along and across grain on softwoods, hardwoods and laminates.



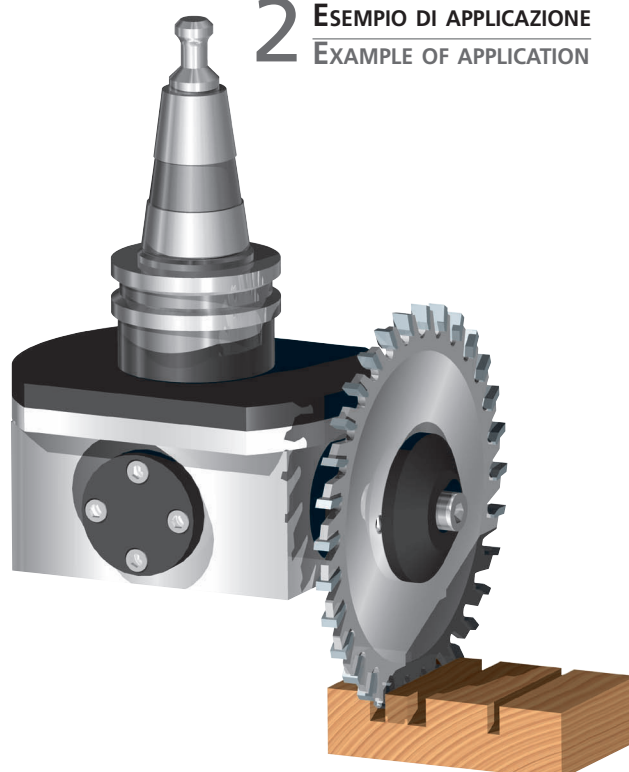
CARATTERISTICHE DEL DENTE - TOOTH'S FEATURES



### 1 ESEMPIO DI APPLICAZIONE EXAMPLE OF APPLICATION



### 2 ESEMPIO DI APPLICAZIONE EXAMPLE OF APPLICATION

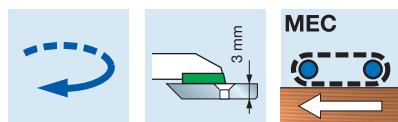




# ST16MG

## 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**  
**Coltelli Riaffilabili**  
**SYSTEM**  
**Resharpenable Knives**

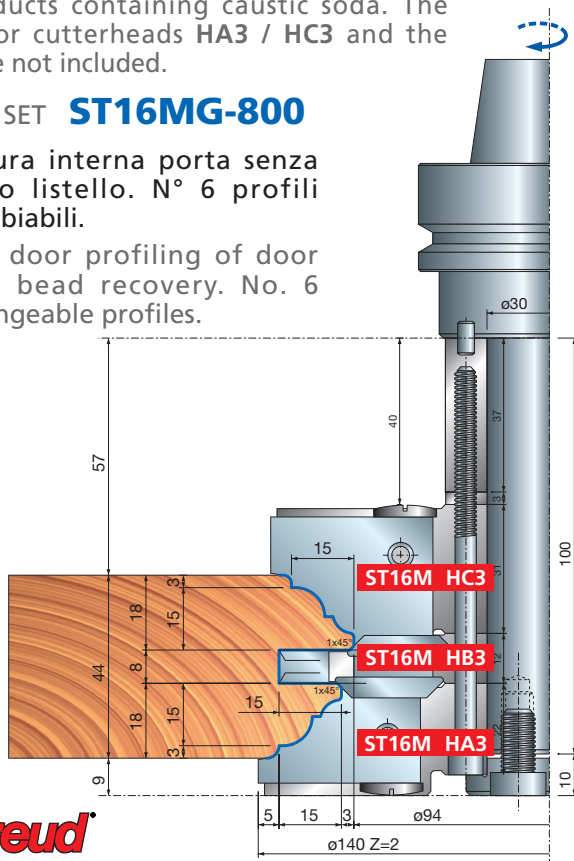
■ Corpo in lega leggera (Ergal). Per la pulizia non utilizzare prodotti contenenti soda caustica. I coltelli per gli utensili HA3 e HC3 e il mandrino vanno ordinati a parte.

■ 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.

### GRUPPO / SET **ST16MG-800**

■ Profilatura interna porta senza recupero listello. N° 6 profili intercambiabili.

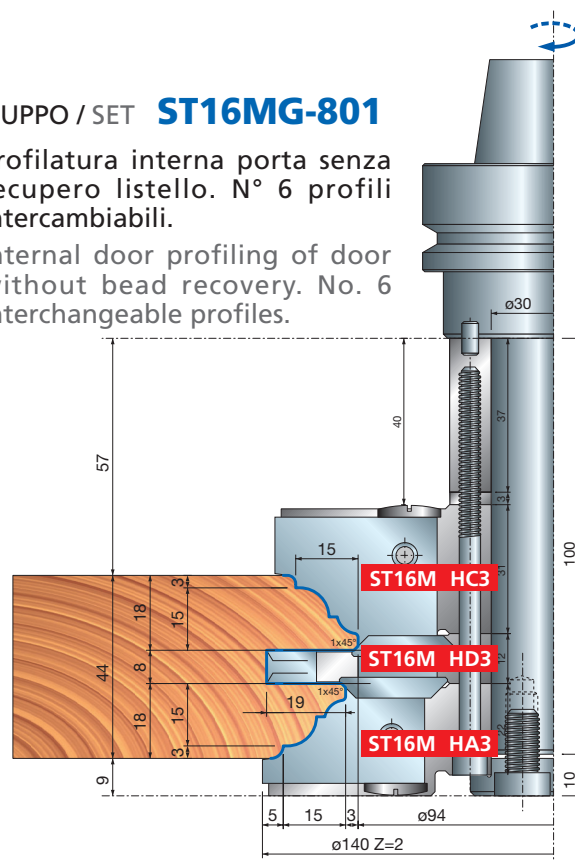
■ Internal door profiling of door without bead recovery. No. 6 interchangeable profiles.



### 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.



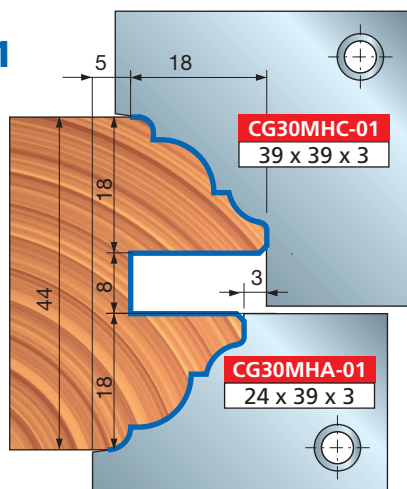
| D     | B  | d  | Z | R | Codice    |
|-------|----|----|---|---|-----------|
| mm    | mm | mm |   |   | Code      |
| 128   | 12 | 30 | 2 | 4 | ST16M HB3 |
| 130,9 | 41 | 30 |   |   | ST16M HC3 |
| 136   | 12 | 30 | 2 | 4 | ST16M HD3 |
| 137   | 27 | 30 |   |   | ST16M HA3 |

| Parti di ricambio |                                     | 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 / Beveling insert |            | 22 x 16 x 5    | IG51M BA3   |
| HC3               | Vite / Screw                        |            | M6 x 13        | VT16M AE9   |
|                   | Vite / Screw                        |            | M5 x 7 x 18    | VT08M AE9   |
|                   | Cuneo / Wedge                       |            | 38 x 38 x 8,5  | CN12MS EE9A |
| HD3               | Vite / Screw                        |            | M10 x 18       | VT03M CC9   |
|                   | 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 / Beveling insert |            | 22 x 16 x 5    | IG51M BA3   |
|                   | Vite / Screw                        |            | M6 x 13        | VT16M AE9   |

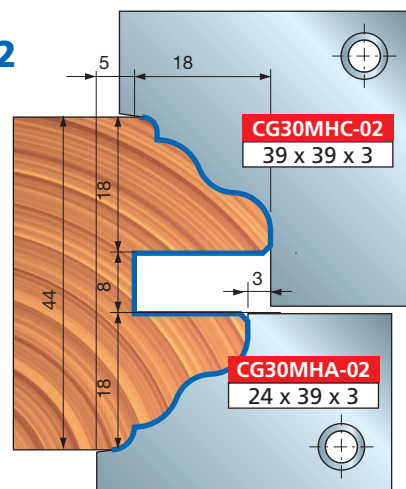
| Spessore legno | Regolazione vetrocamera      |
|----------------|------------------------------|
| Wood thickness | Doble-glazing thickness adj. |
| 44 mm          | 15 mm                        |
| 44 mm          | 19 mm                        |

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

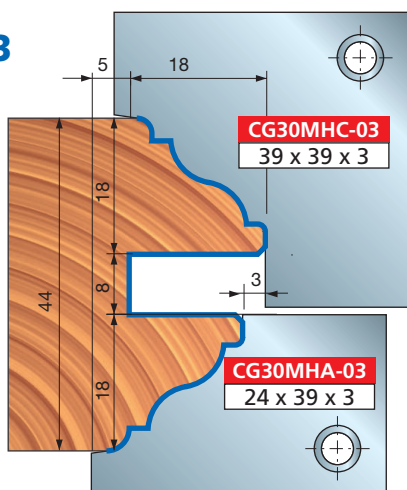
PROFILO / PROFILE **1**



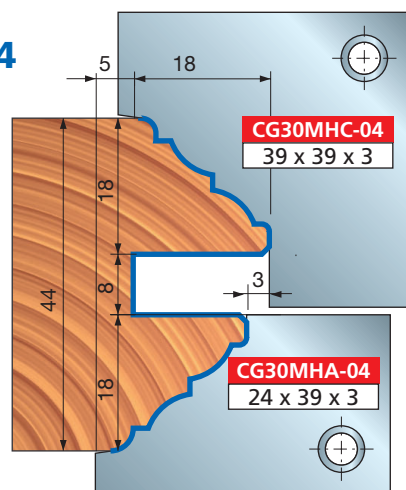
PROFILO / PROFILE **2**



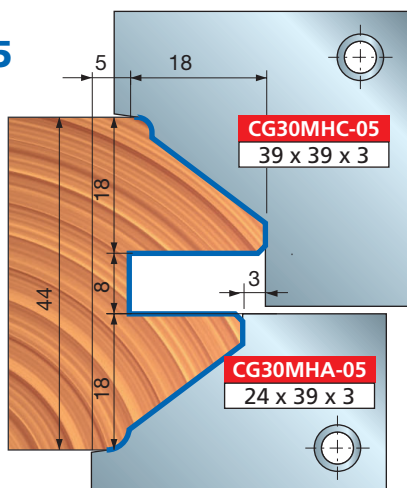
PROFILO / PROFILE **3**



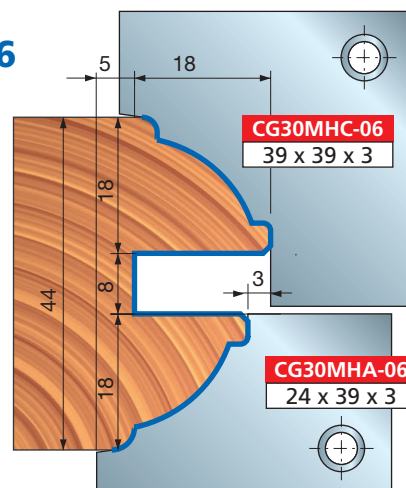
PROFILO / PROFILE **4**



PROFILO / PROFILE **5**

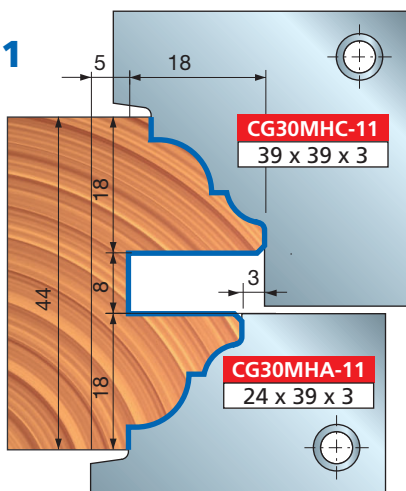


PROFILO / PROFILE **6**

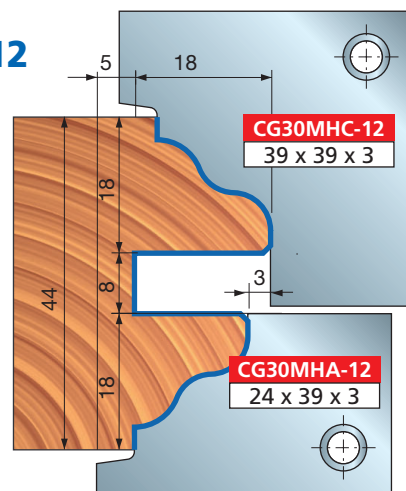


COLTELLI PER UTENSILI / KNIVES FOR CUTTERHEADS: **ST16M HA3**  
**ST16M HC3**

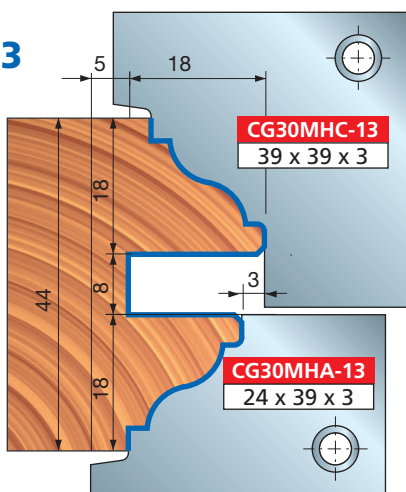
PROFILO / PROFILE **11**



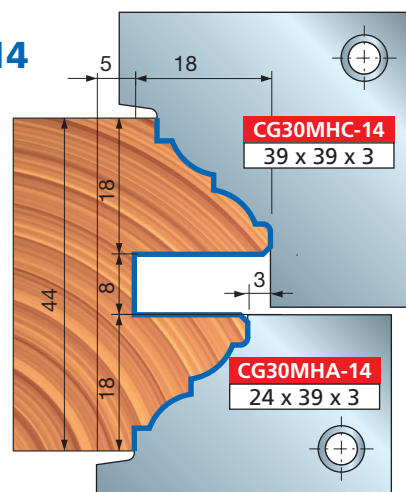
PROFILO / PROFILE **12**



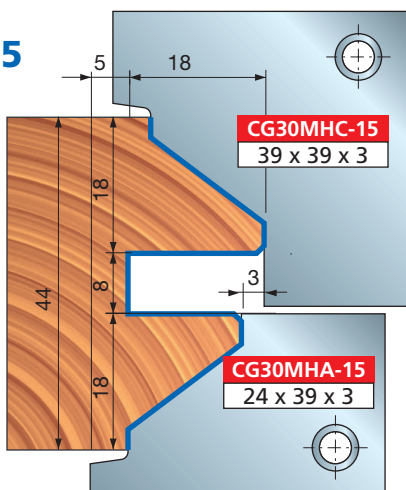
PROFILO / PROFILE **13**



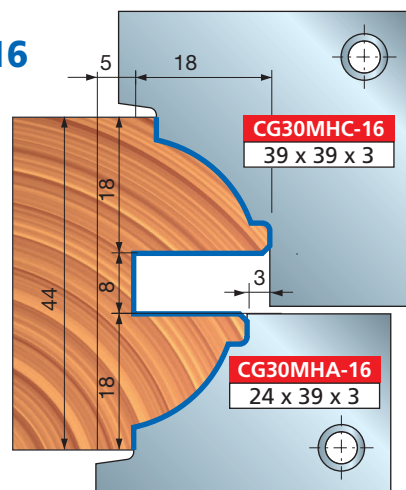
PROFILO / PROFILE **14**



PROFILO / PROFILE **15**



PROFILO / PROFILE **16**

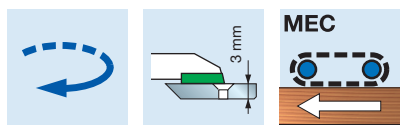
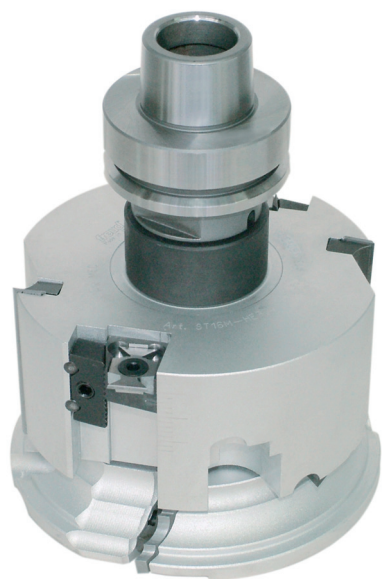


# ST16MG

## 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<br>Code |
|-------|----|----|---|---|----------------|
| mm    | mm | mm |   |   |                |
| 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

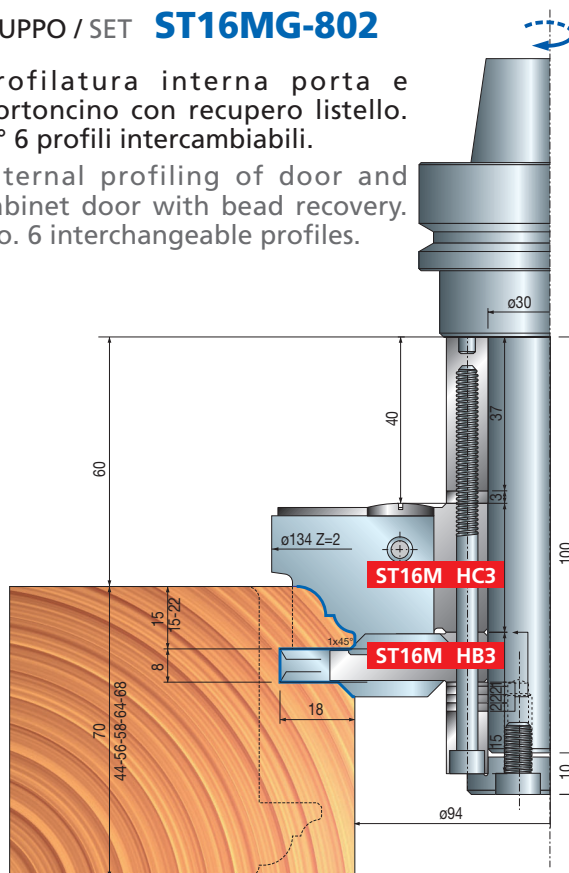
|     | Parti di ricambio<br>Spare parts    |  | Dimensioni<br>Dimensions | Codice<br>Code |
|-----|-------------------------------------|--|--------------------------|----------------|
| HA3 | Vite / Screw                        |  | M5 x 7 x 18              | VT08M AE9      |
|     | Cuneo / Wedge                       |  | 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 / Beveling 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                      |  | 22,86 x 2,5              | RG02M AA3      |
|     | Vite / Screw                        |  | M5 x 8                   | VT05M AA9      |
|     | Insero smussatore / Beveling insert |  | 22 x 16 x 5              | IG51M BA3      |
|     | Vite / Screw                        |  | M6 x 13                  | 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 / Beveling insert |  | 22 x 16 x 5              | IG51M BA3      |
|     | Vite / Screw                        |  | M6 x 14,5                | VT16M AA9      |
| HF3 | Insero raggatore / Rounding insert  |  | 22 x 16 x 5              | IG52M AE3      |
|     | 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.



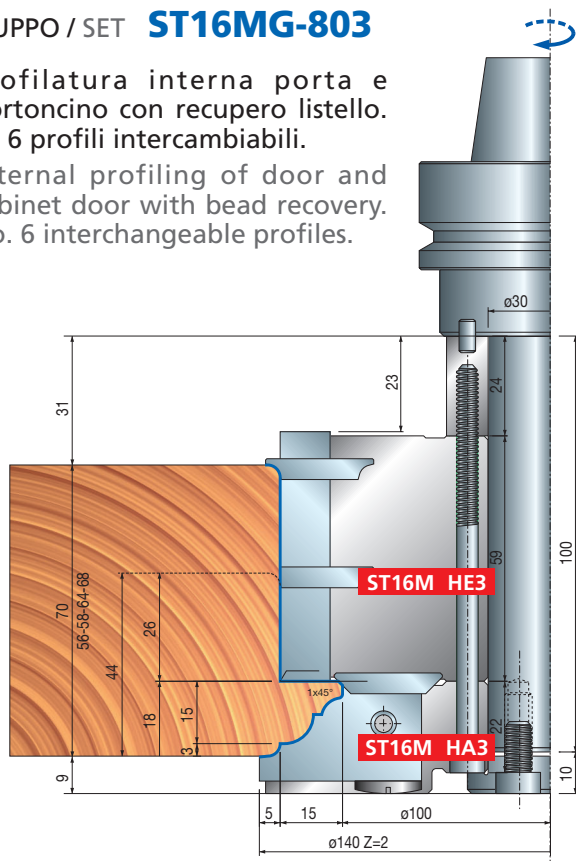
### GRUPPO / SET **ST16MG-802**

- 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.



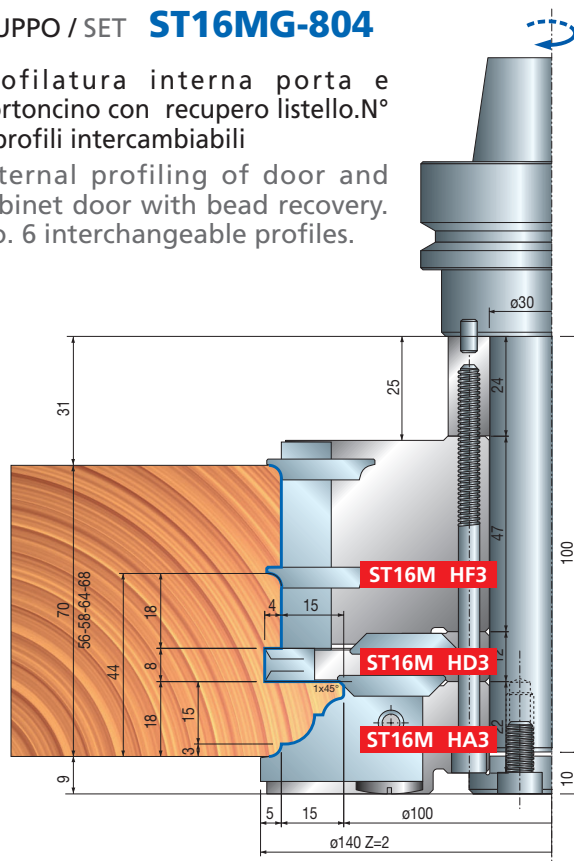
### GRUPPO / SET **ST16MG-803**

- 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**

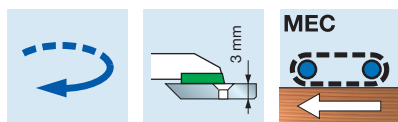
- Profilatura interna porta e portoncino con recupero listello. N° 6 profili intercambiabili.
- Internal profiling of door and cabinet door with bead recovery. No. 6 interchangeable profiles.



# 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<br>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<br>Spare parts   | Dimensioni<br>Dimensions | Codice<br>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      |
| HI3 - HJ3 | 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      |
| HI3       | 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      |
|           | Vite / Screw                       | M10 x 22                 | VT19M MA9      |
| HI3       | 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      |
| HI3       | 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      |

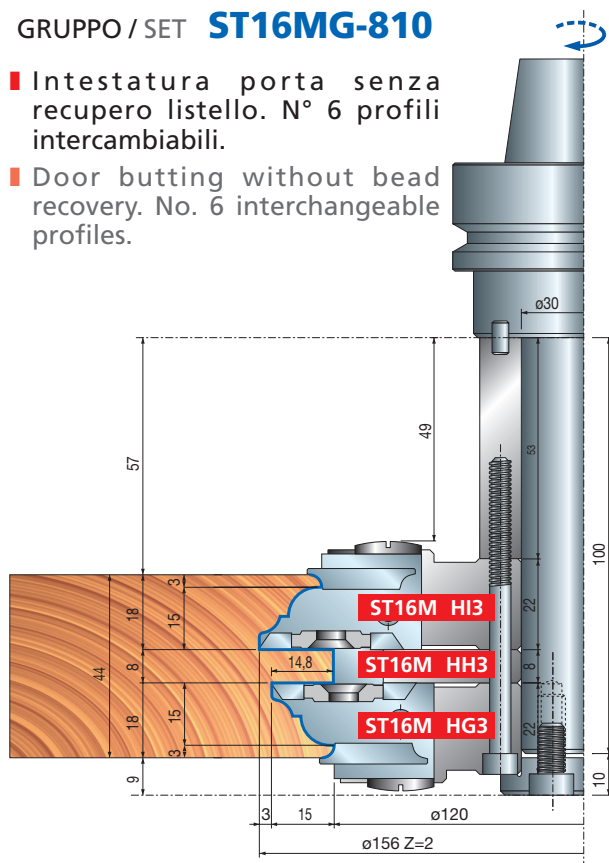
- Corpo in lega leggera (Ergal). Per la pulizia non utilizzare prodotti contenenti soda caustica. I coltelli per gli utensili HI3 e HG3 e il mandrino vanno ordinati a parte.
- Light alloy body (Ergal). For cleaning do not use products containing caustic soda. The knives for cutterheads HI3 / HG3 and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

# ST16MG

## GRUPPI PER CONTROPROFILI DI PORTE SETS FOR DOOR TENONING

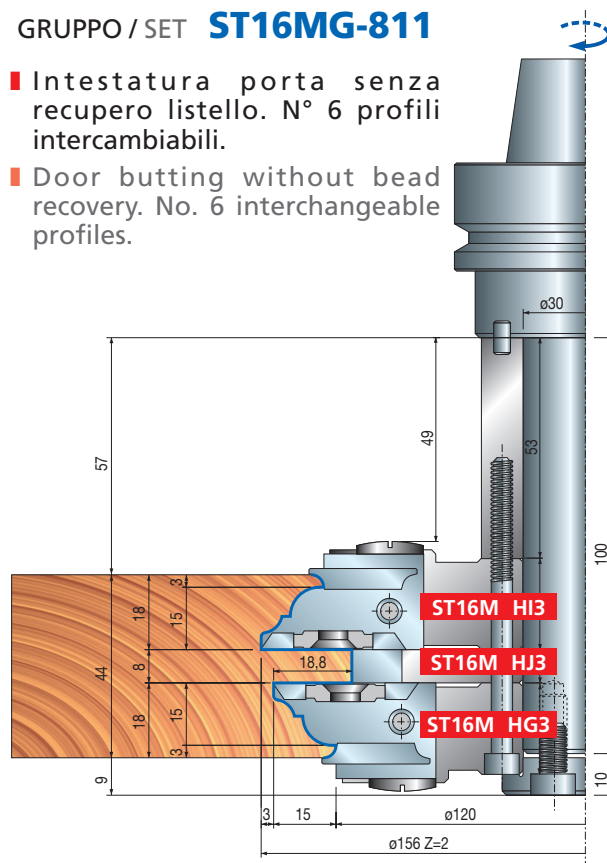
### GRUPPO / SET **ST16MG-810**

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



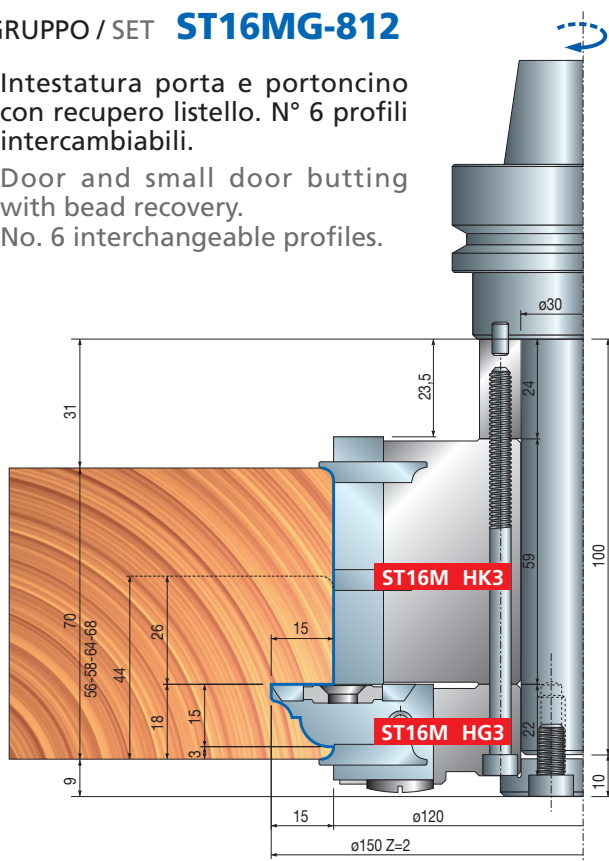
### GRUPPO / SET **ST16MG-811**

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



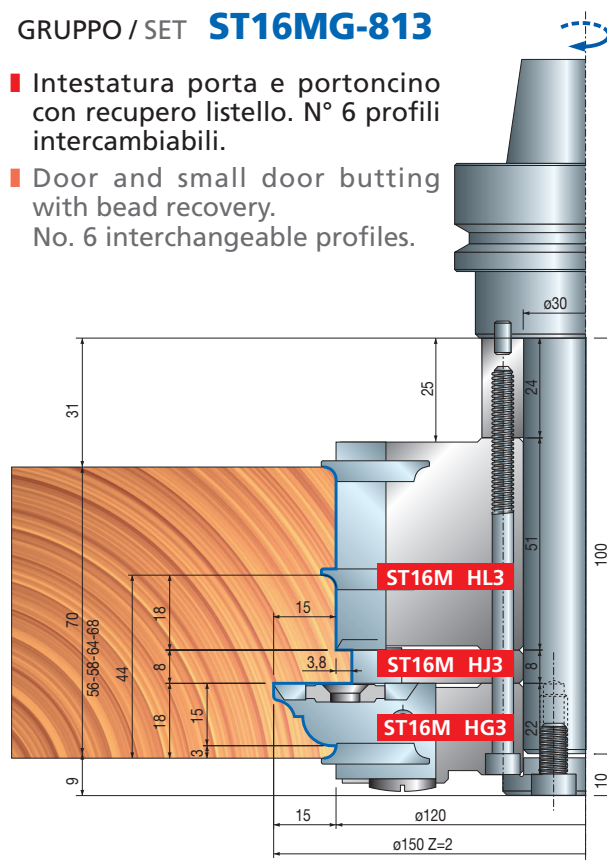
### GRUPPO / SET **ST16MG-812**

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



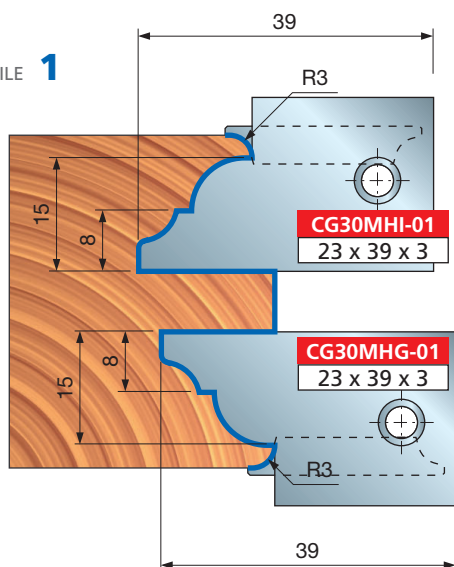
### GRUPPO / SET **ST16MG-813**

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

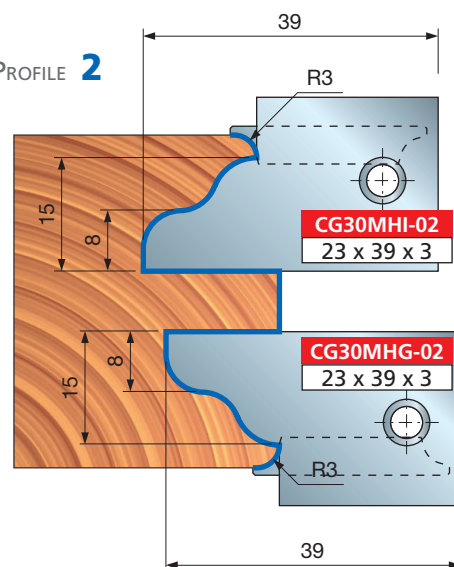


COLTELLI PER UTENSILI / KNIVES FOR CUTTERHEADS: **ST16M HG3**  
**ST16M HI3**

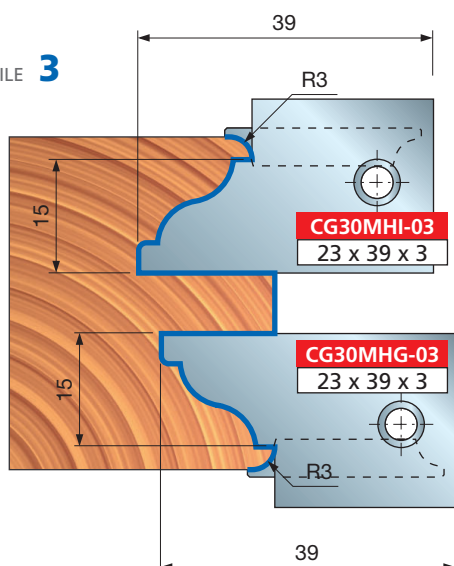
PROFILO / PROFILE **1**



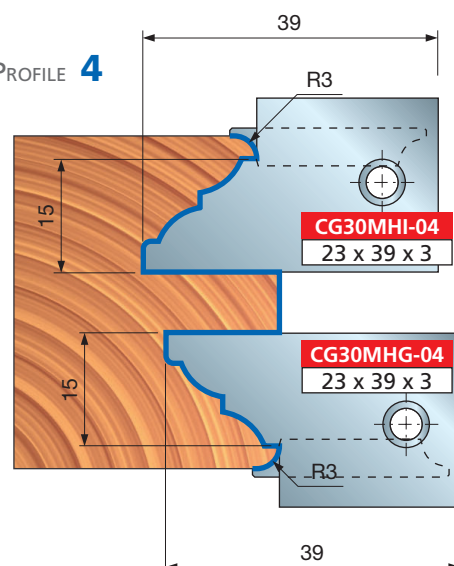
PROFILO / PROFILE **2**



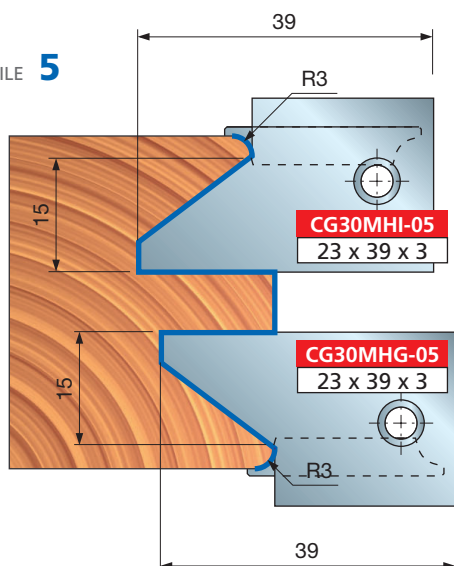
PROFILO / PROFILE **3**



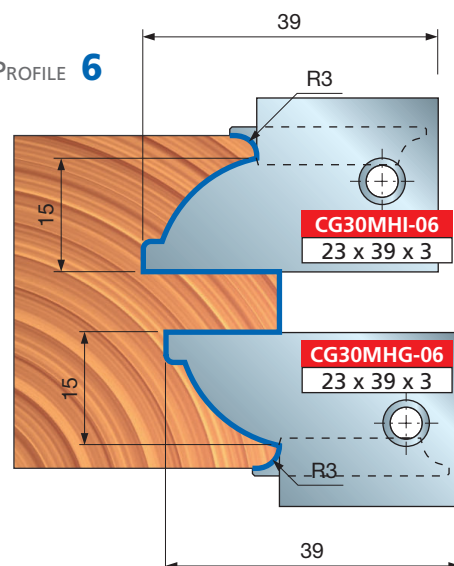
PROFILO / PROFILE **4**



PROFILO / PROFILE **5**



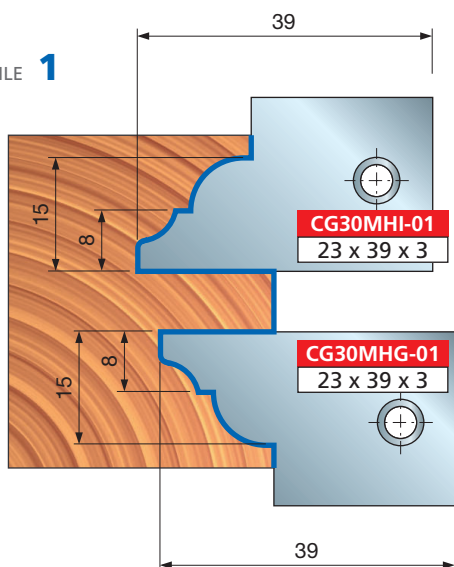
PROFILO / PROFILE **6**



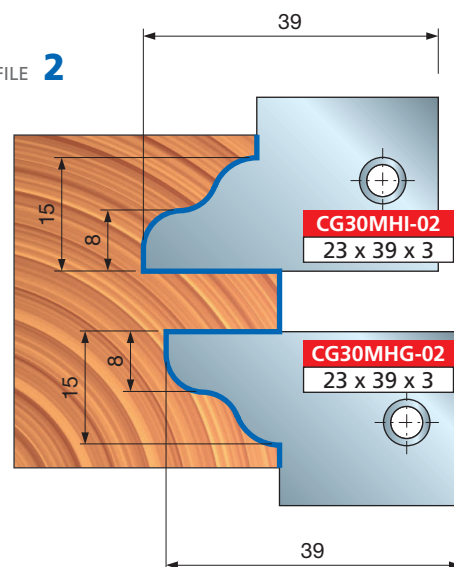


COLTELLI PER UTENSILI / KNIVES FOR CUTTERHEADS: **ST16M HG3**  
**ST16M HI3**

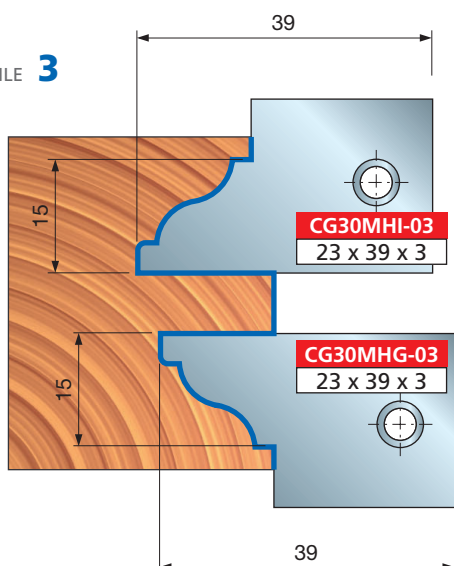
PROFILO / PROFILE **1**



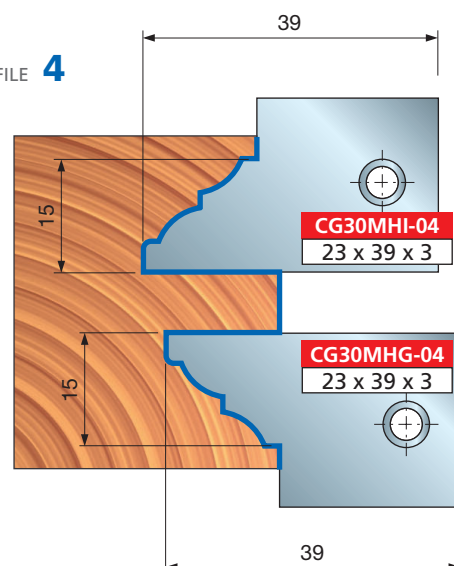
PROFILO / PROFILE **2**



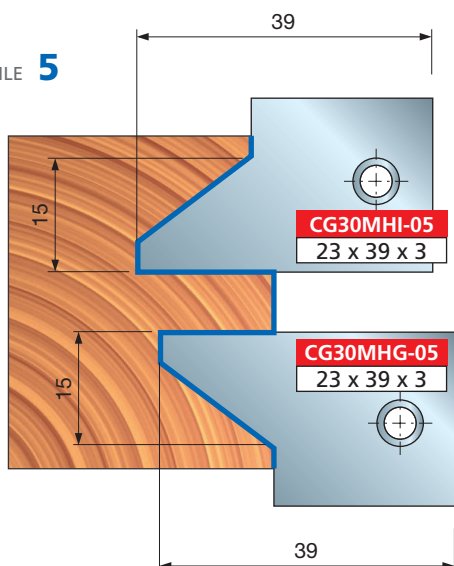
PROFILO / PROFILE **3**



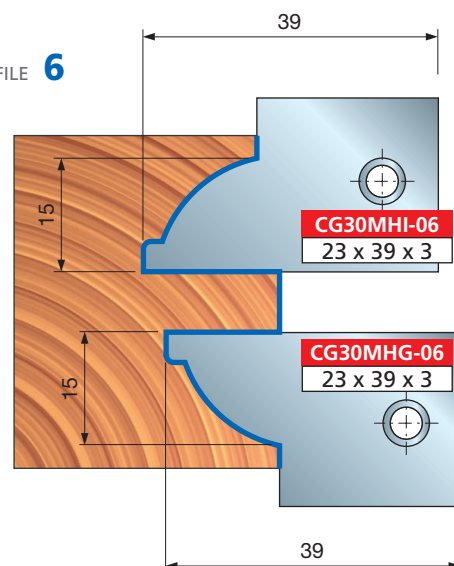
PROFILO / PROFILE **4**



PROFILO / PROFILE **5**



PROFILO / PROFILE **6**

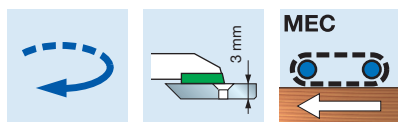
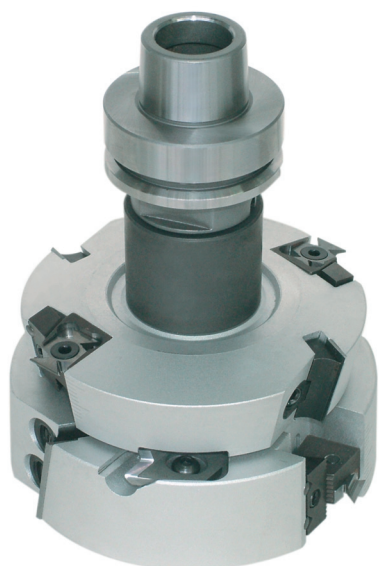


# ST16MG

## GRUPPI PER BATTUTE DI PORTE SETS FOR DOOR REBATES

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

| D     | B  | d  | Z | R | Codice<br>Code |
|-------|----|----|---|---|----------------|
| 118   | 31 | 30 | 2 | 2 | ST16M HN3      |
| 127,3 | 33 | 30 | 2 | 2 | ST16M HO3      |
| 140,7 | 41 | 30 | 2 | 4 | ST16M HM3      |



**PERFORMANCE**  
**Coltelli Riaffilabili**  
**SYSTEM**  
**Resharpenable Knives**

|     | Parti di ricambio<br>Spare parts         | Dimensioni<br>Dimensions | Codice<br>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      |
| HN3 | 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.

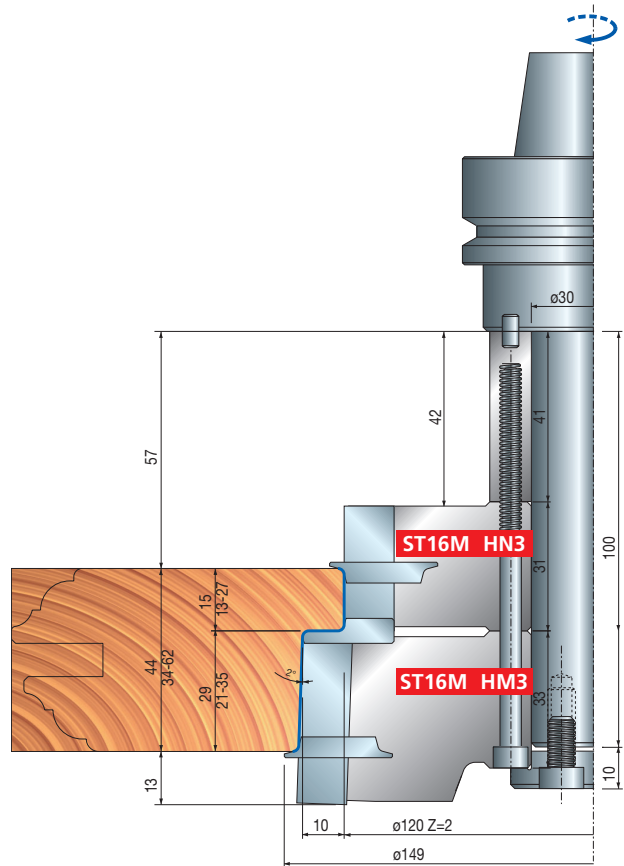
# ST16MG

## GRUPPI PER BATTUTE DI PORTE

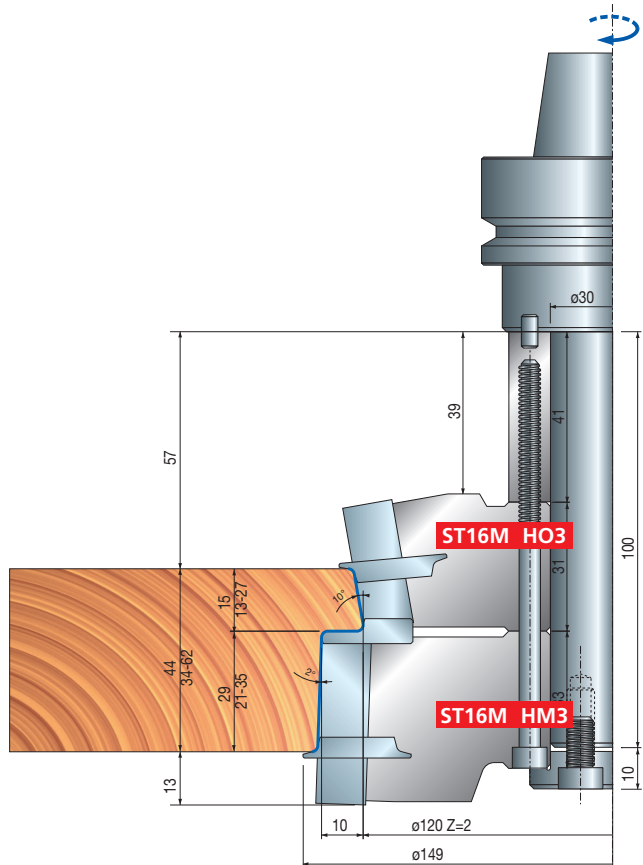
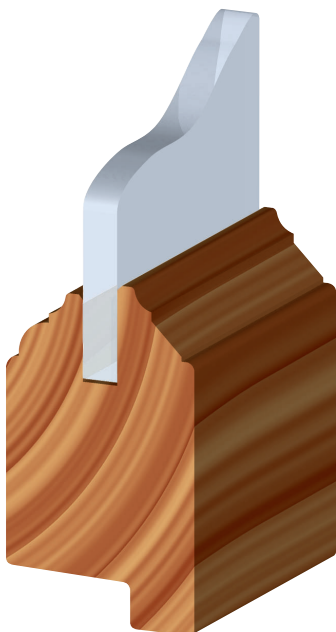
### SETS FOR DOOR REBATES

GRUPPO / SET **ST16MG-820**

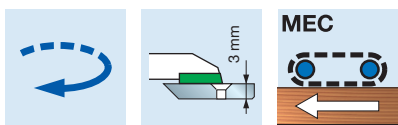
- Squadratura porta con battuta dritta.  
N° 6 profili intercambiabili.
- Door squaring – Straight rebate.  
No. 6 interchangeable profiles.

GRUPPO / SET **ST16MG-821**

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

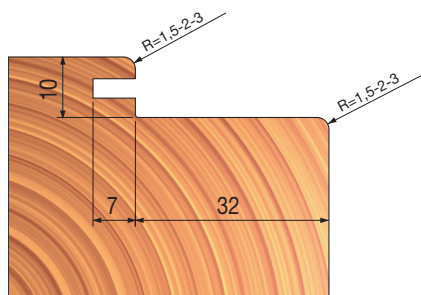


## GRUPPI PER PROFILATURA INTERNA TELAIO PORTA

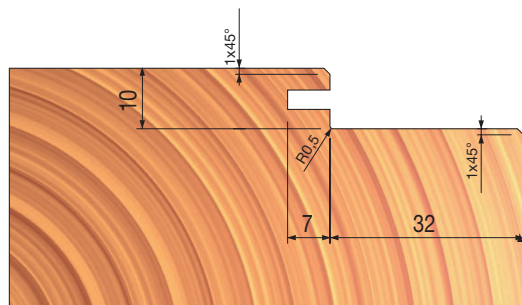


**PERFORMANCE**  
**Coltelli Riaffilabili**  
**SYSTEM**  
**Resharpenable Knives**

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



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



## Utensili per gruppi ST16MG-830

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

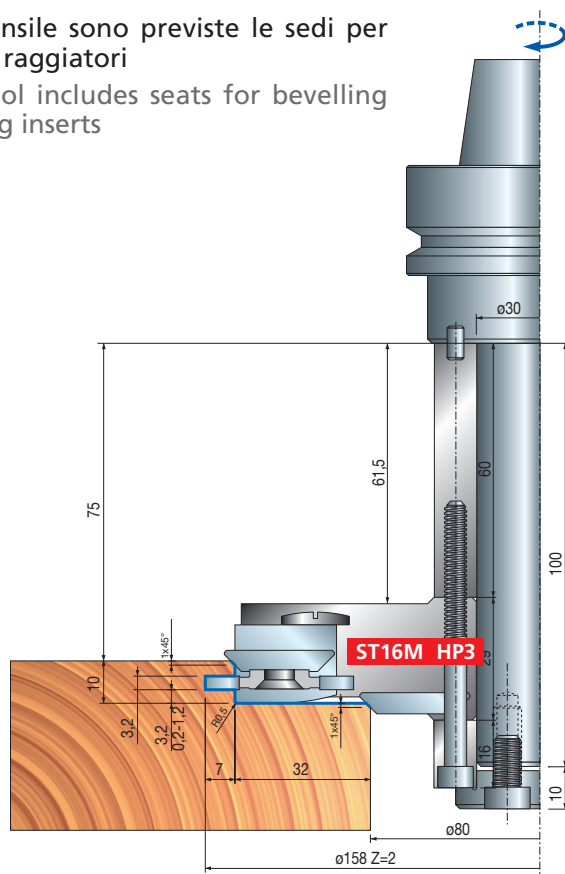
| Parti di ricambio<br>Spare parts        |                                                                                    | Dimensioni<br>Dimensions | Codice<br>Code |
|-----------------------------------------|------------------------------------------------------------------------------------|--------------------------|----------------|
| 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      |
| Inserito per incastri / Grooving insert |  | 40 x 16 x 3              | IG04MD AC3     |
| Vite / Screw                            |  | M6 x 14.5                | VT16M AA9      |

| <b>Inseriti opzionali</b>             |                                                                                   | <b>Dimensioni</b> | <b>Codice</b> |
|---------------------------------------|-----------------------------------------------------------------------------------|-------------------|---------------|
| <b>Optional inserts</b>               |                                                                                   | <b>Dimensions</b> | <b>Code</b>   |
| Inserito smussatore / Beveling insert |  | 22 x 16 x 5 45°   | IG51M BA3     |
| Inserito raggiatore / Rounding insert |  | 22 x 16 x 5 R=1,5 | IG52M AB3     |
| Inserito raggiatore / Rounding insert |  | 22 x 16 x 5 R=2   | IG52M AC3     |
| Inserito raggiatore / Rounding insert |  | 22 x 16 x 5 R=3   | IG52M AE3     |

- **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.

GRUPPO / SET **ST16MG-830**

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



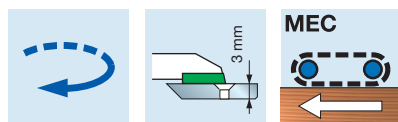


# PCN110

## 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     |
| 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).

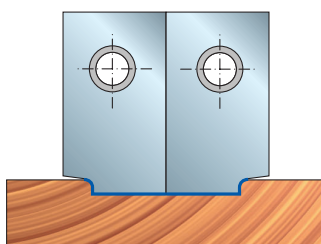
**NB.** Il codice è puramente indicativo e vale solo come proposta d'ordine.

■ 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.

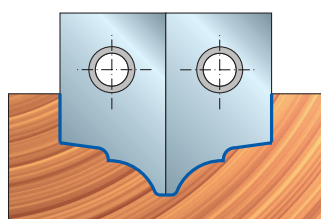
Order example: n. 1 **PCN110** and n. 4 **CCN110** (with same profile as knives fitted on router cutter). For each order, it is necessary to state the type of shank, the material to be machined and include a drawing and/or wood sample of the profile to be obtained.

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

ESEMPIO / EXAMPLE 1

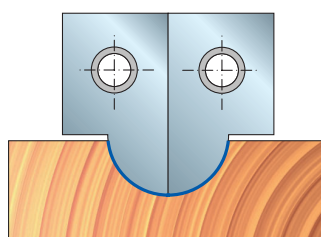


ESEMPIO / EXAMPLE 2

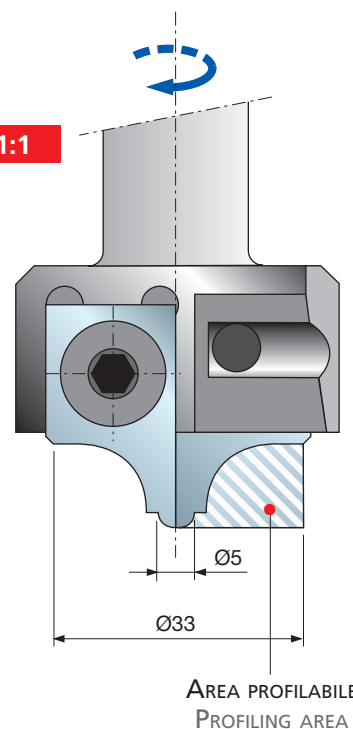
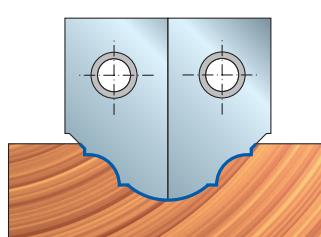


SCALA / SCALE 1:1

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.

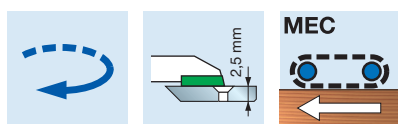
Es. di ordinazione: n. 1 **PCN121** e n. 4 **CCN120** (aventi lo stesso profilo dei 2 coltelli montati). Per ogni ordine è necessario indicare il tipo di attacco, il tipo di materiale lavorato e se il profilo dei coltelli è "a disegno" oppure "a campione legno" (includere il campione all'ordine).

**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.

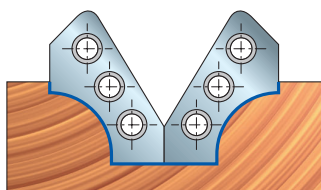
Order example: n. 1 **PCN121** and n. 4 **CCN120** (with same profile as knives fitted on router cutter). For each order, it is necessary to state the type of shank, the material to be machined and include a drawing and/or wood sample of the profile to be obtained.

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

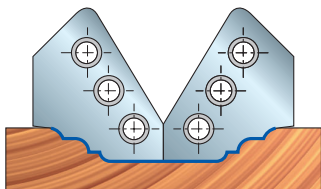


### PERFORMANCE Coltelli Riaffilabili SYSTEM Resharpenable Knives

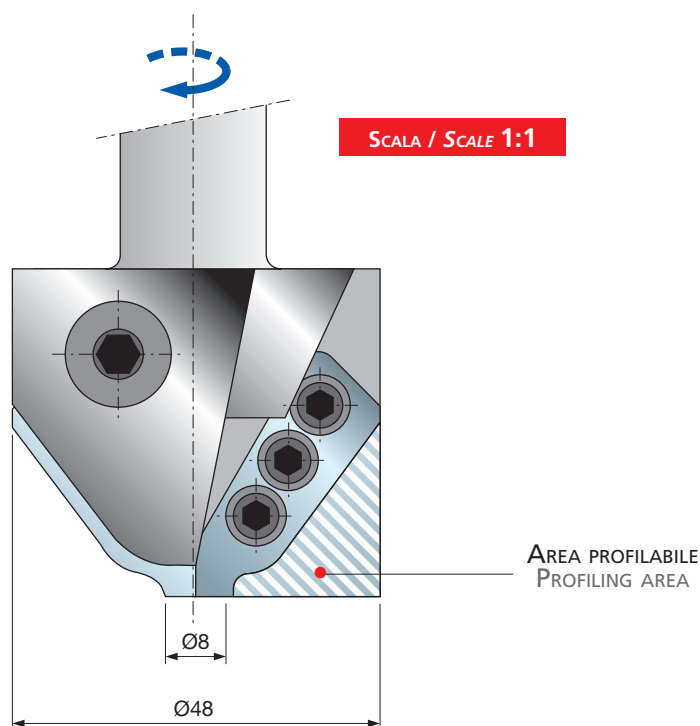
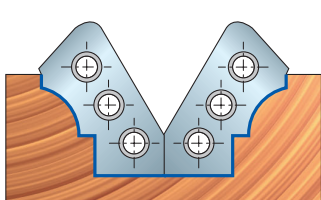
#### ESEMPIO / EXAMPLE 1



#### ESEMPIO / EXAMPLE 2



#### ESEMPIO / EXAMPLE 3

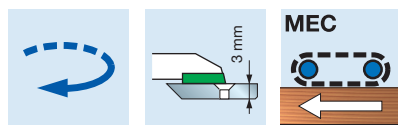


# PCN130

## 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.

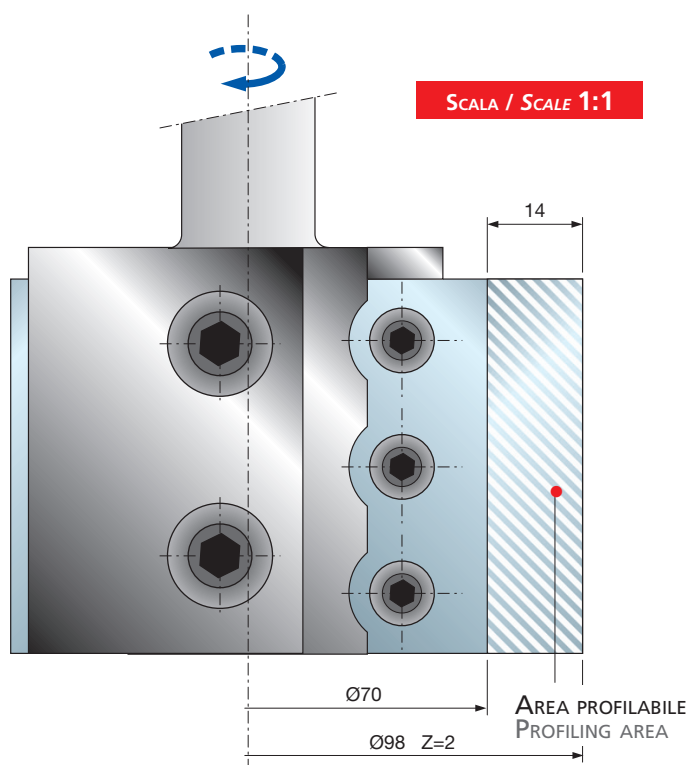
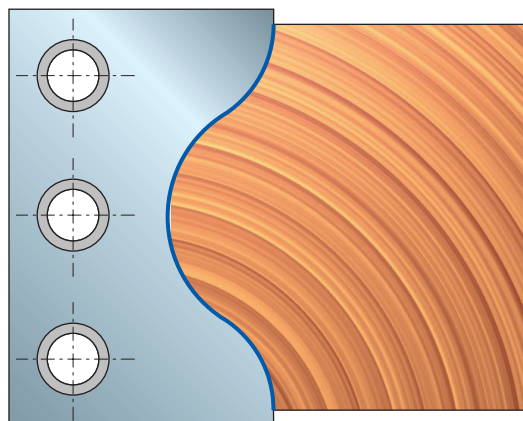
**Order example:** n. 1 **PCN130** and n. 4 **CCN130** (with same profile as knives fitted on router cutter). For each order, it is necessary to state the type of shank, the material to be machined and include a drawing and/or wood sample of the profile to be obtained.

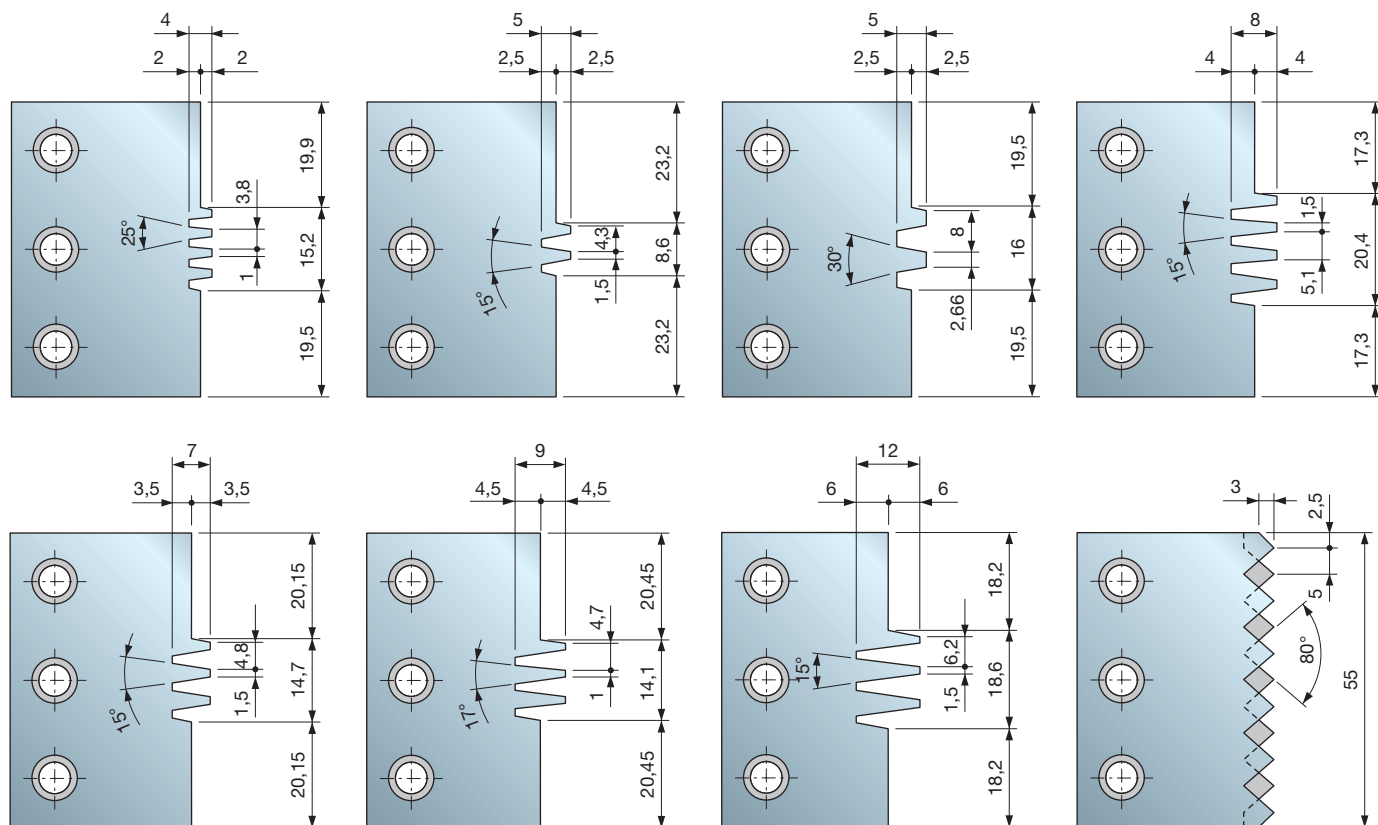
**Please note:** the code is only guideline and is only applicable while order is being processed.

\*Parti di ricambio necessarie in caso di giunzioni.

\*Spare parts needed in case of jointing profiles.

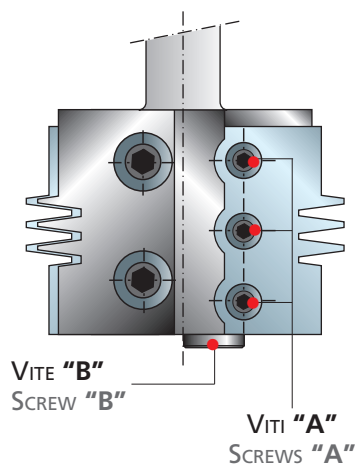
ESEMPIO / EXAMPLE





## SISTEMA DI REGOLAZIONE

### ADJUSTING SYSTEM



#### ISTRUZIONI PER LA REGOLAZIONE DEL GIOCO DI ACCOPPIAMENTO

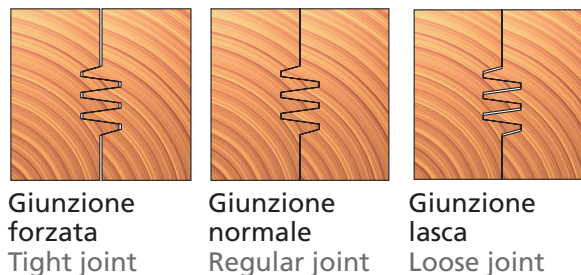
- Allentare le viti A mediante la chiave in dotazione.
- Allentare o serrare la vite B nella misura necessaria per ottenere il tipo di giunzione desiderata.
- Esercitando una leggera pressione sul coltello verso la sede e verso la vite B, serrare le viti A.

#### 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.

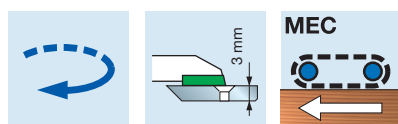
Es. di ordinazione: n. 1 **PCN133** e n. 4 **CCN133** (aventi lo stesso profilo dei 2 coltelli montati). Per ogni ordine è necessario indicare il tipo di attacco, il tipo di materiale lavorato e se il profilo dei coltelli è "a disegno" oppure "a campione legno" (includere il campione all'ordine).

**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.

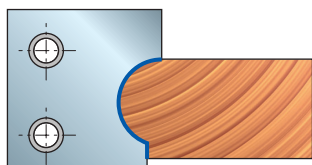
Order example: n. 1 **PCN133** and n. 4 **CCN133** (with same profile as knives fitted on router cutter). For each order, it is necessary to state the type of shank, the material to be machined and include a drawing and/or wood sample of the profile to be obtained.

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

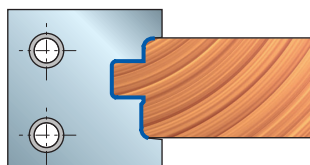


### PERFORMANCE Coltelli Riaffilabili SYSTEM Resharpenable Knives

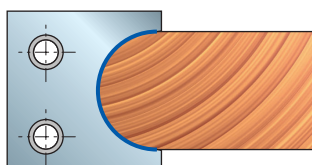
ESEMPIO / EXAMPLE 1



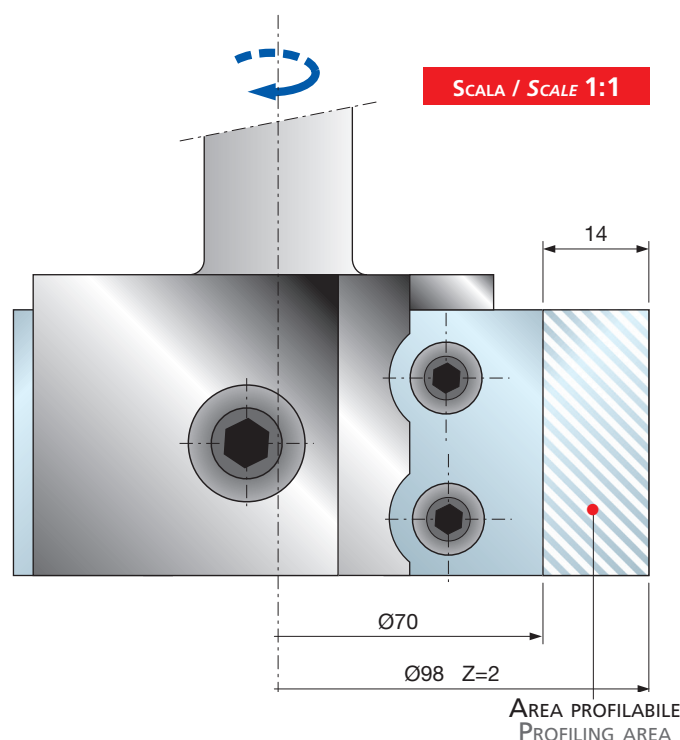
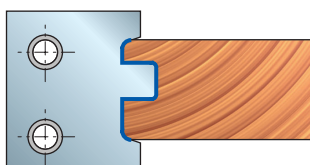
ESEMPIO / EXAMPLE 2



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.

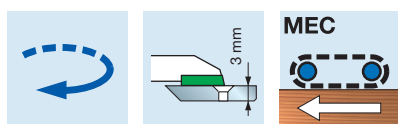
Es. di ordinazione: n. 1 **PCN140** e n. 4 **CCN140** (aventi lo stesso profilo dei 2 coltelli montati). Per ogni ordine è necessario indicare il tipo di attacco, il tipo di materiale lavorato e se il profilo dei coltelli è "a disegno" oppure "a campione legno" (includere il campione all'ordine).

**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.

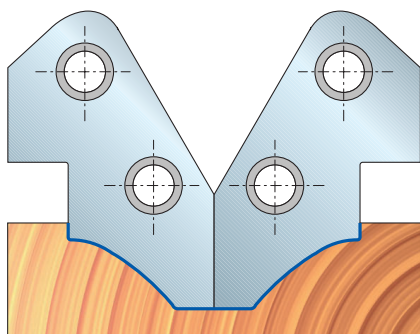
Order example: n. 1 **PCN140** and n. 4 **CCN140** (with same profile as knives fitted on router cutter). For each order, it is necessary to state the type of shank, the material to be machined and include a drawing and/or wood sample of the profile to be obtained.

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

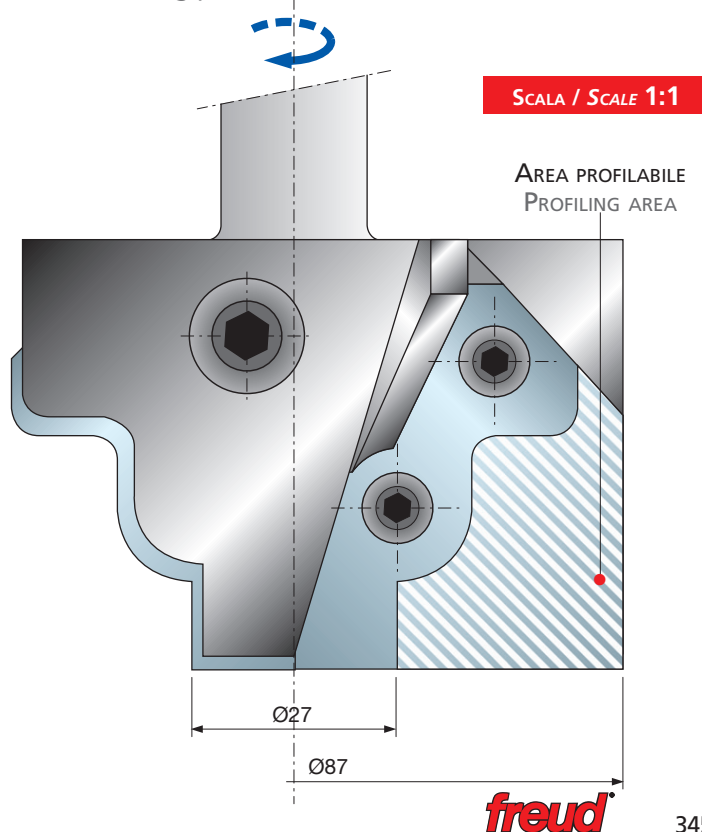
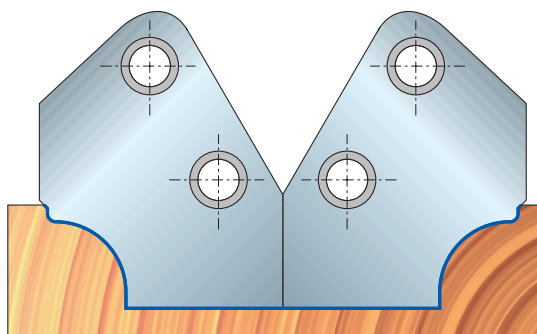


### PERFORMANCE Coltelli Riaffilabili SYSTEM Resharpenable Knives

#### ESEMPIO / EXAMPLE 1



#### ESEMPIO / EXAMPLE 2

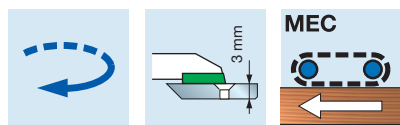


# PCN150

## 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     |
| 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).

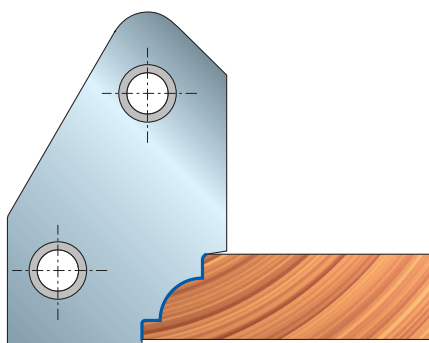
**NB.** Il codice è puramente indicativo e vale solo come proposta d'ordine.

■ 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.

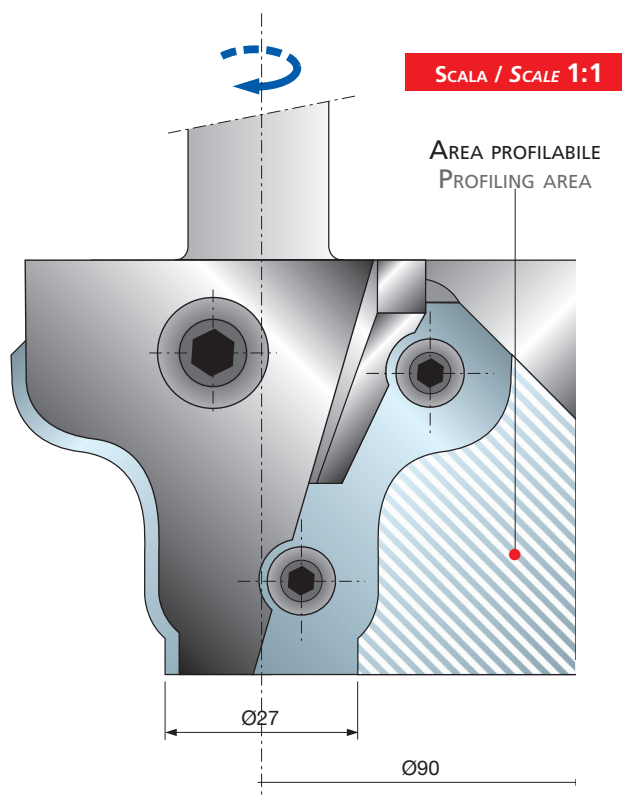
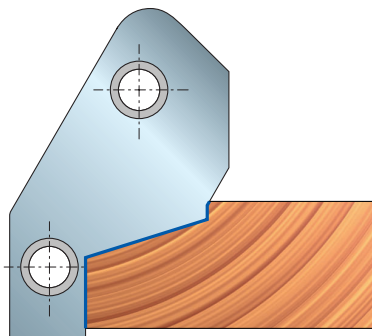
Order example: n. 1 **PCN150** and n. 4 **CCN150** (with same profile as knives fitted on router cutter). For each order, it is necessary to state the type of shank, the material to be machined and include a drawing and/or wood sample of the profile to be obtained.

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

### ESEMPIO / EXAMPLE 1



### ESEMPIO / EXAMPLE 2



# PCN160

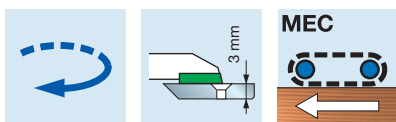
## PUNTA PER SPECCHIETTI DI ANTINA CNC RAISED PANEL ROUTER CUTTER

### 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).

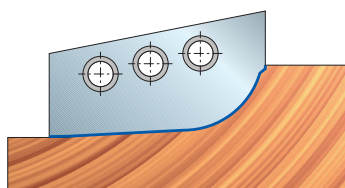
**NB.** Il codice è puramente indicativo e vale solo come proposta d'ordine.

■ 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.

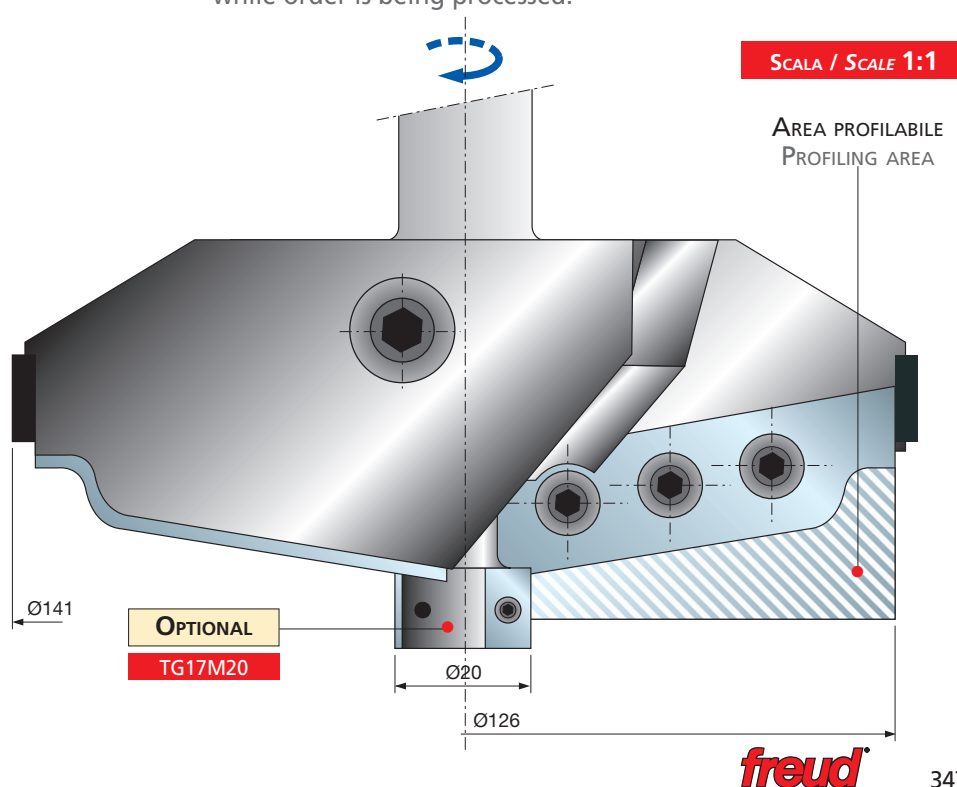
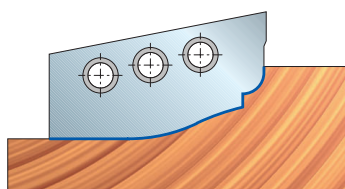
Order example: n. 1 **PCN160** and n. 4 **CCN160** (with same profile as knives fitted on router cutter). For each order, it is necessary to state the type of shank, the material to be machined and include a drawing and/or wood sample of the profile to be obtained.

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

#### ESEMPIO / EXAMPLE 1



#### ESEMPIO / EXAMPLE 2

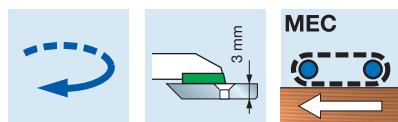




# PCN160R

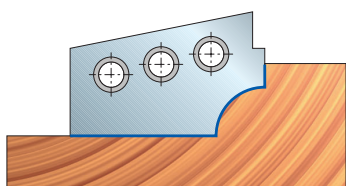
## PUNTA PER SPECCHIETTI DI ANTINA CNC RAISED PANEL ROUTER CUTTER

### ARTICOLI SPECIALI SPECIAL ITEMS

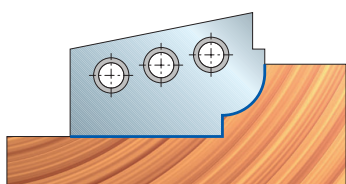


### PERFORMANCE Coltelli Riaffilabili SYSTEM Resharpenable Knives

#### ESEMPIO / EXAMPLE 1



#### ESEMPIO / EXAMPLE 2



| 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 |

■ 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.

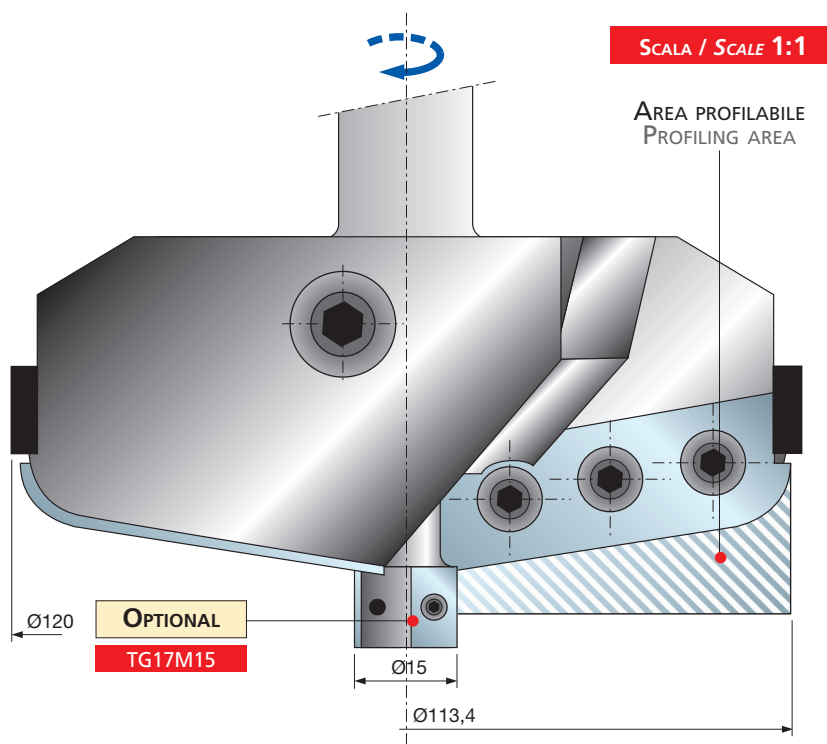
Es. di ordinazione: n. 1 **PCN160R** e n. 4 **CCN160R** (aventi lo stesso profilo dei 2 coltelli montati). Per ogni ordine è necessario indicare il tipo di attacco, il tipo di materiale lavorato e se il profilo dei coltelli è "a disegno" oppure "a campione legno" (includere il campione all'ordine).

**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.

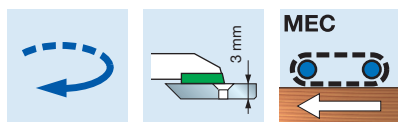


# PCN300

## PUNTA PER PROFILO TELAIO ANTINA

### CNC CABINET DOOR ROUTER CUTTER - PROFILE

#### ARTICOLI SPECIALI SPECIAL ITEMS



#### PERFORMANCE SYSTEM Coltelli Riaffilabili Resharpenable Knives

| 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  |
| Inserito per incastri / Grooving insert | 34 x 4      | SR06MD AG3 |
| Inserito per incastri / Grooving insert | 34 x 7      | SR06MD AH3 |
| Chiave / Allen key                      | 5 x 110     | CB03M EA9  |

■ 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.

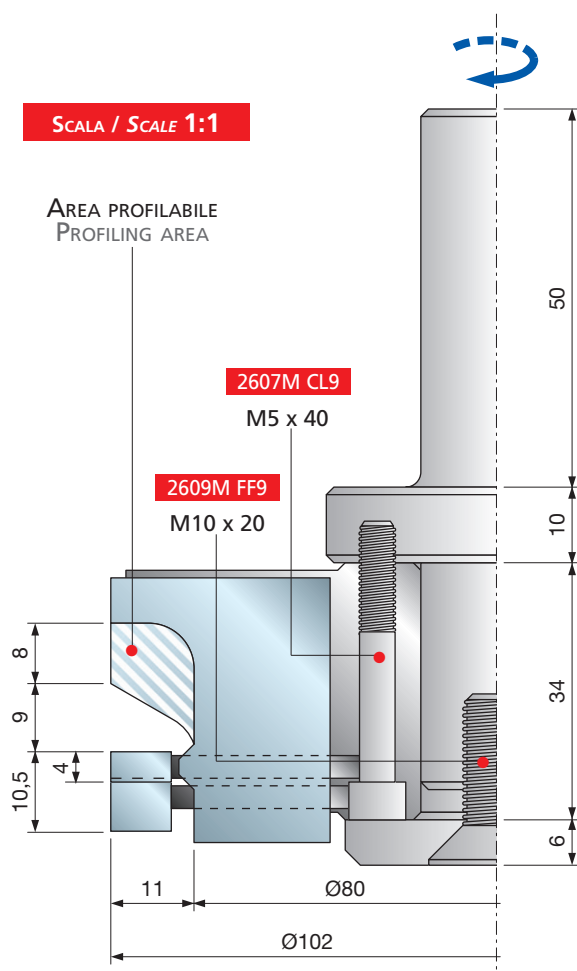
**NB.** Il codice è puramente indicativo e vale solo come proposta d'ordine.

■ 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.

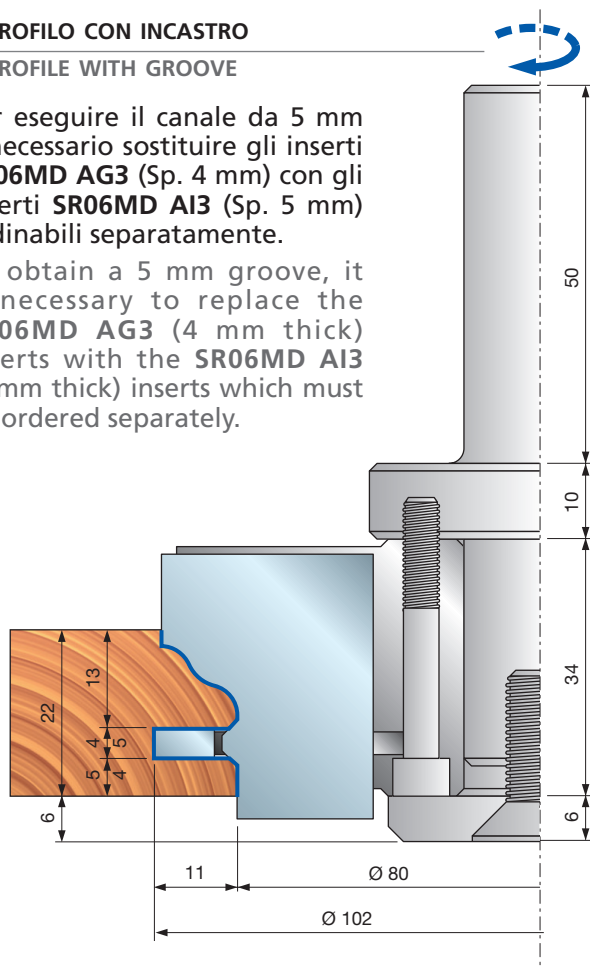
**Please note:** the code is only guideline and is only applicable while order is being processed.



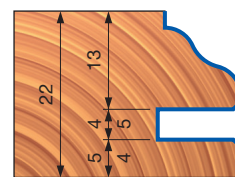
## 1 PROFILO CON INCASTRO PROFILE WITH GROOVE

■ 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.

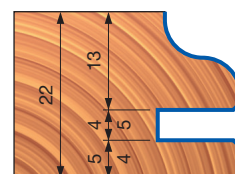
■ To obtain a 5 mm groove, it is necessary to replace the **SR06MD AG3** (4 mm thick) inserts with the **SR06MD AI3** (5 mm thick) inserts which must be ordered separately.



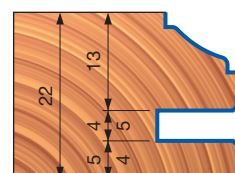
### PROFILO / PROFILE 1



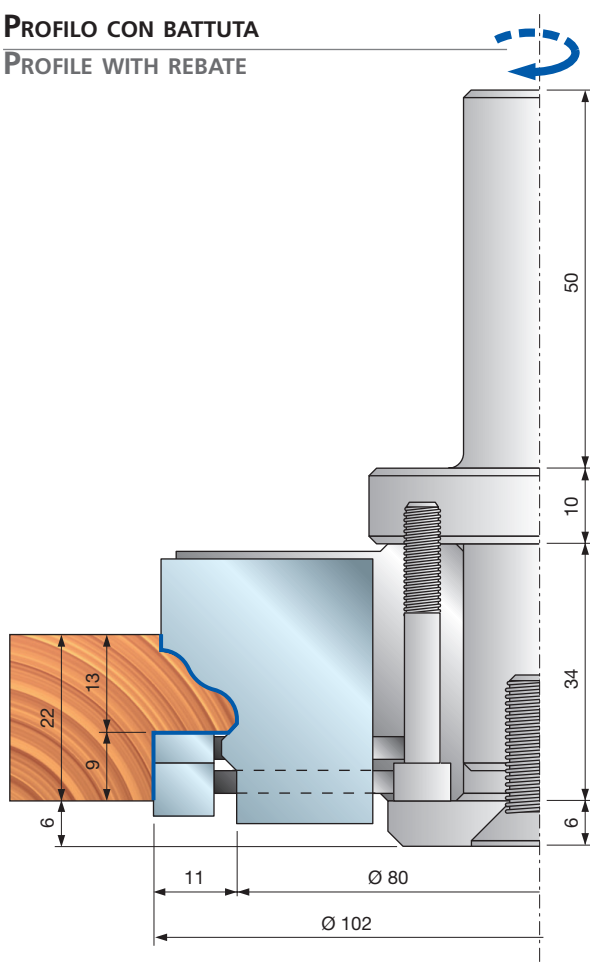
### PROFILO / PROFILE 2



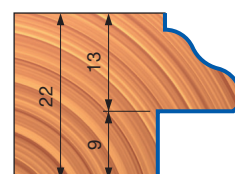
### PROFILO / PROFILE 3



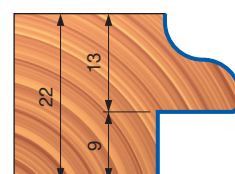
## 2 PROFILO CON BATTUTA PROFILE WITH REBATE



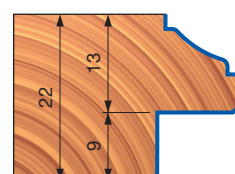
### PROFILO / PROFILE 1



### PROFILO / PROFILE 2



### PROFILO / PROFILE 3



# PCN310

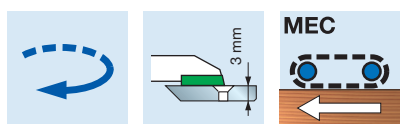
## PUNTA PER CONTROPROFILO TELAIO ANTINA CNC CABINET DOOR ROUTER CUTTER - SCRIBE

### ARTICOLI SPECIALI SPECIAL ITEMS



| D   | B  | A     | Max RPM | Codice |
|-----|----|-------|---------|--------|
| mm  | mm | mm    | U/min.  | Code   |
| 102 | 35 | 20x50 | 10.500  | PCN310 |

| Parti di ricambio                       | Dimensioni    | Codice      |
|-----------------------------------------|---------------|-------------|
| Spare parts                             | Dimensions    | Code        |
| Coltello / Knife                        | 35 x 30 x 3   | CK02 DC3    |
| Cuneo / Wedge                           | 33 x 17 x 8,5 | CN11M B310A |
| Vite / Screw                            | M10 x 18      | VT03M CC9   |
| Vite / Screw                            | M6 x 14,5     | VT16M AA9   |
| Vite / Screw                            | 16 x 7 x M5   | VT08M AE9   |
| Inserito 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 **PCN310** 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 **PCN310** 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 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.

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

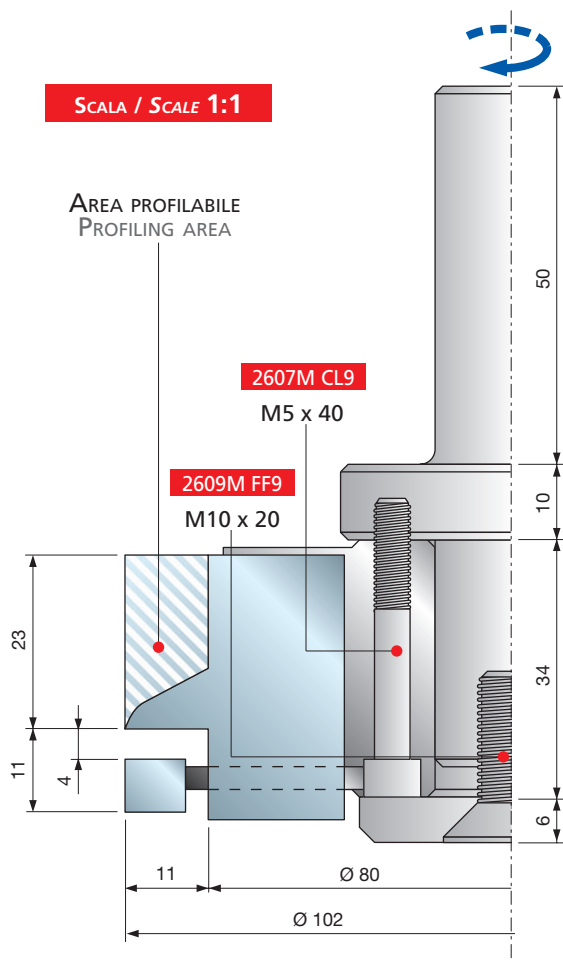
■ For profiling soft and hard solid woods, exotic woods, chipboard and MDF on normal and CNC overhead routing machines. Code **PCN310** includes the router bit body, 2 profiled knives, the chuck, screws and servicing keys. For each router cutter, minimum 6 profiled knives must be ordered.

Order example: n. 1 **PCN310** 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 the 5 mm tenon, it is necessary to a washer (1 mm thick) under the **SR06MD AH3** (7 mm thick) inserts. The washer **ST07M 109** must be ordered separately.

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

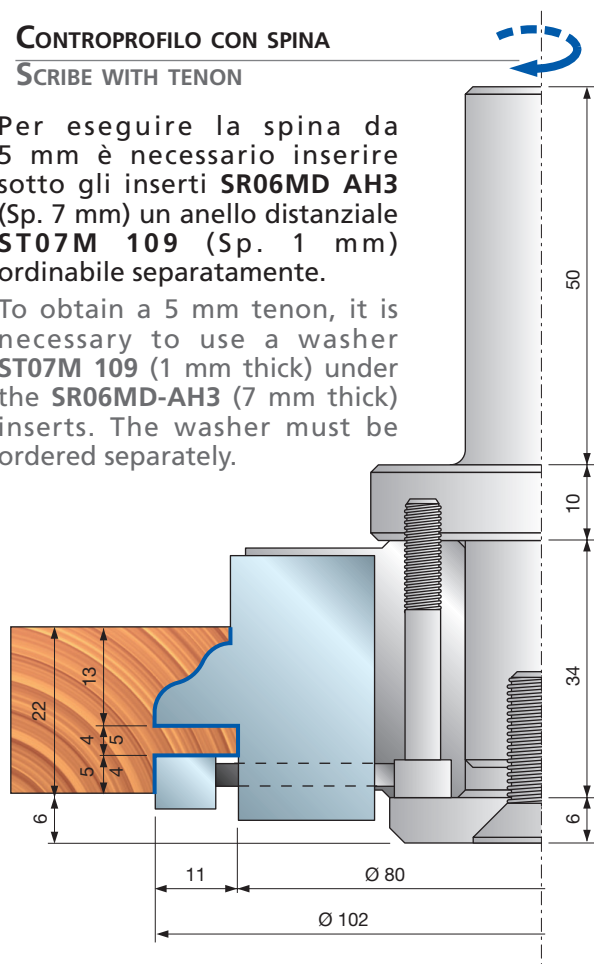




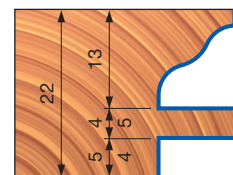
## 1 CONTROPROFILO CON SPINA SCRIBE WITH TENON

■ 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.

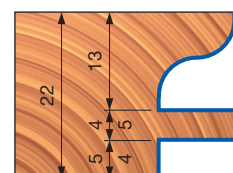
■ To obtain a 5 mm tenon, it is necessary to use a washer **ST07M 109** (1 mm thick) under the **SR06MD-AH3** (7 mm thick) inserts. The washer must be ordered separately.



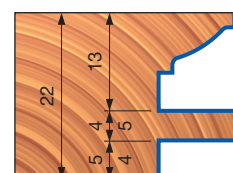
PROFILO / PROFILE 1



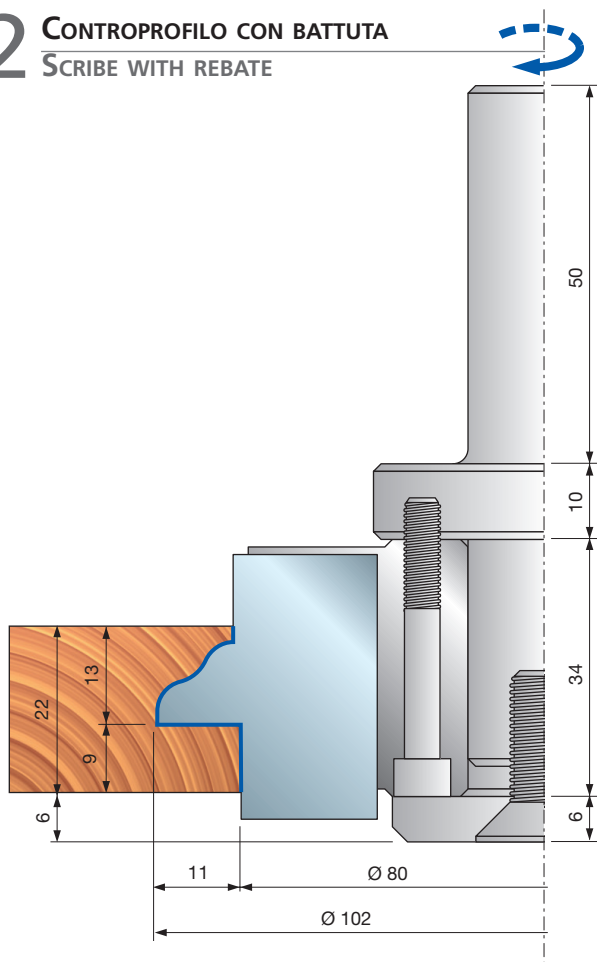
PROFILO / PROFILE 2



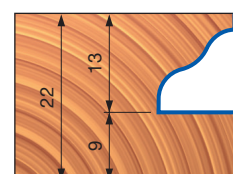
PROFILO / PROFILE 3



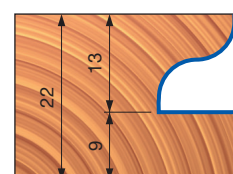
## 2 CONTROPROFILO CON BATTUTA SCRIBE WITH REBATE



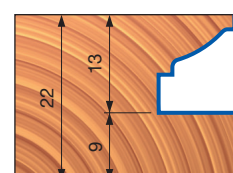
PROFILO / PROFILE 1



PROFILO / PROFILE 2



PROFILO / PROFILE 3



# ANTINE PANTOGRAFATE

## CABINET DOORS

## ESEMPI DI LAVORAZIONE

## WORKING EXAMPLE

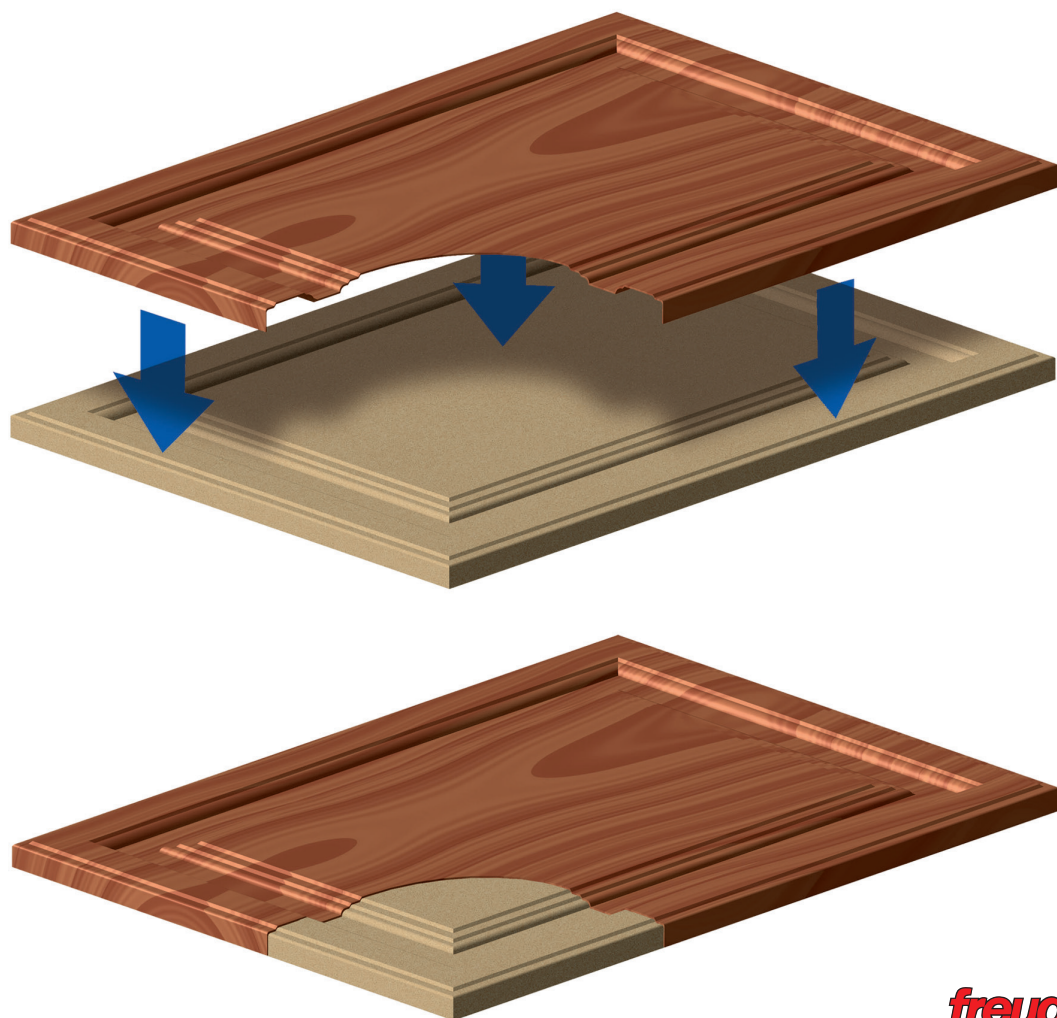


■ La tecnologia impiegata nella produzione delle antine ha portato all'utilizzo di materiali diversi dal legno massiccio, che permettono la lavorazione di un unico pezzo, evitando di dover eseguire il telaio con profilo e controprofilo. Si utilizza soprattutto MDF, materiale che offre una superficie 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.

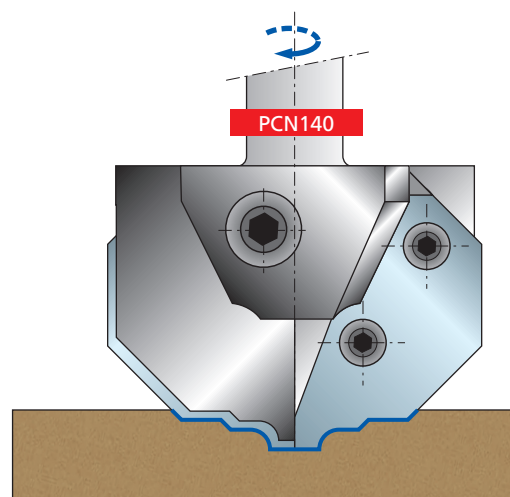
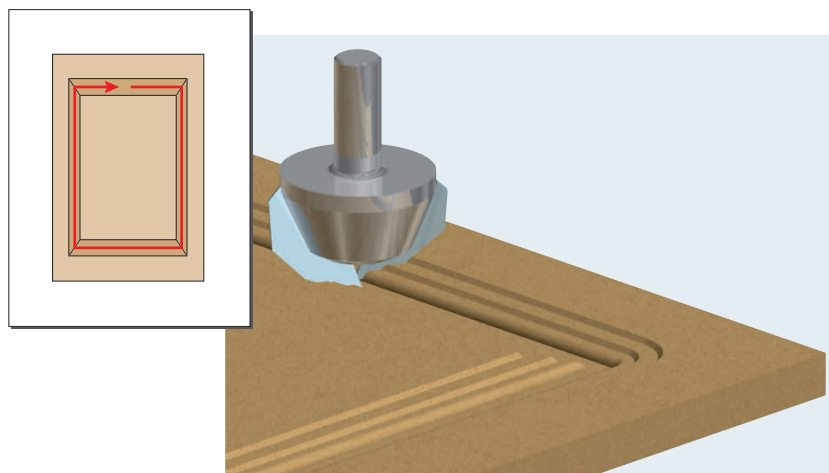
La gamma di punte CNC **Freud** semplifica molto questo tipo di produzione, permettendo la realizzazione di antine di ogni genere e dimensione utilizzando solo pochi utensili molto versatili. Inoltre, la **Freud** è in grado di produrre gli utensili necessari in base alle esigenze del Cliente, a prezzi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

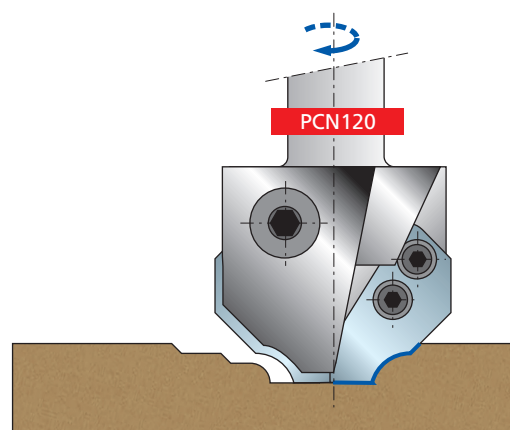
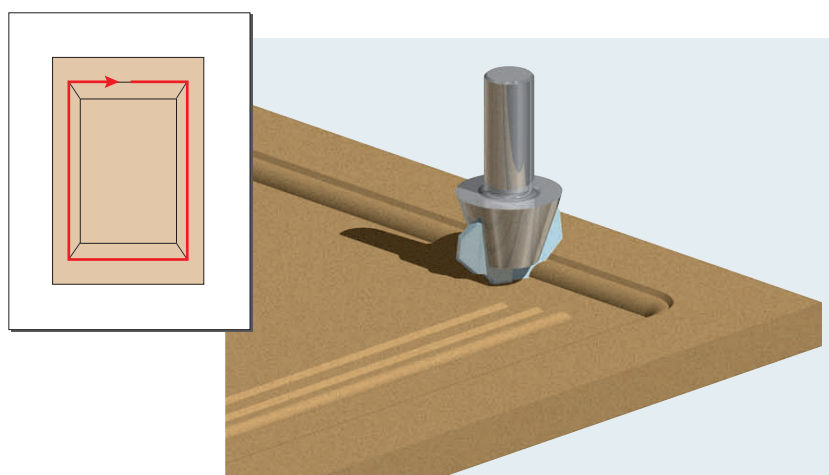
Now, thanks to the **Freud**, CNC router bits all this has become much easier: with a few versatile tools it is now feasible to produce all types of cabinet doors and of any given sizes: according to the customer's requirements **Freud** can, in fact, manufacture the necessary tools at really competitive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



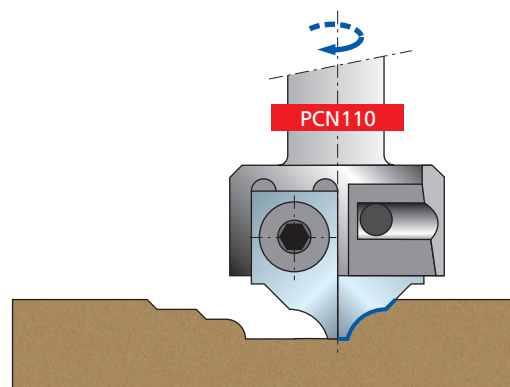
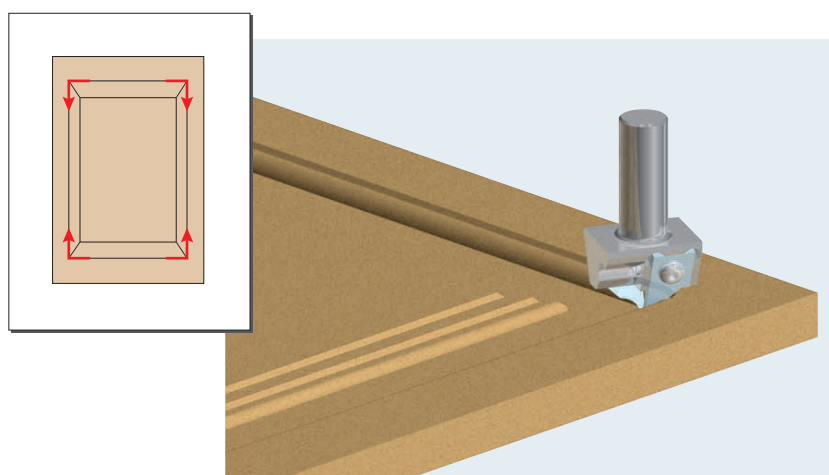
## 1 PRIMA LAVORAZIONE FIRST STEP



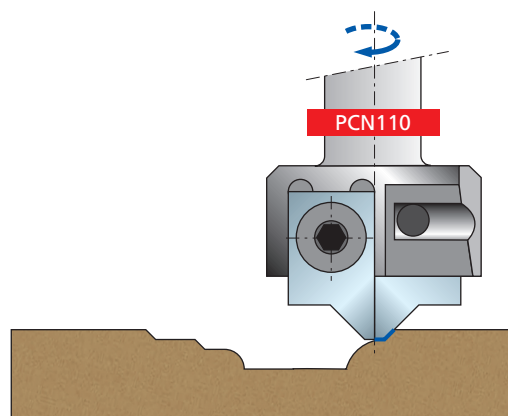
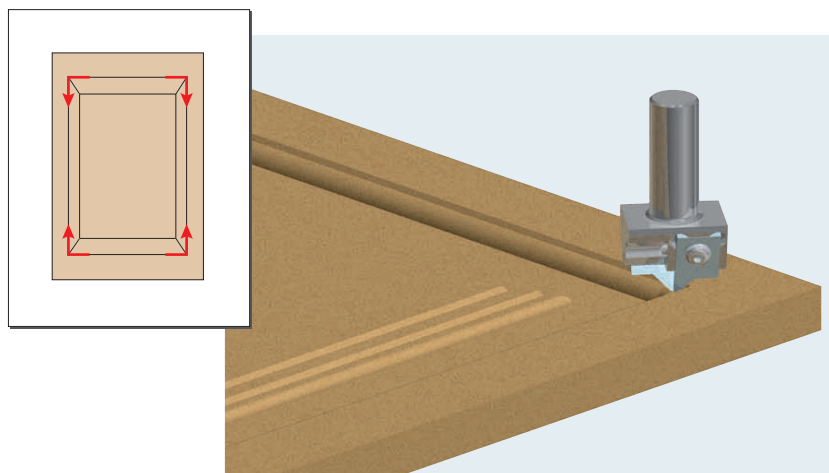
## 2 SECONDA LAVORAZIONE SECOND STEP



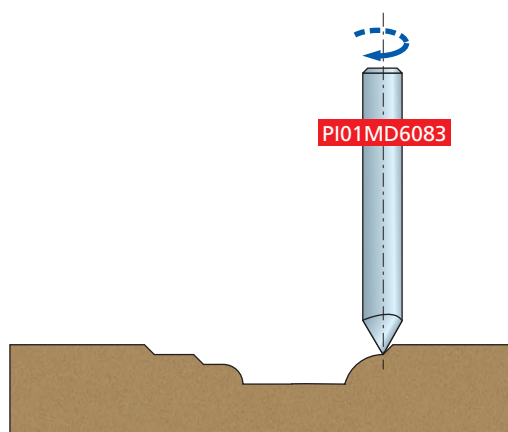
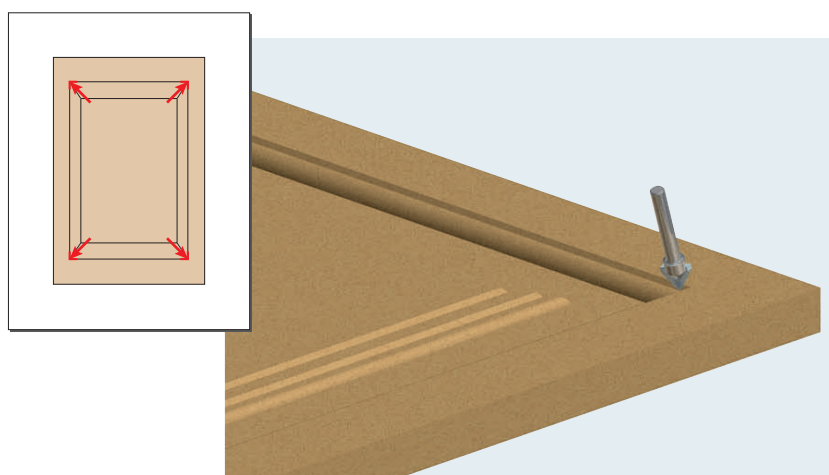
## 3 TERZA LAVORAZIONE THIRD STEP



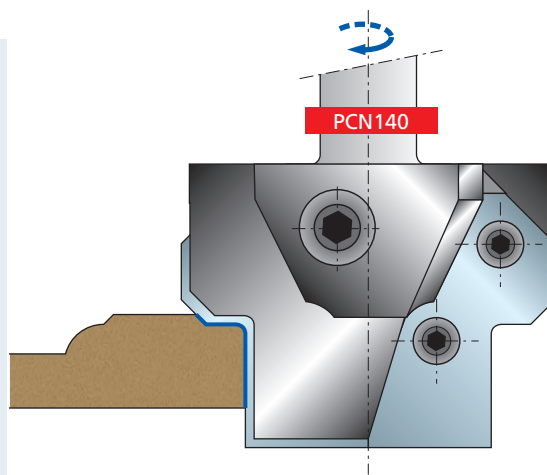
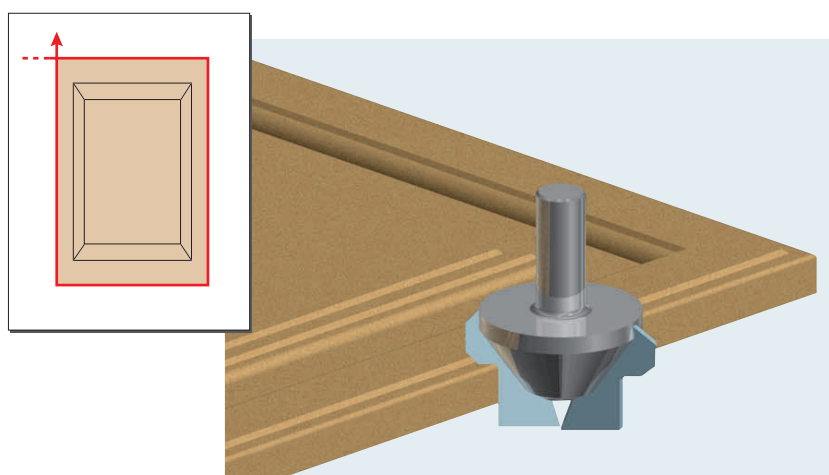
#### 4 QUARTA LAVORAZIONE FOURTH STEP



#### 5 QUINTA LAVORAZIONE FIFTH STEP

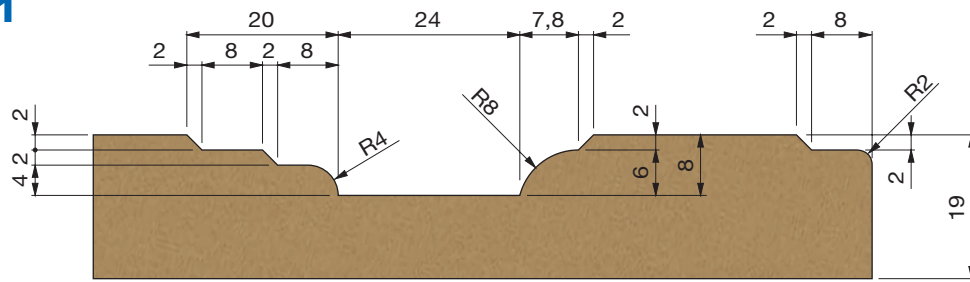


#### 6 SESTA LAVORAZIONE SIXTH STEP

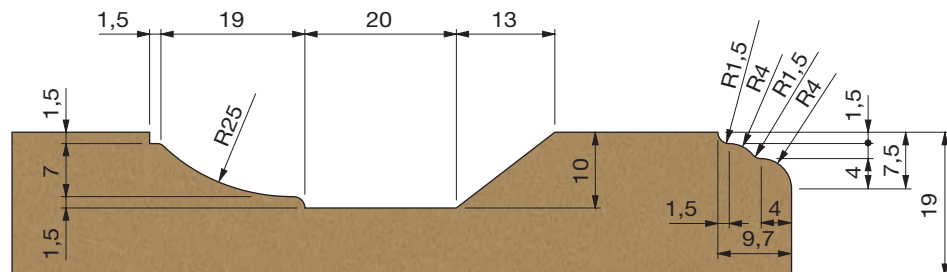




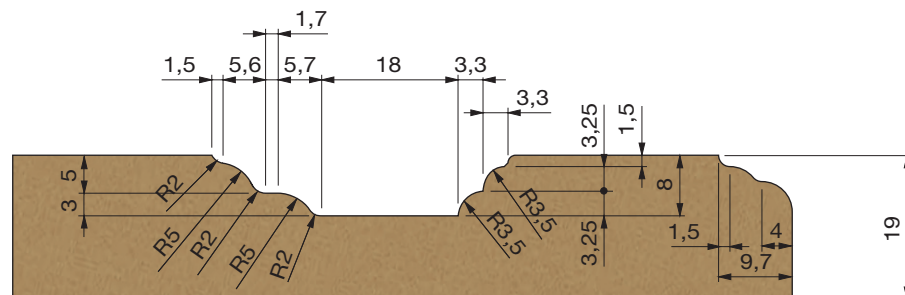
PROFILO / PROFILE 1



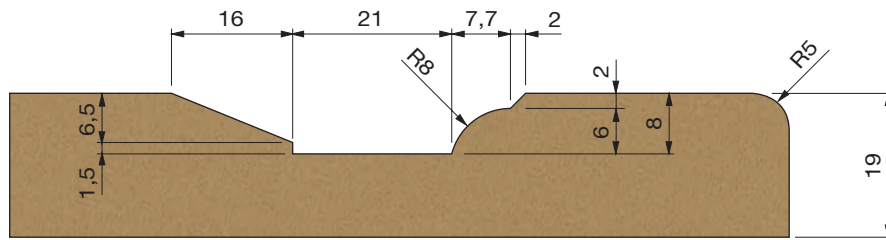
PROFILO / PROFILE 2



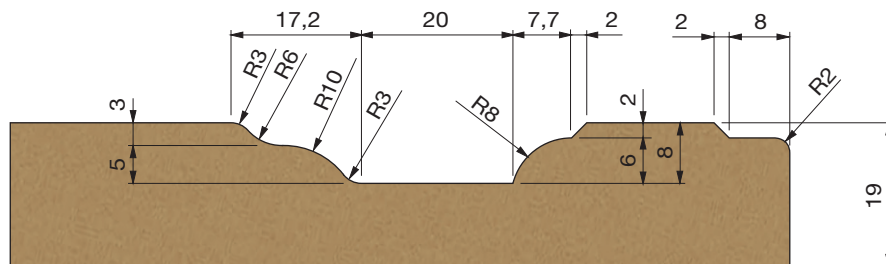
PROFILO / PROFILE 3



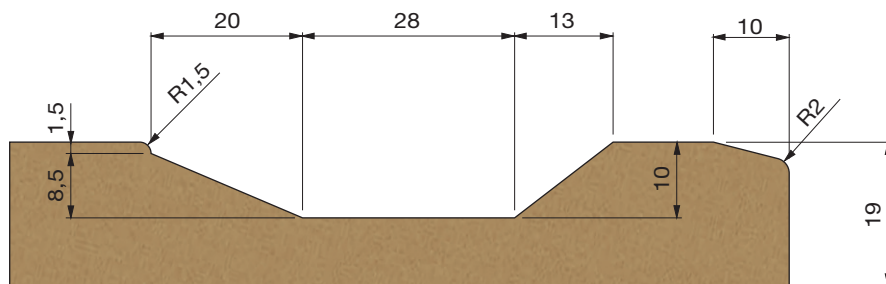
## PROFILO / PROFILE 4



## PROFILO / PROFILE 5



## PROFILO / PROFILE 6



# PROGRAMMA SERRAMENTO

## WINDOW TOOLING PROGRAM



■ Gli utensili per la produzione di serramenti costruiti dalla Freud hanno delle peculiarità tali da garantire la massima versatilità di utilizzo, mantenendo la sicurezza e la precisione degli stessi. La forza dell'azienda **Freud** sta comunque nella possibilità di costruire utensili per produrre serramenti con tipologie dedicate e adatti a tutti i tipi di pantografo.

Per garantire la massima qualità a livello europeo, gli infissi costruiti con i nostri utensili sono stati sottoposti ai più severi controlli e collaudi, ottenendo sempre la massima valutazione, presso i più rappresentativi centri di ricerca. Richiedete al vostro agente di zona il Programma completo Serramenti.

■ Freud's window tooling sets are designed to allow maximum flexibility without compromising safety and precision. The strength of our firm rests on the possibility of manufacturing tools for different types of windows and machines.

To guarantee maximum European quality levels, windows manufactured with our tools have been severely tested and rewarded with the highest scores from the most representative research facilities. Ask your representative the complete Window Tooling Program.

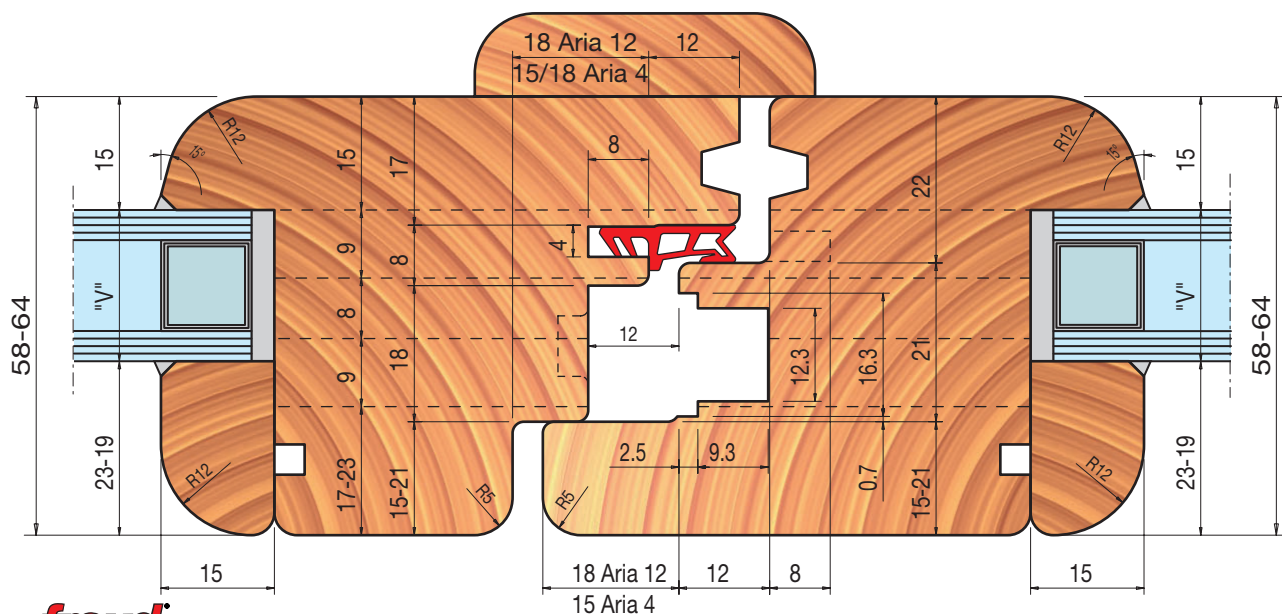


### ESEMPI DI SEZIONI

### EXAMPLE OF SECTIONS

**SERRAMENTO "FREUMEX" - VERSIONE S17 ROUND PERFORMANCE - ARIA 12 mm**

**WINDOW TOOLING SYSTEM "FREUMEX" - VERSION S17 ROUND PERFORMANCE - AIR 12 mm**

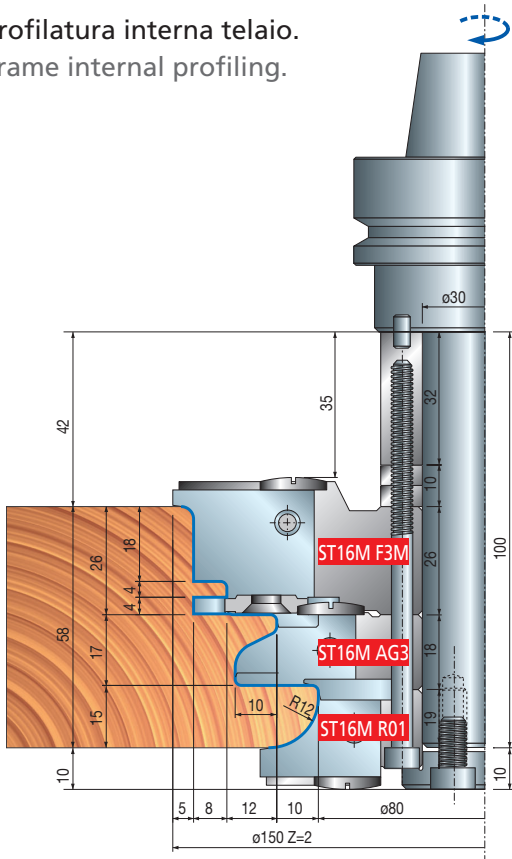




## SERRAMENTO "ST16MGR108"

## WINDOW TOOLING SYSTEM "ST16MGR108"

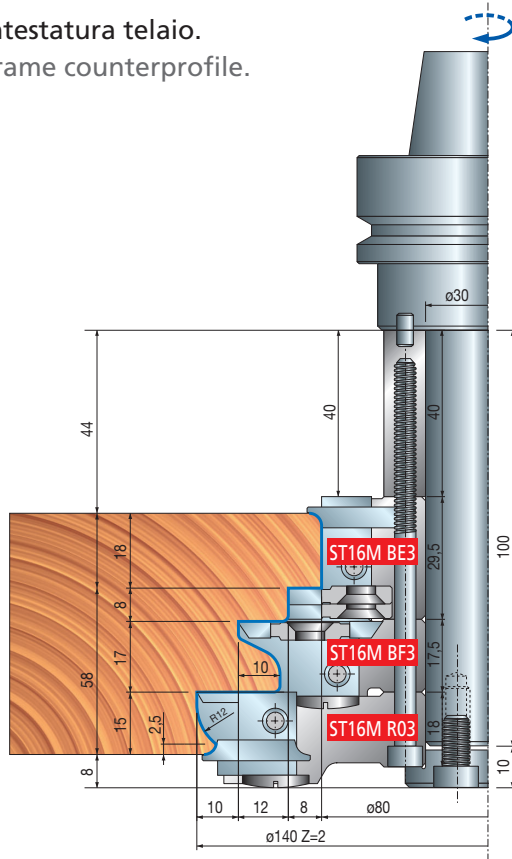
- Frame internal profiling.



## SERRAMENTO "ST16MGR206"

## WINDOW TOOLING SYSTEM "ST16MGR206"

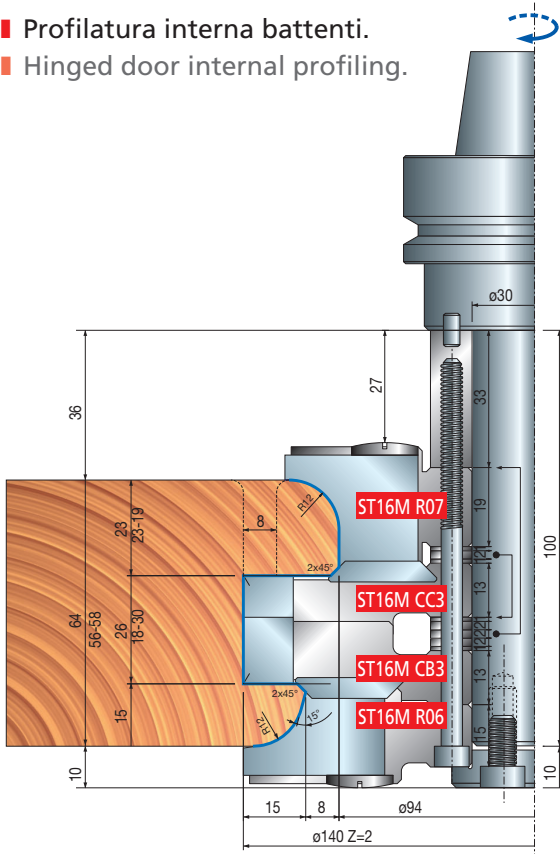
- Frame counterprofile.



## SERRAMENTO "ST16MGR310"

## WINDOW TOOLING SYSTEM "ST16MGR310"

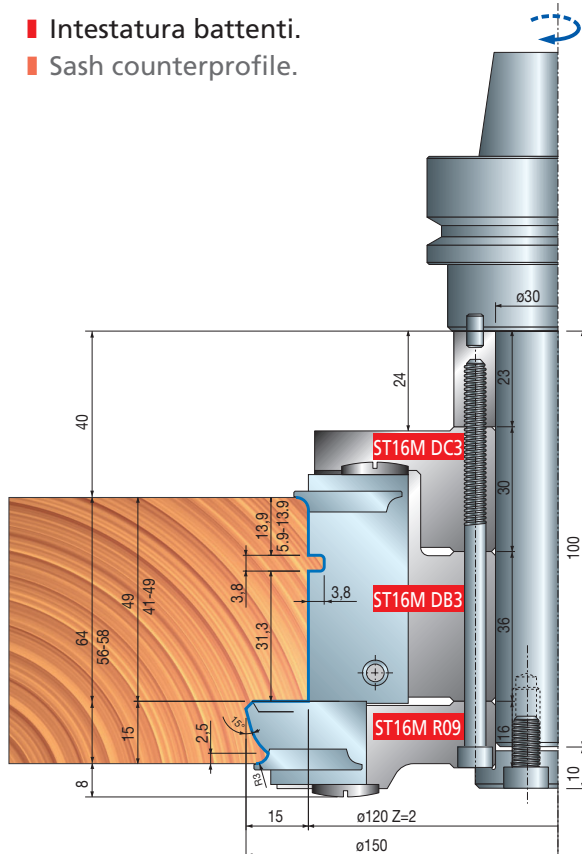
- Hinged door internal profiling.



## SERRAMENTO "ST16MGR410"

## WINDOW TOOLING SYSTEM "ST16MGR410"

- Sash counterprofile.





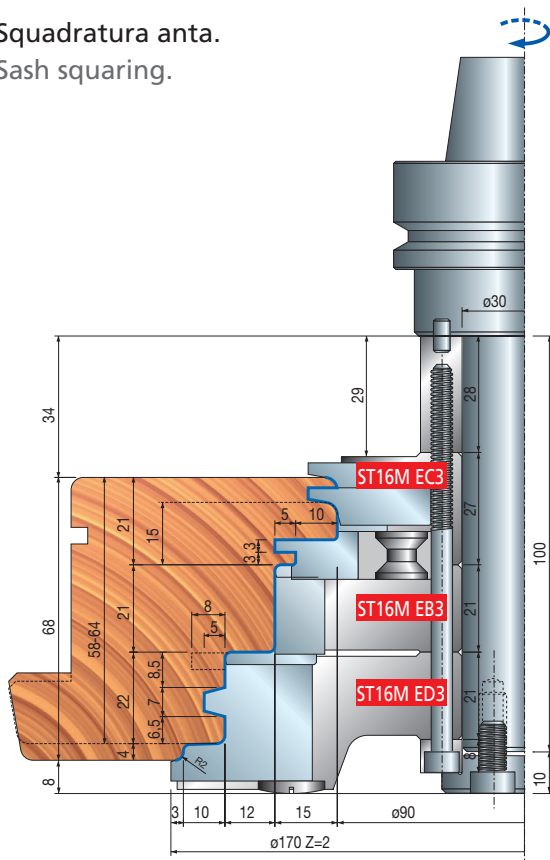
# ESEMPI DI GRUPPI PER SERRAMENTI PER PANTOGRAFO

## EXAMPLE OF WINDOW TOOLING SETS FOR CNC OVERHEAD ROUTER MACHINES

### SERRAMENTO "ST16MGR501"

#### WINDOW TOOLING SYSTEM "ST16MGR501"

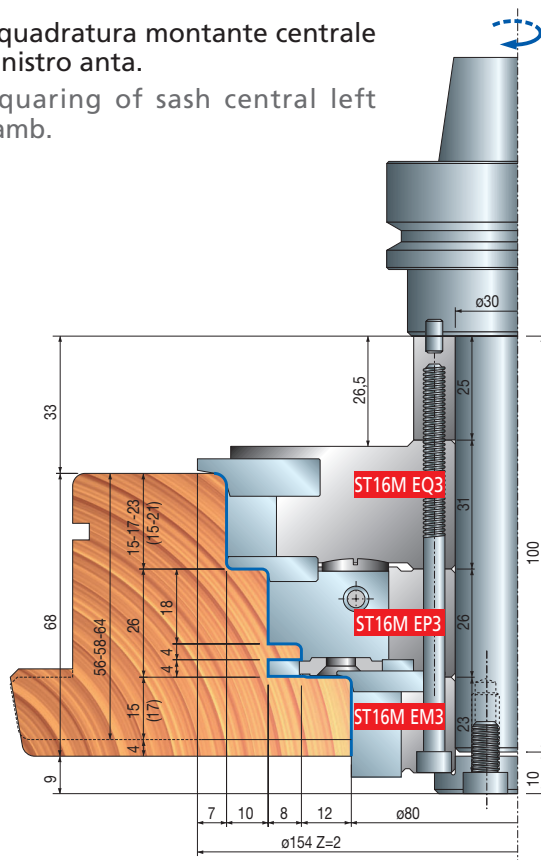
- Squadatura anta.
- Sash squaring.



### SERRAMENTO "ST16MGR514"

#### WINDOW TOOLING SYSTEM "ST16MGR514"

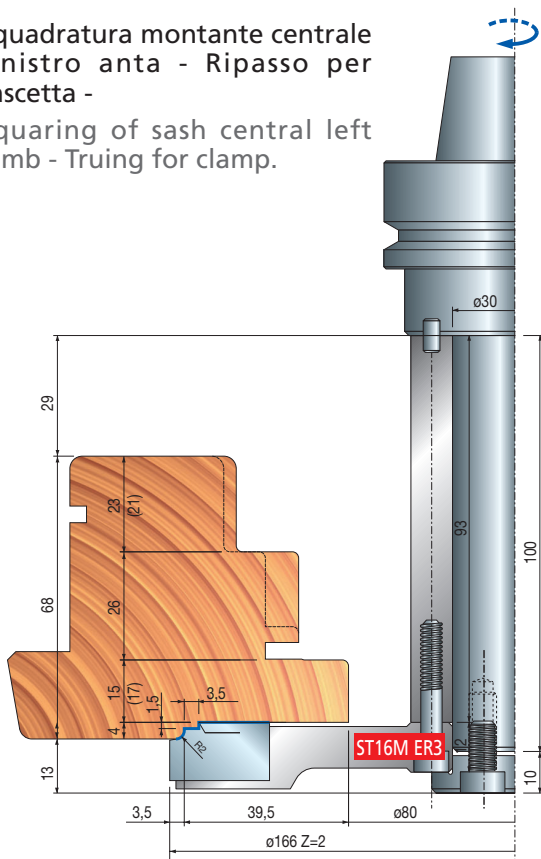
- Squadatura montante centrale sinistro anta.
- Squaring of sash central left jamb.



### SERRAMENTO "ST16MGR515"

#### WINDOW TOOLING SYSTEM "ST16MGR515"

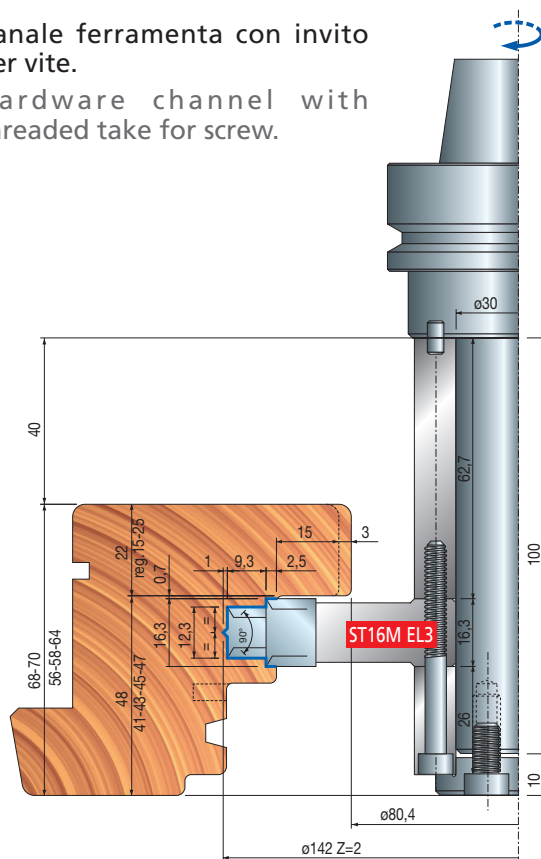
- Squadatura montante centrale sinistro anta - Ripasso per fascetta -
- Squaring of sash central left jamb - Truing for clamp.



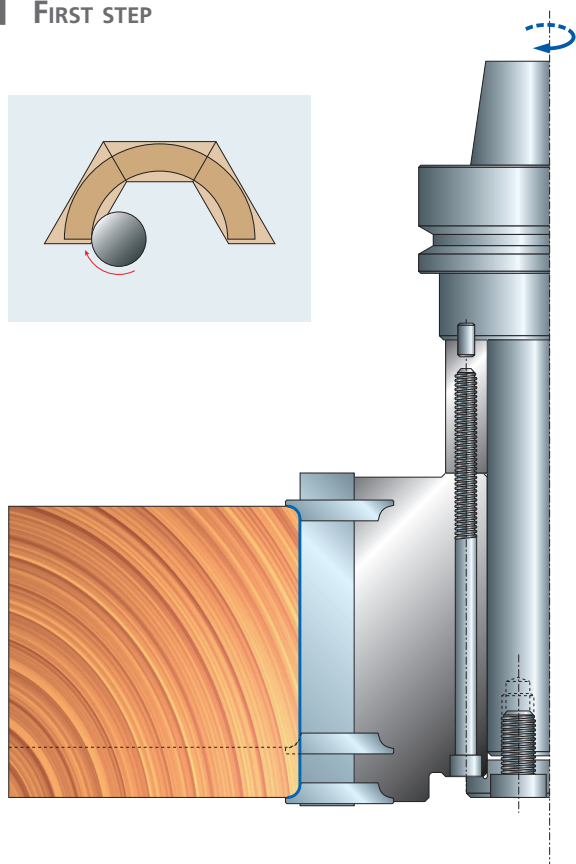
### SERRAMENTO "ST16MGR512"

#### WINDOW TOOLING SYSTEM "ST16MGR512"

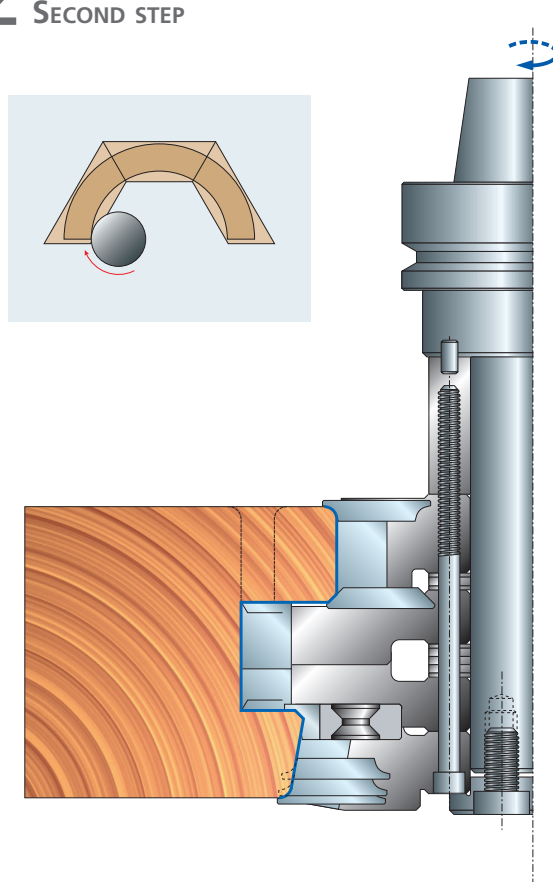
- Canale ferramenta con invito per vite.
- Hardware channel with threaded take for screw.



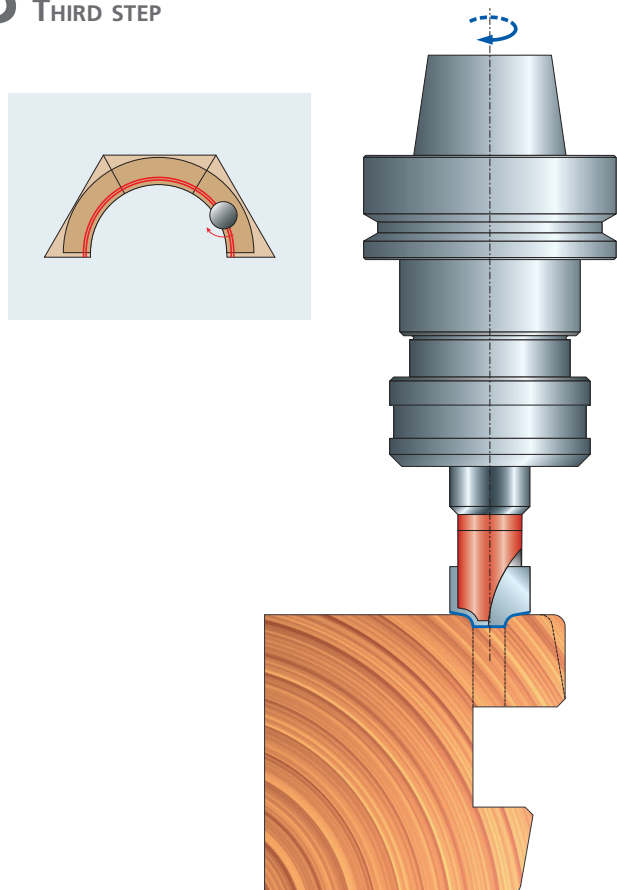
**1 PRIMA LAVORAZIONE**  
**FIRST STEP**



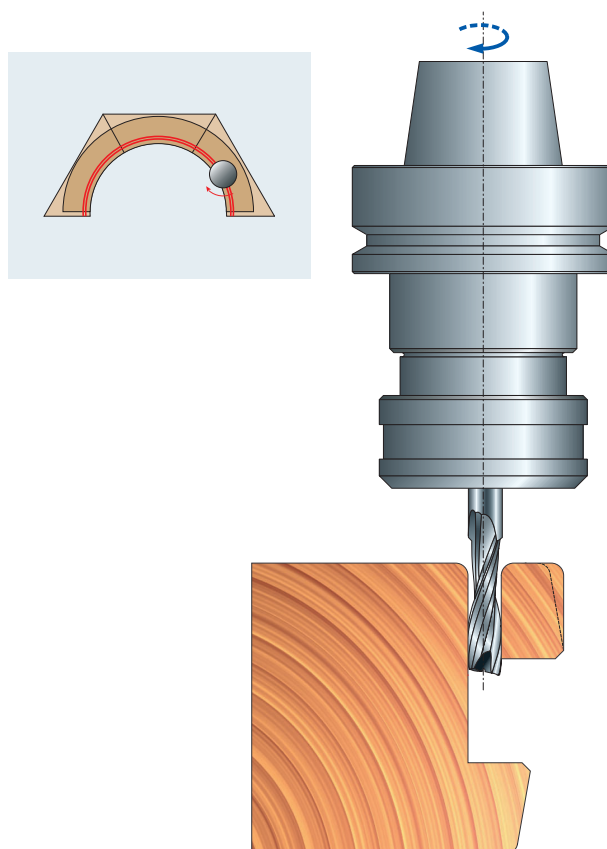
**2 SECONDA LAVORAZIONE**  
**SECOND STEP**



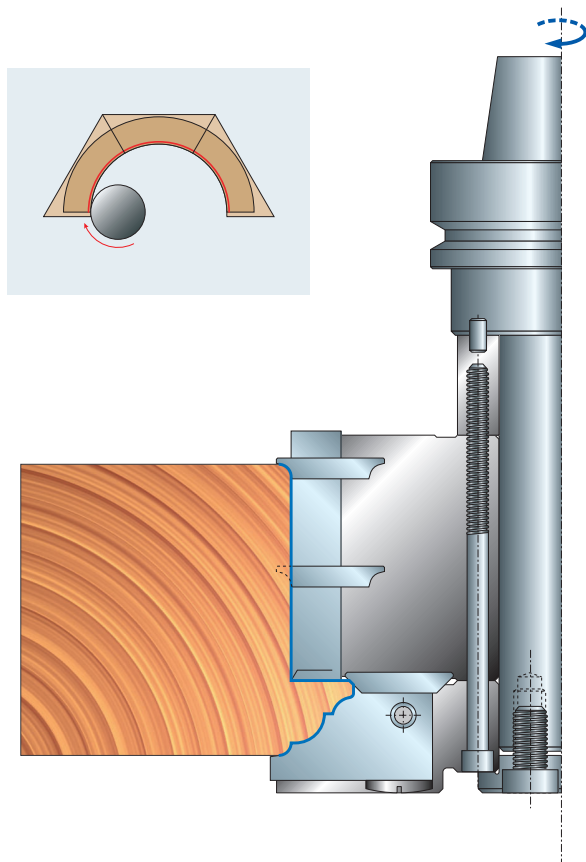
**3 TERZA LAVORAZIONE**  
**THIRD STEP**



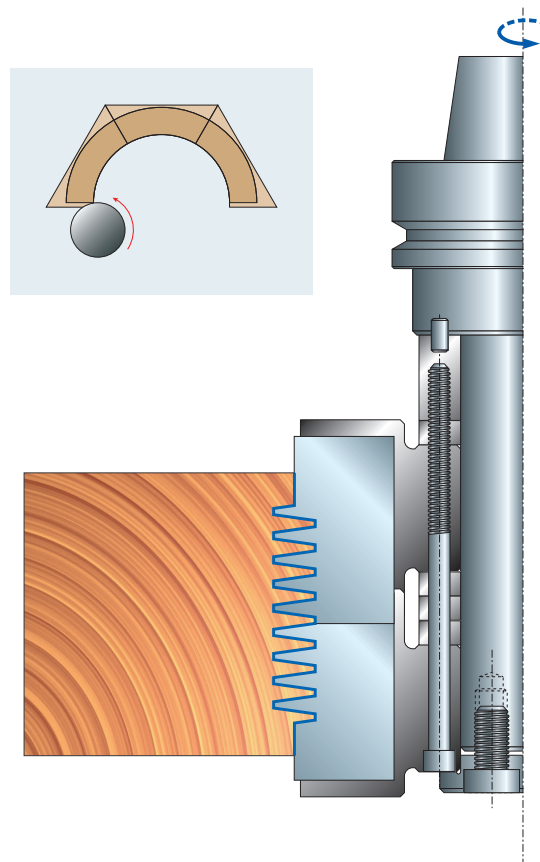
**4 QUARTA LAVORAZIONE**  
**FOURTH STEP**



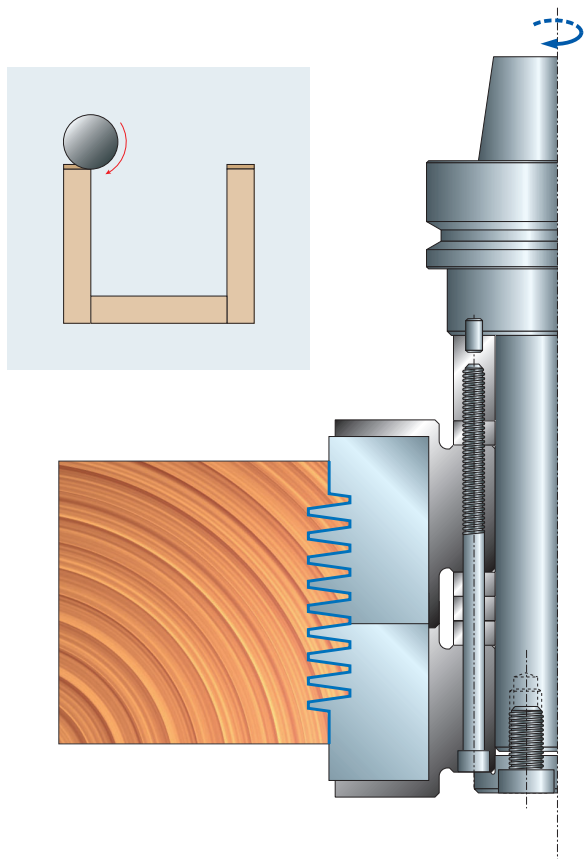
## 5 QUINTA LAVORAZIONE FIFTH STEP



## 6 SESTA LAVORAZIONE SIXTH STEP



## 7 SETTIMA LAVORAZIONE SEVENTH STEP



## 8 OTTAVA LAVORAZIONE EIGHTH STEP

