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BASIC LINE

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Linea utensili per macchine tradizionali combinate e toupie
Tooling line for classic single spindle and combined machines
Werkzeuglinie für Standard - und Kombimaschinen



INDUSTRIAL LINE

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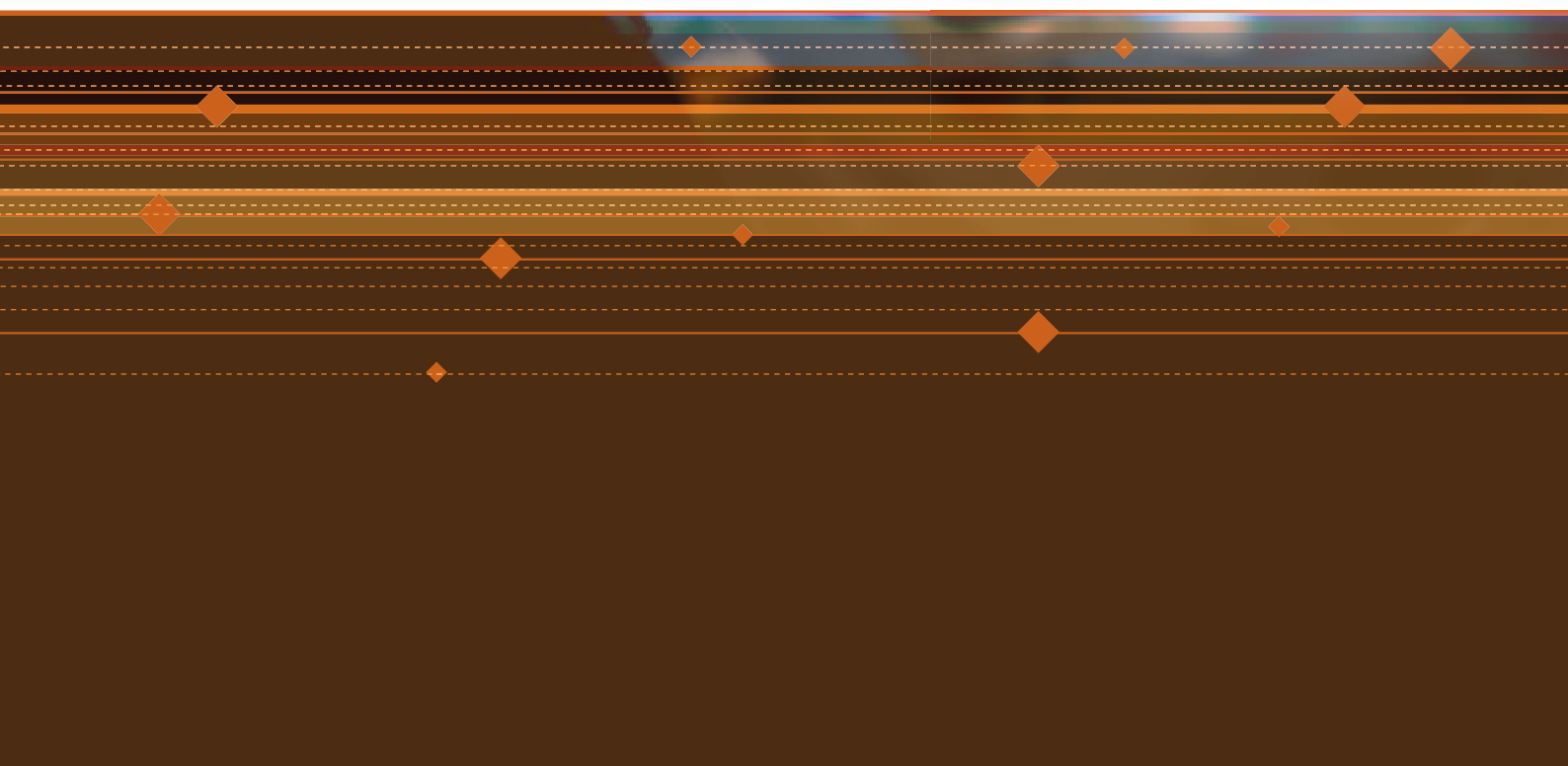
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BASIC LINE
2017


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IN03TM01
IN03TM04
TH27TM01

MAN | HW

FRESA PER INCASTRI GROOVE CUTTER FOR BISCUIT JOINTERS LAMELLEN-NUTFRÄSER

Fresa a taglienti e rasanti riportati in HW per eseguire incastri con fresatrici manuali. Adatta al taglio lungo vena e trasverso vena su legni teneri e duri, multistrato truciolari, MDF e laminati.

HW groove cutter for grooving. Suitable for standard handheld machines to produce biscuit joints.

Anwendung

Zum ausrissfreien Nuten für Verbindungslamellen bei Eckverbindungen aller Art. Geeignet für alle Plattenwerkstoffe sowie Massivholz

Technische Daten

Tragkörper aus Stahl, HW-bestückt, mit Nebenlöchern für handelsübliche Lamellen-Maschinen, umfangschneidend sowie flankenschneidend, spandickenbegrenzt und rückschlagarm, für Handvorschub.



IN03TM01

MAN | HW

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	RPM min-max	Art. Nr.	€
100	3,95	22	2	4	7600 - 13900	IN03TM01	



IN03TM04

MAN | HW

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	RPM min-max	Art. Nr.	€
100	3,95	22	6	-	7600 - 13900	IN03TM04	

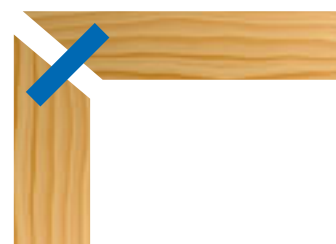
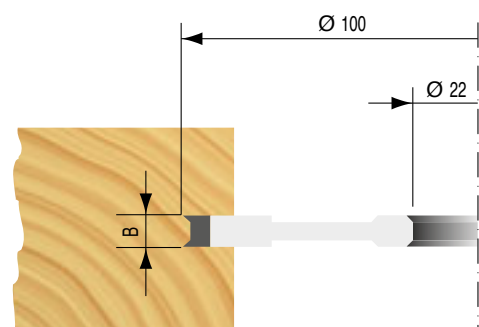
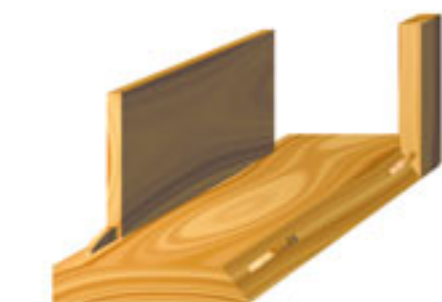


TH27TM01

MAN | HW

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	RPM min-max	Art. Nr.	€
100	4	22	4	4	7600 - 13900	TH27TM01	

Ricambi / Spare Parts / Ersatzteile							
TH27TM01	Art. Nr.	600301	500401	501101	600202	500401	501001
	Dim.	18x18x1,95	M4x3,2	12x1,7	14x14x1,2	M4x3,2	10x1,6
	Pcs	10	10	10	10	10	10
	€						



IN03TM02

MAN | HW

FRESA PER INCASTRI CONCAVI "MINI SPOT" GROOVE CUTTER "MINI SPOT" HARZGALLENFRÄSER "MINI SPOT"



Fresa saldobrasata a taglienti riportati in HW per eseguire incastri concavi con fresatrici manuali. Utilizzata per eliminare sacche di resina.

TCT-cutter with steel body and 4 pin holes for standard handheld machines. Chip thickness limitation and reduced recoil, suitable for manual feed.

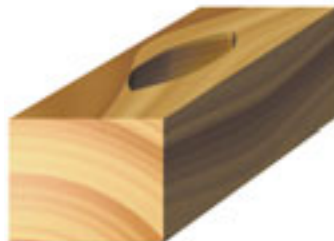
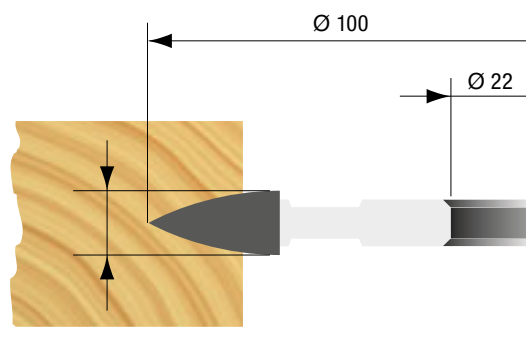
Anwendung

Fräser zum Ausflicken von Harzgallen und Holzrisen in Massivholz.

Technische Daten

Tragkörper aus Stahl, HW-bestückt, mit Nebenlöchern für handelsübliche Lamellen-Maschinen, wechselseitig schneidend, spandickenbegrenzt und rückschlagarm, für Handvorschub.

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	RPM min-max	Art. Nr.	€
100	8	22	4	-	7600 - 13900	IN03TM02	



TH37TM
TH38TM

MAN | HW

TESTA CON COLTELLINI PER INCASTRI GROOVE CUTTERHEAD WITH REVERSIBLE KNIVES WENDEPLATTEN-NUTFRÄSER

Testa con coltellini e rasanti in HW reversibili per eseguire incastri sottili di precisione (da 4 a 6 mm e da 8 a 12 mm).

Cutterhead with HW reversible knives and spurs for making thin precision grooves (from 4 to 6 mm and from 6 to 8 mm).

Anwendung:

Zum exakten Nuten in Längs- und Querhölzern.

Technische Daten:

Tragkörper aus Stahl, Standard-Wendep Plattentechnik, konstanter Messerflugkreis, spandickenbegrenzt und rückschlagarm, für Handvorschub.



TH37TM

MAN | HW

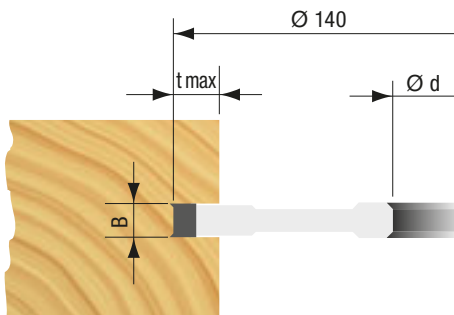
Ø D [mm]	B [mm]	Ø d [mm]	Z	V	t max [mm]	RPM min-max	Art. Nr.	€
140	4	30 (-50)	4	4	32	5500-9400	TH37TM01	
140	5	30 (-50)	4	4	32	5500-9400	TH37TM02	
140	6	30 (-50)	4	4	32	5500-9400	TH37TM03	



TH38TM

MAN | HW

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	t max [mm]	RPM min-max	Art. Nr.	€
140	8	30 (-50)	4	4	32	5500-9400	TH38TM01	
140	10	30 (-50)	4	4	32	5500-9400	TH38TM02	
140	12	30 (-50)	4	4	32	5500-9400	TH38TM03	



Ricambi / Spare Parts / Ersatzteile							
TH37TM01	Art. Nr.	600301	500401	501101	600202	500401	501001
	Dim.	18x18x1,95	M4x3,2	12x1,7	14x14x1,2	M4x3,2	10x1,65
	Pcs	10	10	10	10	10	10
	€						
TH37TM02	Art. Nr.	600302	500402	501102	600204	500402	501002
	Dim.	18x18x2,45	M4x4	12x2,2	14x14x1,7	M4x4	10x2,1
	Pcs	10	10	10	10	10	10
	€						
TH37TM03	Art. Nr.	600303	500402	501102	600204	500402	501002
	Dim.	18x18x2,95	M4x4	12x2,2	14x14x1,7	M4x4	10x2,1
	Pcs	10	10	10	10	10	10
	€						

Ricambi / Spare Parts / Ersatzteile						
TH38TM01	Art. Nr.	600001	350021	502403	600201	500002
	Dim.	7,65x12x1,5	6,8	M5x18	14x14x2	M5x7
	Pcs	10	2	10	10	10
	€					
TH38TM02	Art. Nr.	600012	350022	502403	600201	500002
	Dim.	9,6x12x1,5	7,6	M5x18	14x14x2	M5x7
	Pcs	10	2	10	10	10
	€					
TH38TM03	Art. Nr.	600013	350023	502403	600201	500002
	Dim.	11,6x12x1,5	9	M5x18	14x14x2	M5x7
	Pcs	10	2	10	10	10
	€					



IR10TM
IR20TM
MAN | HW

FRESA PER INCASTRI REGISTRABILI BRAZED ADJUSTABLE GROOVER VERSTELLNUTER

Fresa saldobrasata a taglienti e rasanti riportati in HW per eseguire incastri di precisione a spessore variabile (da 1,8 a 4,8 mm e da 4 a 14 mm). La fresa viene fornita completa di anelli distanziali.

HW brazed cutter with spurs for making precision grooves with various thickness (from 1,8 to 4,8 mm and from 4 to 14 mm). The tool is complete with spacing rings.

Anwendung

Zum präzisen Nuten in Massivholz und Plattenwerkstoffen, speziell für Furnieradern, Kunststoff- und Metall-Lysenen sowie Umleimer.

Technische Daten

Tragkörper aus Stahl, HW-bestückt, zweiteilige Konstruktion verstellbar im Zehntelbereich durch mitgelieferte Zwischenringe, umfangschneidend sowie flankenschneidend, rückschlagarm, für Handvorschub.



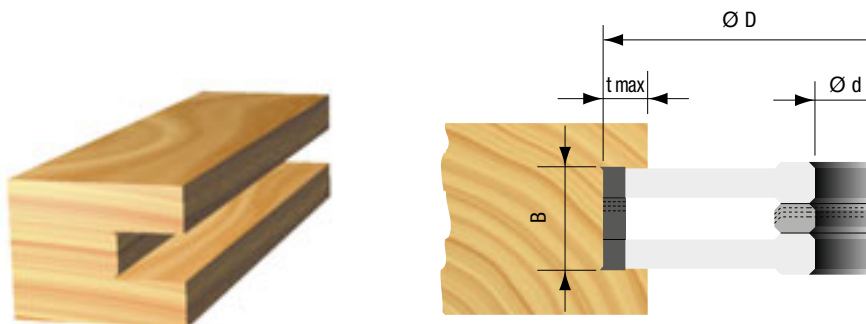
IR10TM
MAN | HW

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	t max [mm]	RPM min-max	Art. Nr.	€
140	1,8 - 3,4	30 (-50)	4	4	15	5500 - 9800	IR10TM01	
140	2,5 - 4,8	30 (-50)	4	4	15	5500 - 9800	IR10TM02	



IR20TM
MAN | HW

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	t max [mm]	RPM min-max	Art. Nr.	€
160	4 - 7,5	30 (-50)	4	4	35	4800 - 8600	IR20TM01	
160	7,5 - 14	30 (-50)	4	4	35	4800 - 8600	IR20TM02	



TH23TM

MAN | HW

TESTA CON COLTELLINI PER INCASTRI REGISTRABILI ADJUSTABLE CUTTERHEAD WITH REVERSIBLE KNIVES FOR GROOVES WENDEPLATTEN-VERSTELLNUTER



Testa con coltellini e rasanti in HW reversibili per eseguire incastri sottili di precisione (da 4 a 15 mm). L'utensile viene fornito completo di anelli distanziali. L'elemento centrale (tipo B) a due taglienti, monta coltelli standard da 7,65x12x1,5 mm.

Cutterhead with HW reversible knives and spurs for making thin precision grooves (from 4 to 15 mm), adjustable by means of spacing rings. The central element (type B) fits two standard disposable knives of 7,65x12x1,5 mm. Spacing rings are included.

Anwendung

Zum universellen, präzisen Nuten in Massivholz und Plattenwerkstoffen, hervorragend bei abrasiven Werkstoffen mit starker Werkzeugbeanspruchung, ausrissfreie Schnitte auch bei empfindlichen Materialien durch Wendevorschneider.

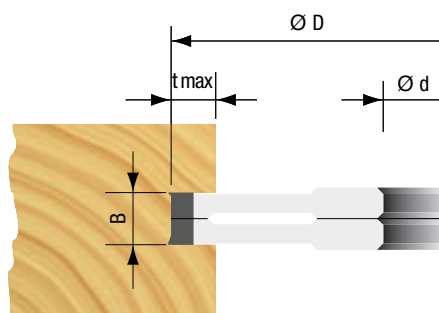
Technische Daten

Tragkörper aus Stahl, 2- oder 3-teilig, verstellbar in 1/10 mm Abständen durch im Lieferumfang enthaltene Zwischenringe, Standard-HW-Wendepfannentechnik, konstanter Flugkreis, spandickenbegrenzt und rückschlagarm, für manuelle sowie mechanische Vorschübe geeignet.

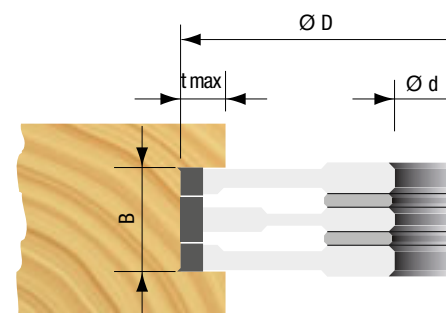
Combinazioni possibili
Cutterhead combinations
Fräse-Kombinationen

Type	Art. Nr.	Set	B [mm]
A+B 140	TH23TM15 + TH23TM20	TH23TM30	4 ÷ 15
A+B 160	TH23TM25 + TH23TM35	TH23TM50	4 ÷ 15
A+B 180	TH23TM05 + TH23TM10	TH23TM40	4 ÷ 15

Type	Ø D [mm]	B [mm]	Ø d [mm]	Z	V	t max [mm]	RPM min-max	Art. Nr.	€
A	140	4 - 7,5	30 (-35)	4	4	32	5500 - 9400	TH23TM15	
B	140	7,65	30 (-35)	2	-	32	5500 - 9400	TH23TM20	
A + B	140	4 - 15	30 (-35)	4 + 2	4	32	5500 - 9400	TH23TM30	
A	160	4 - 7,5	40 (-50)	4	4	35	4800 - 8200	TH23TM25	
B	160	7,65	40 (-50)	2	-	35	4800 - 8200	TH23TM35	
A + B	160	4 - 15	40 (-50)	4 + 2	4	35	4800 - 8200	TH23TM50	
A	180	4 - 7,5	30 (-50)	8	4	37	4200 - 7300	TH23TM05	
B	180	7,65	30 (-50)	2	-	37	4200 - 7300	TH23TM10	
A + B	180	4 - 15	30 (-50)	8 + 2	4	37	4200 - 7300	TH23TM40	



TH23TM15
TH23TM25
TH23TM05



TH23TM30
TH23TM50
TH23TM40

Ricambi / Spare Parts / Ersatzteile

TH23TM15 TH23TM25 TH23TM05	Art. Nr.	600301	500401	501101			600202	500401	501001
	Dim.	18x18x1,95	M4x3,2	12x1,7			14x14x1,2	M4x3,2	10x1,65
	Pcs	10	10	10			10	10	10
	€								
TH23TM20 TH23TM35 TH23TM10	Art. Nr.	600001			350021	502403			
	Dim.	7,65x12x1,5			6,8	M5x18			
	Pcs	10			2	10			
	€								

TH28TM01

MAN | HW

TESTA CON COLTELLINI PER INCASTRI REGISTRABILI CON GHIERA ADJUSTABLE GROOVER WITH THREADED BUSH WENDEPLATTEN-VERSTELLNUTER



Testa con coltellini e rasanti in HW reversibili per eseguire incastri sottili di precisione (da 4 a 7,5 mm). La regolazione avviene tramite una ghiera filettata e graduata.

Cutterhead with steel body mounted on threaded bush, tungsten carbide standard reversible knives and spurs, 1/10 mm stepless adjustability for high precision groove cutting, chip thickness limitation and reduced recoil, suitable for manual feed.

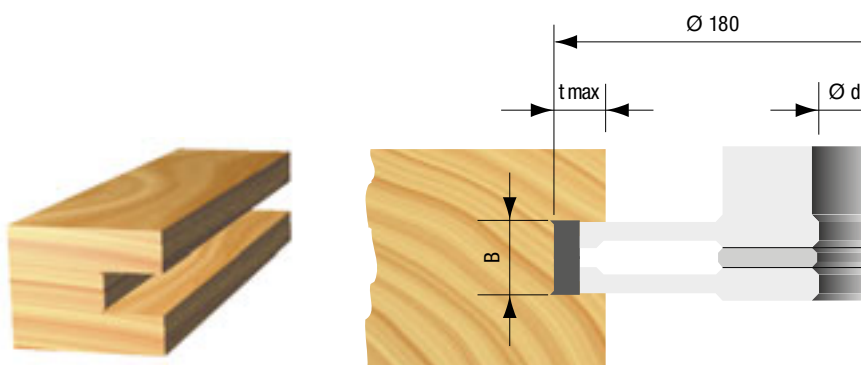
Anwendung







Zum universellen, präzisen Nuten in Massivholz und Plattenwerkstoffen, hervorragend bei abrasiven Werkstoffen mit starker Werkzeugbeanspruchung, ausrissfreie Schnitte auch bei empfindlichen Materialien durch Wendevorschneider.

Technische Daten

Tragkörper aus Stahl, stufenlos verstellbar durch Spezialgewindebühse, Standard-HW-Wendeplattentechnik, konstanter Flugkreis, spandickenbegrenzt und rückschlagarm, für Handvorschub geeignet.

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	t max [mm]	RPM min-max	Art. Nr.	€
180	4 - 7,5	30 (-35)	8	4	32	4200 - 7300	TH28TM01	



Ricambi / Spare Parts / Ersatzteile							
TH28TM01	Art. Nr.	600301	500401	501101	600202	500401	501001
	Dim.	18x18x1,95	M4x3,2	12x1,7	14x14x1,2	M4x3,2	10x1,65
	Pcs	10	10	10	10	10	10
	€						

TH09TM

MAN | HW

TESTA CON COLTELLINI PER INCASTRI REGISTRABILI ADJUSTABLE CUTTERHEAD WITH REVERSIBLE KNIVES FOR GROOVES WENDEPLATTEN-VERSTELLNUTER



Testa con coltellini e rasanti in HW reversibili per eseguire incastri di precisione.

L'utensile viene fornito completo di anelli distanziali. L'elemento centrale, a due taglienti e 15 mm di spessore (tipo B), permette di ottenere maggiori larghezze di taglio.

Cutterhead with steel body, tungsten carbide standard reversible knives and spurs, adjustable with 1/10 mm spacing rings (included) for high precision groove cutting, chip thickness limitation and reduced recoil, suitable for manual and mechanical feed.

Anwendung

Zum universellen, präzisen Nuten in Massivholz und Plattenwerkstoffen, hervorragend bei abrasiven Werkstoffen mit starker Werkzeugbeanspruchung, ausrissfreie Schnitte auch bei empfindlichen Materialien durch Wendevorschneider.

Technische Daten

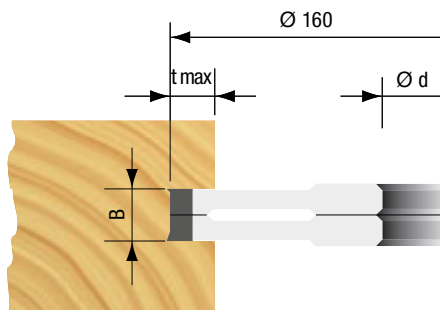
Tragkörper aus Stahl, 2- oder 3-teilig, verstellbar in 1/10 mm Abständen durch im Lieferumfang enthaltene Zwischenringe, Standard-HW-Wendepfannentechnik, konstanter Flugkreis, spandickenbegrenzt und rückschlagarm, für manuelle sowie mechanische Vorschübe geeignet.

Combinazioni possibili
Cutterhead combinations
Fräse-Kombinationen

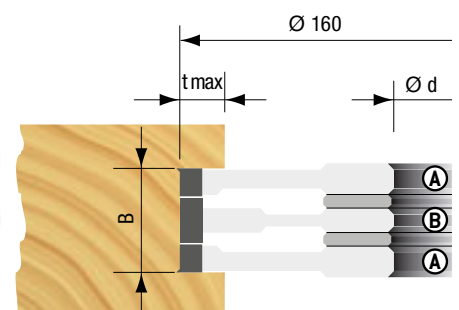
Type	Art. Nr.	Set	B [mm]
A + B	TH09TM01 + TH09TM02	TH09TM20	8 ÷ 28
A + B	TH09TM03 + TH09TM13	TH09TM60	16 ÷ 44

Type	Ø D [mm]	B [mm]	Ø d [mm]	Z	V	t max [mm]	RPM min-max	Art. Nr.	€
A	160	8÷15	30 (-50)	4	4	30	4800 - 8200	TH09TM01	
B	160	15	30 (-50)	2	-	30	4800 - 8200	TH09TM02	
A + B	160	8÷28	30 (-50)	4 + 2	4	30	4800 - 8200	TH09TM20	
A	160	12,5÷24	30 (-50)	4	4	30	4800 - 8200	TH09TM11	
A	160	16÷30	30 (-50)	4	4	30	4800 - 8200	TH09TM03	
B	160	15	30 (-50)	2	-	30	4800 - 8200	TH09TM13	
A + B	160	16÷44	30 (-50)	4 + 2	4	30	4800 - 8200	TH09TM60	

TH09TM01
TH09TM11
TH09TM03



TH09TM20
TH09TM60



Ricambi / Spare Parts / Ersatzteile

TH09TM01	Art. Nr.	600001	350021	502403	600201	500002
	Dim.	7,65x12x1,5	6,8	M5x18	14x14x2	M5x7
	Pcs	10	2	10	10	10
	€					
TH09TM11	Art. Nr.	600002	350023	502403	600201	500002
	Dim.	12x12x1,5	9	M5x18	14x14x2	M5x7
	Pcs	10	2	10	10	10
	€				3,80	
TH09TM03	Art. Nr.	600003	350004	502402	600201	500002
	Dim.	15x12x1,5	11	M7x21	14x14x2	M5x7
	Pcs	10	2	10	10	10
	€					
TH09TM02 TH09TM13	Art. Nr.	600003	350004	502402		
	Dim.	15x12x1,5	13	M7x21		
	Pcs	10	2	10		
	€					

TH94TM10

MAN | HW

INCASTRO REGISTRABILE GRADUALE GRADUAL ADJUSTABLE GROOVE CUTTER VERSTELLBARER WENDEPLATTEN-FALZFRÄSER



Testa con coltellini e rasanti in HW reversibili per eseguire incastri di precisione (da 28 a 55 mm).

Cutterhead with HW reversible knives and spurs for making precision grooves (from 28 to 55 mm).

Anwendung

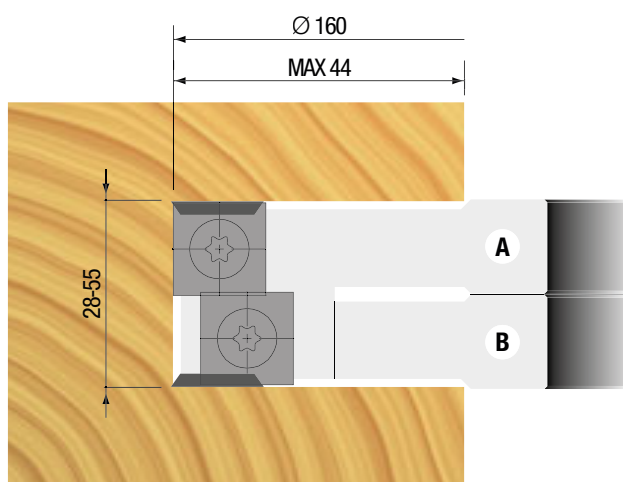
Modular aufbaufähiges Fräswerkzeug zum Fälzen, Zapfenschneiden und Nuten.

Technische Daten

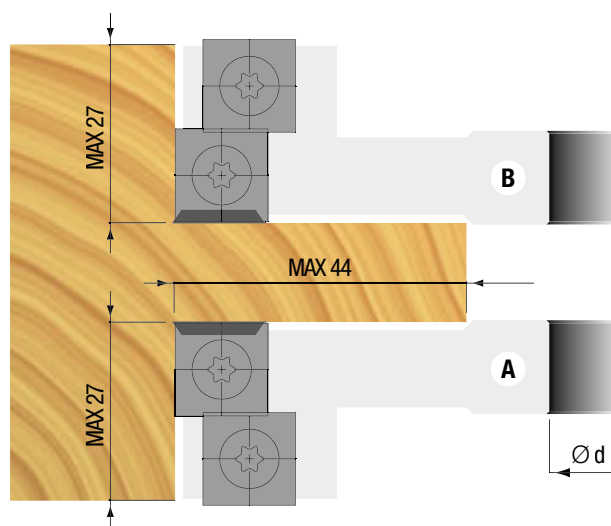
Werkzeugkörper aus Stahl, Wendepplatten-Technik mit Standard-HW-Vorschneidem, spandickenbegrenzt und rückschlagarm, für manuelle sowie mechanische Vorschübe geeignet.



Ø D [mm]	B [mm]	Ø d [mm]	Z	V	t max [mm]	RPM min-max	Art. Nr.	€
160	28 - 55	30 (-50)	4	4	44	4800 - 8200	TH94TM10	

STANDARD



COMBINAZIONI POSSIBILI CUTTERHEAD COMBINATIONS FRÄSE-KOMBINATIONEN



Ricambi / Spare Parts / Ersatzteile			
TH94TM10	Art. Nr.	600201	500002
	Dim.	14x14x2	M5x7
	Pcs	10	10
	€		

TH06TM

MAN | HW

TESTA CON COLTELLINI PER TENONI REGISTRABILI ADJUSTABLE GROOVES CUTTERHEAD FOR TENONS WENDEPLATTEN-VERSTELLSCHLITZFRÄSER



Testa con coltellini e rasanti in HW per eseguire tenoni di spessore variabile (da 8 a 15 mm). La regolazione avviene per mezzo di anelli distanziali compresi nella fornitura.

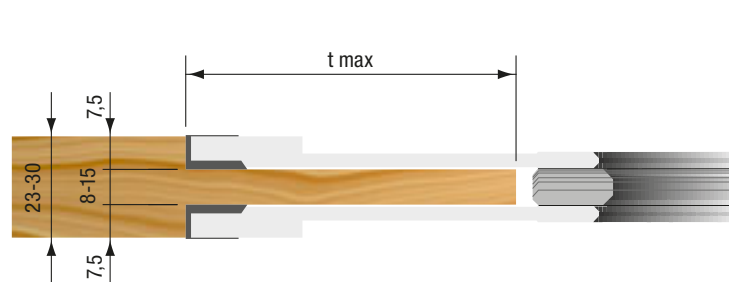
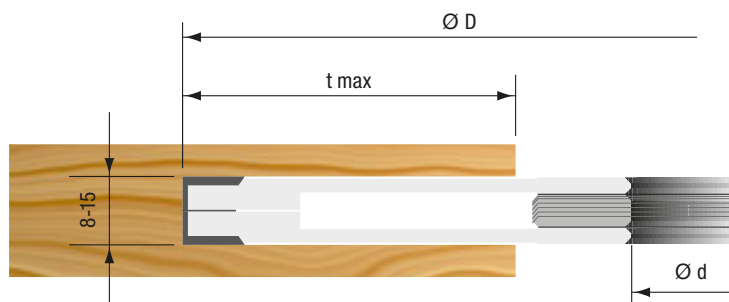
Cutterhead with steel body, tungsten carbide standard reversible knives and spurs, adjustable with 1/10 mm spacing rings (included) for high precision slot and tenon milling, chip thickness limitation and reduced recoil, suitable for manual and mechanical feed.






Anwendung Verstellbarer Schlitzfräser, bestens geeignet für tiefe Nuten oder zum präzisen Schlitz- und Zapfen von Eckverbindungen, mit Standard-Hartmetall-Wendepplatten und Vorschneidern für saubere Bearbeitung in Massivholz und allen Plattenwerkstoffen.

Technische Daten

Grundkörper aus Stahl, 2-teilig, Breite verstellbar im 1/10 mm-Bereich durch im Lieferumfang enthaltene Zwischenringe, Wendeplattentechnik, konstanter Schneidenflugkreis, spandickenbegrenzt und rückschlagarm, für manuelle sowie mechanische Vorschübe geeignet.

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	t max [mm]	RPM min-max	Art. Nr.	€
200	8 - 15	30 (-50)	4	4	65	3800 - 6500	TH06TM05	
250	8 - 15	30 (-50)	4	4	90	3000 - 5200	TH06TM10	



Ricambi / Spare Parts / Ersatzteile						
TH06TM05 TH06TM10	Art. Nr.	600001	350021	502403	600201	500002
	Dim.	7,65x12x1,5	6,8	M5x18	14x14x2	M5x7
	Pcs	10	2	10	10	10
	€	3,45			3,80	

TH76TM

MAN | HW

TESTE CON COLTELLINI PER TENONI CUTTERHEADS WITH REVERSIBLE KNIVES FOR TENONS WENDEPLATTEN-SCHLITZFRÄSER



Testa con coltellini e rasanti in HW per eseguire incastri profondi e tenoni.

Cutterhead with steel body, tungsten carbide standard reversible knives and spurs, for high precision slot mortising and tenon milling, chip thickness limitation and reduced recoil, suitable for both manual and mechanical feed.

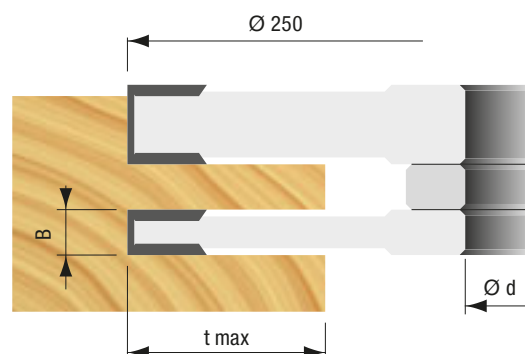
Anwendung






Bestens geeignet zum präzisen Zapfenschneiden und Schlitzen in Massivholz, mit Standard-Hartmetall-Wendeplatten und Vorschneidern, für saubere Bearbeitung speziell im Hirnholzbereich von Hart- sowie Weichhölzern.

Technische Daten

Tragkörper aus Stahl, Standard-HW-Wendeplattentechnik, konstanter Flugkreis, spandickenbegrenzt und rückschlagarm, für manuelle sowie mechanische Vorschübe geeignet.

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	t max [mm]	RPM min-max	Art. Nr.	€
250	8	30 (-60)	2	4	80	3000 - 5200	TH76TM01	
250	10	30 (-60)	2	4	80	3000 - 5200	TH76TM02	
250	12	30 (-60)	2	4	80	3000 - 5200	TH76TM03	
250	16	30 (-60)	2	4	80	3000 - 5200	TH76TM05	
250	20	30 (-60)	2	4	80	3000 - 5200	TH76TM06	



Ricambi / Spare Parts / Ersatzteile						
TH76TM01	Art. Nr.	600801	350021	502403	600201	500002
	Dim.	7,65x12x1,5	6,8	M5x18	14x14x2	M5x7
	Pcs	10	2	10	10	10
	€					
TH76TM02	Art. Nr.	600816	350022	502403	600201	500002
	Dim.	9,6x12x1,5	7,6	M5x18	14x14x2	M5x7
	Pcs	10	2	10	10	10
	€					
TH76TM03	Art. Nr.	600817	350023	502403	600201	500002
	Dim.	11,6x12x1,5	9	M5x18	14x14x2	M5x7
	Pcs	10	2	10	10	10
	€					
TH76TM05	Art. Nr.	600813	350004	502402	600201	500002
	Dim.	15,6x12x1,5	11	M7x21	14x14x2	M5x7
	Pcs	10	2	10	10	10
	€					
TH76TM06	Art. Nr.	600823	350005	502402	600201	500002
	Dim.	19,6x12x1,5	16	M7x21	14x14x2	M5x7
	Pcs	10	2	10	10	10
	€					

TH02TM YH151AAM

MAN | HW

TESTA CON COLTELLINI PER BATTUTE CON TAGLIANTI INCLINATI ALTERNATI E RASANTI CUTTERHEAD WITH ALTERNATE SHEAR REVERSIBLE KNIVES AND SPURS WENDEPLATTEN-FALZKOPF

Testa con coltellini e rasanti in HW reversibili per eseguire battute e contornature. L'angolo assiale favorisce un miglior scarico del truciolo e una maggiore resa in termini di avanzamento oltre a migliorare la tenuta di taglio.

Cutterhead with tungsten carbide reversible knives and spurs, alternate axial angle for excellent cutting results, chip thickness limitation and reduced recoil, suitable for manual and mechanical feed.

Anwendung

Geeignet zum Fügen, Nuten und Fälzen in Massivholz und Plattenwerkstoffen aller Art, besonders saubere Bearbeitung und verminderter Schnittdruck auch im Hirnholzbereich durch wechselseitig ziehende Schneiden. [Achswinkel]

Technische Daten

Grundkörper aus Stahl oder Aluminium, Wendeplattentechnik mit Standard-Hartmetall-Wendeplatten und Vorschneidern, Umlaufschneiden mit wechselseitigem Achswinkel, spandickenbegrenzt und rückschlagarm, für manuelle Vorschübe geeignet.

TH02TM

MAN | HW

STEEL








Ø D [mm]	B [mm]	Ø d [mm]	Z	V	t max [mm]	RPM min-max	Art. Nr.	€
125	50	30 (-50)	4	4	25	6100 - 10600	TH02TM04	
150	50	30 (-50)	4	4	35	5100 - 8800	TH02TM07	
180	50	30 (-50)	4	4	50	4200 - 7300	TH02TM06	

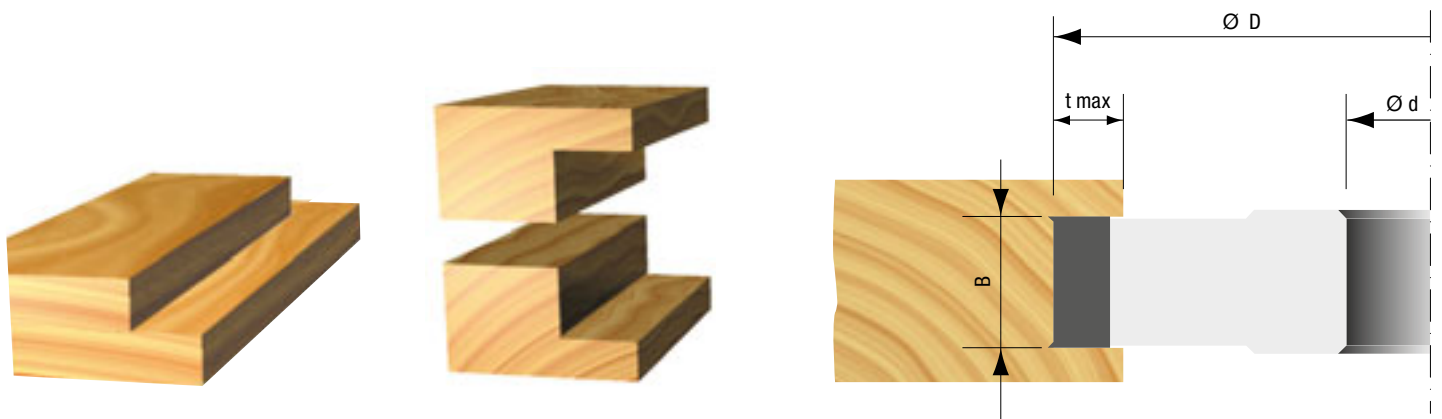
YH151AAM

MAN | HW

LIGHT
ALLOY

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	t max [mm]	RPM min-max	Art. Nr.	€
125	50	30 (-50)	2	4	25	6100 - 10600	YH151AAM	

Ricambi / Spare Parts / Ersatzteile						
TH02TM04 TH02TM07 TH02TM06	Art. Nr.	600006	350009	502402	600201	500002
	Dim.	50x12x1,5	46	M7x21	14x14x2	M5x7
	Pcs	10	2	10	10	10
	€					
YH151AAM	Art. Nr.	600006	341002	501403	600201	500002
	Dim.	50x12x1,5	48	M8x16	14x14x2	M5x7
	Pcs	10	2	10	10	10
	€					



TH74TA01

MAN | HW

TESTA ELICOIDALE A PIALLARE E CONTORNARE HELICAL PLANNING AND ROUTING CUTTERHEAD WENDEPLATTEN-SPIRALFÜGEFRÄSER



Testa elicoidale per medie finiture con corpo lega leggera equipaggiata di coltelli 14x14x2 in HW con quattro lati taglienti.

Le teste possono essere fornite di rasanti su uno o sui due lati. Il prezzo verrà aumentato in base al numero di rasanti montati.

Helical head for medium finishing with body in light alloy equipped with 14x14x2 knives in HW with four cutting edges.

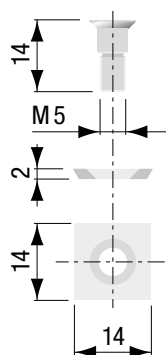
The heads can be fitted with spurs on one or both sides. The price will be increased on the basis of the number of spurs installed.

Anwendung

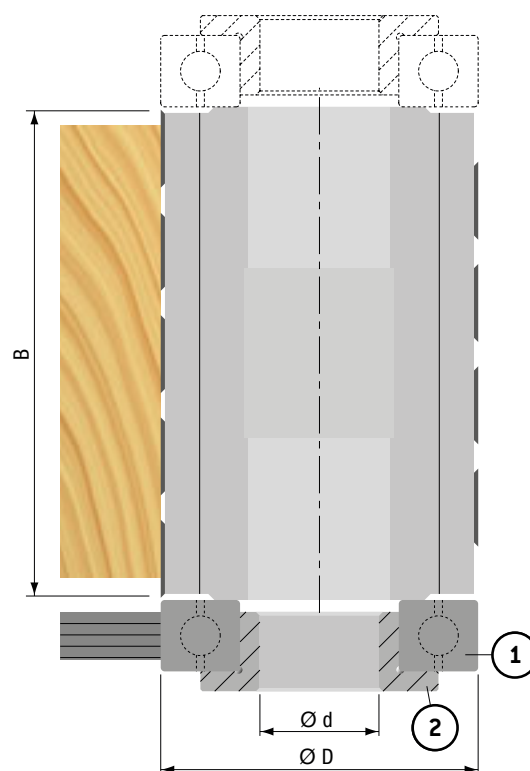
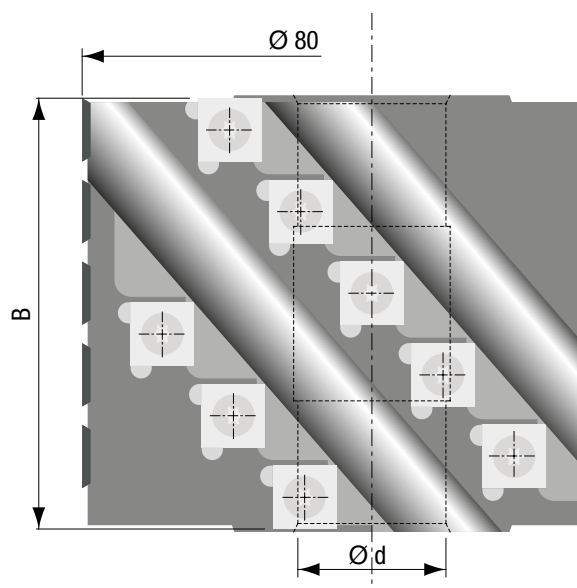
Spiralmesserkopf zum Fügen von Massivholz mit mittlerer Anforderung an Oberflächengüte.

Technische Daten

Werkzeugkörper aus Aluminium, mit Standard-Wndemessem (4 Schneidfasen). Ausgelegt auf 80mm Anlaufring, spandickenbegrenzt und rückschlagarm, für manuelle Vorschübe geeignet.



Ø D [mm]	B [mm]	Ø d [mm]	Z	V	RPM min-max	Art. Nr.	€
80	76,5	30 (-50)	12	-	6000 - 16000	TH74TA01	



1. Cuscinetto per contornare
Ball bearing
Kugellager-Leerlaufbüchse

	Ø D [mm]	B [mm]	Ø d [mm]	Art. Nr.
1	80	16	50	100610
2	50	10	30	100344
2	50	10	35	100349
2	50	10	40	100353

2. Bussole di riduzione con flangia
Reducing bushes with flange
Reduzierbüchsen mit Bund

Con cuscinetto fino Ø 40
With guide ball bearing until before Ø 40
Mit Kugellager-Leerlaufbüchse bis einschließlich d=40mm

Ricambi Spare Parts Ersatzteile

	Art. Nr.	600201	500003
TH74TA01	Dim.	14x14x2	M5x14
	Pcs	10	10
	€		

TH17TM20

MAN | HW

TESTA CON COLTELLINI A INCLINAZIONE VARIABILE PER SMUSSI CUTTERHEAD WITH ADJUSTABLE ANGLE KNIVES FOR CHAMFERING WENDEPLATTEN-SCHWENKMESSERKOPF



Testa con coltellini in HW reversibili per eseguire smussi con angolazione variabile da 0° a 70°. La regolazione degli spostamenti angolari avviene grado per grado. Le caratteristiche costruttive consentono un impiego pressochè universale.

Steel body execution with high-precision wing adjustability in 1° increments between 0°-70° to both sides, standard tungsten carbide reversible knives, for milling solid wood and all types of board material. suitable for manual feed.

Anwendung

Zum Erstellen von Gehrungen und Fasen in unterschiedlichen Winkeln, für präzise Flach- und Steilfasen in Massivholz und Plattenwerkstoffen.

Technische Daten

Werkzeugkörper aus Stahl, präzise schwenkbar mit 1°-Verstellung von 0-70° in beide Richtungen durch hochwertige Ausführung des Schwenkmechanismus, Standard-Hartmetall-Wendeplattentechnik, für manuelle Vorschübe geeignet.

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	RPM min-max	Art. Nr.	€
160	50	30 (-40)	2	--	5000 - 7500	TH17TM20	
170	50	50	2	-	4700 - 7000	TH17TM20050	

0° - B max = 48

5° - B max = 48

10° - B max = 47

15° - B max = 46

20° - B max = 45

25° - B max = 43

30° - B max = 41

35° - B max = 39

45° - B max = 33

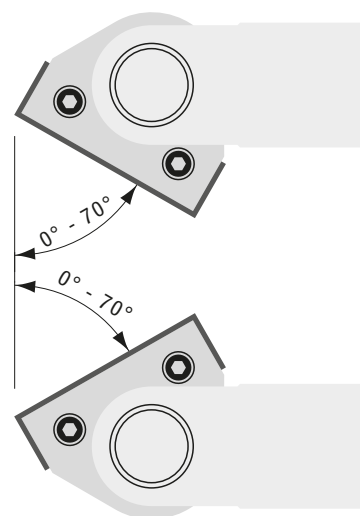
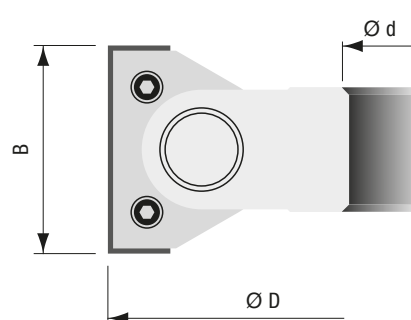
50° - B max = 30




55° - B max = 26

60° - B max = 23

65° - B max = 19

70° - B max = 15



Ricambi / Spare Parts / Ersatzteile				
TH17TM20 TH17TM20050	Art. Nr.	600006	302602	501401
	Dim.	50x12x1,5	47	M6x12
	Pcs	10	2	10
	€			

YH131AAM

MAN | HW

TESTA PORTACOLTELLI PER SMUSSI A 45° CUTTERHEAD FOR 45° BEVELS WENDEPLATTEN-FASEFRÄSER 45°



Testa a due taglienti con corpo in lega leggera per la realizzazione di smussi a 45° molto precisi. Adatta per lavorazioni su legno massiccio e pannello.

Body in light alloy execution, standard tungsten carbide reversible knives, precise 45° bevel cuts on solid wood and all types of board material, chip thickness limitation and reduced recoil, suitable for manual feed.

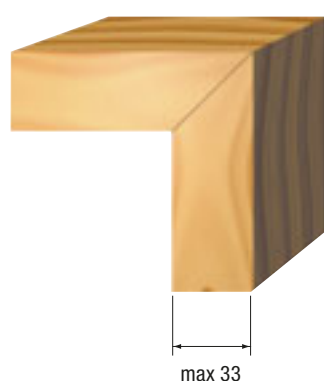
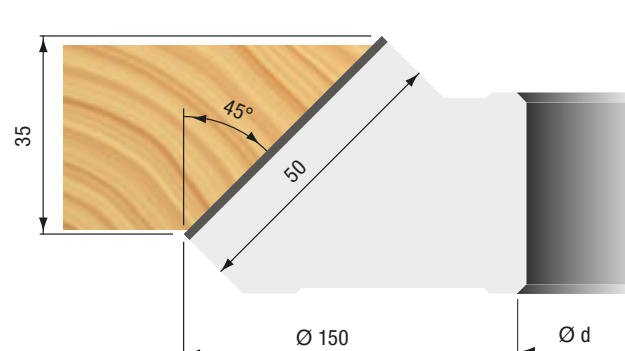
Anwendung




Zum Herstellen von Fasen und Gehrungen mit exaktem 45° Winkel, ideal auch für Korpus- und Rahmeneckverbindungen auf Gehrung, für Massivholz und alle Plattenwerkstoffe einsetzbar.

Technische Daten

Grundkörper aus hochfestem Aluminium, Standard-Hartmetall-Wendeplatten für lange Standwege, spandickenbegrenzt und Rückschlagarm, für Handvorschübe geeignet.

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	t max [mm]	RPM min-max	Art. Nr.	€
150	36	30 (-40)	2	-	-	5100 - 8800	YH131AAM	



Ricambi / Spare Parts / Ersatzteile				
YH131AAM	Art. Nr.	600006	340029	501404
	Dim.	50x12x1,5	46	M8x20
	Pcs	10	2	10
	€			

YS118AZM

MAN | HW

SET UTENSILI PER RAGGIARE E SMUSSARE TOOLING SET FOR ROUNDING AND CHAMFERING ABRUND-FÜGE- U. FASEFRÄSER-SET



Gruppo di teste in lega leggera composto da due elementi. L'elemento 1 è sagomato e consente con un lato del coltello di effettuare raggi (R 4) e con l'altro di realizzare smussi a 45°. L'elemento 2 consente sia la lavorazione della parte dritta del pannello da lavorare che la raggatura o smussatura nella parte inferiore. Il set comprende inoltre gli anelli distanziali per le varie regolazioni da inserire tra i due elementi. È possibile montare coltelli optional R 2, R 3, R 4, R 5 e R 6 sia a singolo raggio che a doppio raggio.

Cutterset consisting of two elements in light alloy execution, standard tungsten carbide reversible knives, for high precision planing and chamfering/rounding in one single working operation, adjustable for milling solid wood and all types of board material from 18-50 mm thickness [spacing rings included], chip thickness limitation and reduced recoil, suitable for manual feed. The cutterheads are equipped with knives R 4 while R 2, R 3, R 5, R 6 are available on request.

Anwendung

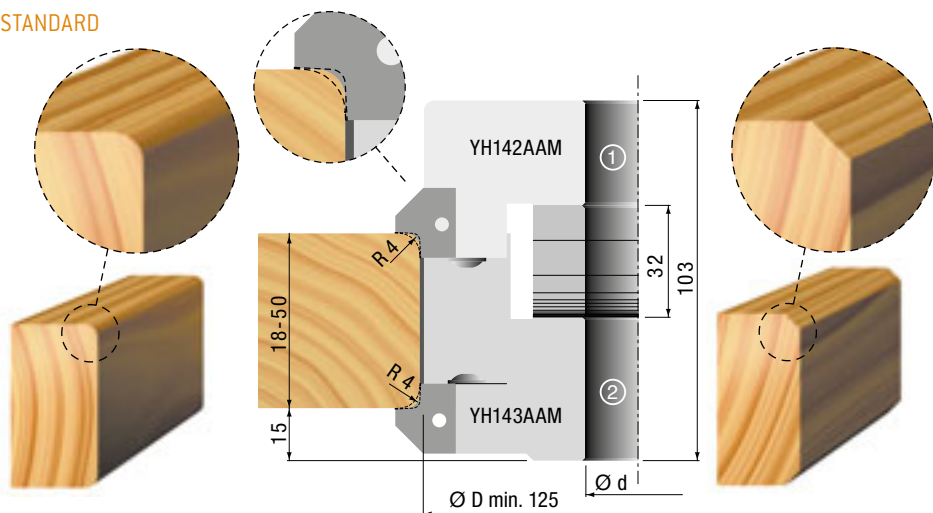
Zum Fügen und Abrunden/Fasen (R 2-6 mm) in einem Arbeitsgang, für Massivholz und alle Plattenwerkstoffe geeignet, verstellbar für unterschiedliche Materialstärken zwischen 18-50 mm, inkl. Zwischenringe.

Technische Daten

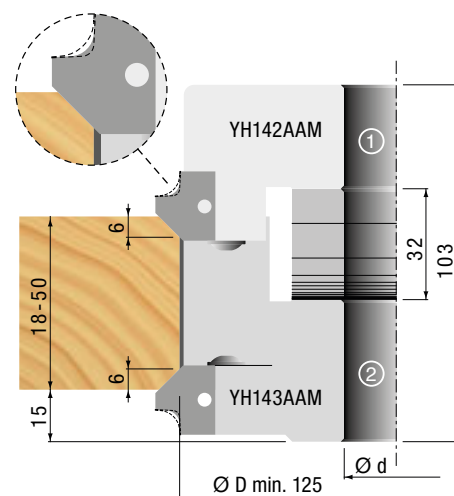
2-teiliges Werkzeugset, Tragkörper aus hochfestem Aluminium, Standard-HW-Wendeplattentechnik, Grundbestückung mit R 4 mm (+ Fase) Profilplatten, spandickenbegrenzt und rückschlagarm, für manuellen Vorschub geeignet.

Ø D [mm]	B [mm]	Ø d [mm]	Z	R [mm]	RPM min-max	Art. Nr.	€
139	103	30 (-50)	2 + 2 + 2	2-3-④-5-6	5500 - 9400	YS118AZM	

STANDARD



OPZIONE: COLTELLO DOPPIO RAGGIO/SMUSSO OPTION: DOUBLE RADIUS KNIVES OPTION: DOPPELRADIUS-MESSER



Ricambi / Spare Parts / Ersatzteile

① YH142AAM	Art. Nr.	608001-R 2	608003-R 3	608005-R 4	608007-R 5	608009-R 6	340024	501404
	Dim.	20x21x2	20x21x2	20x21x2	20x21x2	20x21x2	17	M8x20
	Pcs	2	2	2	2	2	2	10
	€							
② YH143AAM	Art. Nr.	608002-R 2	608004-R 3	608006-R 4	608008-R 5	608010-R 6	340024	501404
	Dim.	20x21x2	20x21x2	20x21x2	20x21x2	20x21x2	17	M8x20
	Pcs	2	2	2	2	2	2	10
	€							
② YH143AAM	Art. Nr.	600006	341002	501404				
	Dim.	50x12x1,5	46	M8x20				
	Pcs	10	2	10				
	€							

Ricambi / Spare Parts / Ersatzteile

Coltelli Knives Messer	Art. Nr.	R [mm]	Pcs	€
YH142AAM YH143AAM				
Type				
	608012	2	2	
	608013	3	2	
	608014	4	2	
	608015	5	2	
	608016	6	2	
	608011	α=45°	2	

TH70TM

MAN | HW

TESTA CON COLTELLINI PER QUARTI DI TONDO CUTTERHEAD WITH KNIVES FOR QUARTER ROUNDS WECHSELPLATTEN-VIERTELSTABFRÄSER



Utensile con coltellini a due taglienti ed angolo assiale in HW per eseguire quarti di tondo. Le teste possono montare tutti i profili indicati nella tabella, ma vengono fornite correate dei seguenti coltelli:

TH70TM01 R 5 mm

TH70TM02 R 15 mm

Steel body with standard tungsten carbide profiled knives for quarter rounds, axial angle for excellent milling results and reduced cutting pressure, different radii [see spare part list below] can be fitted onto the same tool body, TH70TM01 is supplied with R 5 mm, TH70TM02 is supplied with R 15 mm, chip thickness limitation and reduced recoil, suitable for manual feed.

Anwendung

Zum Abrunden von Massivholz und allen handelsüblichen Plattenwerkstoffen.

Technische Daten

Werkzeugkörper aus Stahl, Standard-HW-Profilplatten in axialem Winkel für besonders saubere, ziehende Schnitte und verminderten Schnittdruck, mehrere Radien (siehe Ersatzteilliste) im gleichen Grundkörper einsetzbar, alle Radien auf \varnothing 125 mm-Anlaufing abgestimmt, Set TH70TM10 wird geliefert mit allen Radien von 3-10 mm, Einzelfräser TH70TM01 mit R 5 mm, TH70TM02 mit R 15 mm, rückschlagarm, für manuelle sowie mechanische Vorschübe geeignet.

Set fornito in cassetta di legno

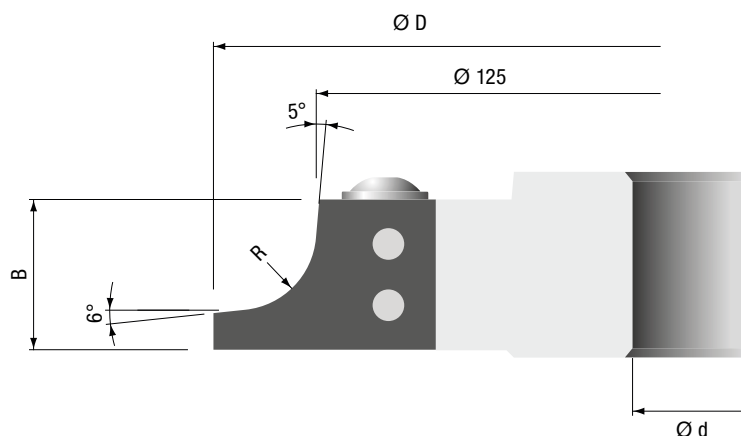
Set supplied in a wooden box

Set wird in Holzkassette geliefert

Nr.	R [mm]	Art. Nr.	€
Set	3-4-5-6-8-10	TH70TM10	



\varnothing D [mm]	B [mm]	\varnothing d [mm]	Z	R [mm]	RPM min-max	Art. Nr.	€
132	20	30 (-50)	2	3-4-5-6-8-10	5200 - 8000	TH70TM01	
152	30	30 (-50)	2	12-15-18-20	4600 - 7300	TH70TM02	



Ricambi / Spare Parts / Ersatzteile									
TH70TM01	Art. Nr.	601451-R 3	601452-R 4	601453-R 5	601454-R 6	601455-R 8	601456-R 10	350024	502404
	Dim.	20x24x2	20x24x2	20x24x2	20x24x2	20x24x2	20x24x2	17,6	M7 x 19
	Pcs	2	2	2	2	2	2	2	10
	€								
TH70TM02	Art. Nr.	601457-R 12	601458-R 15	601459-R 18	601460-R 20			350020	502404
	Dim.	30x34x2	30x34x2	30x34x2	30x34x2			27	M7 x 19
	Pcs	2	2	2	2			2	10
	€								

YS107BZM

R 3/6 - R 4/8 - R 5/10
MAN | HW

SET MULTIRAGGIO MULTIRADIUS SET VIERTELSTABFRÄSER-SET



Il set, pensato per la realizzazione di molteplici profili raggiati, è composto da una testa in lega leggera con due coltelli di R 5/10 mm montati sull'utensile e quattro coltelli con R 3/6 mm e R 4/8 mm di ricambio.

Light alloy body with standard tungsten carbide profiled knives for flexible machining of quarter rounds, all radii match a 105 mm guide ring, body is mounted with R 5/10 mm knives, profiles R 4/8 and R 3/6 mm are included in the set, chip thickness limitation and reduced recoil, suitable for manual feed.

Anwendung

Fräser-Set zum vielseitigen und variablen Abrunden von Massivholz und allen Plattenwerkstoffen.

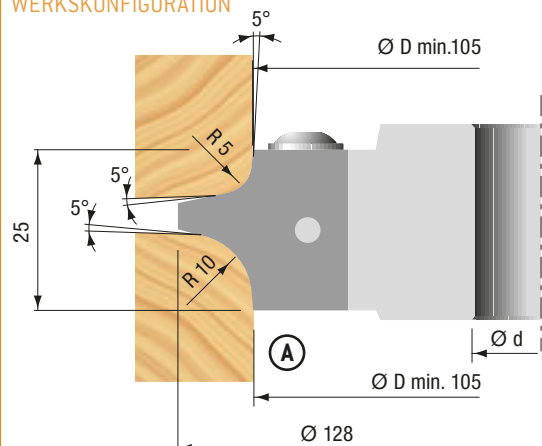
Technische Daten

Tragkörper aus hochfestem Aluminium, Standard-HW-Profilplatten, konstanter Messerflugkreis, alle Radien auf \varnothing 105 mm-Anlaufring abgestimmt, Messer R 5/10 mm montiert, Austauschprofile R 4/8 und R 3/6 mm im Lieferumfang enthalten, spandickenbegrenzt und rückschlagarm, für manuellen Vorschub geeignet.

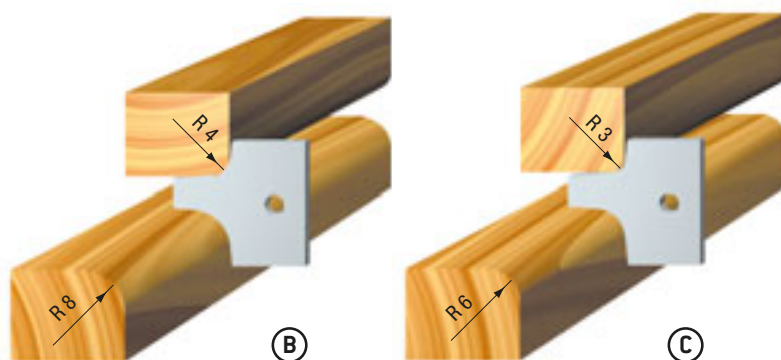
Set fornito in cassetta di plastica
Set supplied in a plastic box
Set wird in Kunststoff-Box geliefert

Ø D [mm]	B [mm]	Ø d [mm]	Z	R [mm]	RPM min-max	Art. Nr.	€
128	25	30 (-50)	2	3-4-5-6-8-10	5800 - 10200	YS107BZM	

PROFILO MONTATO DI SERIE STANDARD MOUNTED KNIVES WERKSKONFIGURATION



PROFILI DI RICAMBIO SPARE KNIVES ERSATZMESSE



Ricambi Spare Parts Ersatzteile						
Art. Nr.	YH110BAM	A 601409 R 5/10	B 601410 R 4/8	C 601411 R 3/6	340025	501404
Dim.		25x24,8x2	25x24,8x2	25x24,8x2	22	M8x20
Pcs		2	2	2	2	10
€						

YS108BZM

R 12/18 - R 15/20
MAN | HW

SET MULTIRAGGIO MULTIRADIUS SET VIERTELSTABFRÄSER-SET



Set ideato per la realizzazione di molteplici profili raggiati. il set è composto da una testa in lega leggera con due coltelli di R 15/20 mm montati sull'utensile e due coltelli con R 12/18 mm di ricambio.

Light alloy body with standard tungsten carbide profiled knives for flexible machining of quarter rounds, all radii match a 105 mm guide ring, body is mounted with R 15/20 mm knives, profiles R 12/18 mm are included in the set, chip thickness limitation and reduced recoil, suitable for manual feed.

Anwendung

Fräser-Set zum vielseitigen und variablen Abrunden von Massivholz und allen Plattenwerkstoffen.

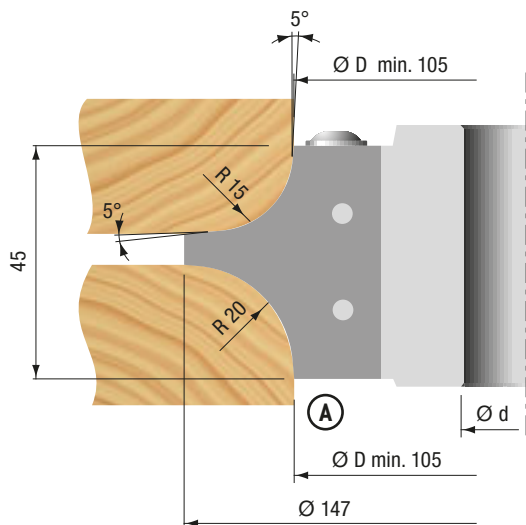
Technische Daten

Tragkörper aus hochfestem Aluminium, Standard-HW-Profilplatten, konstanter Messerflugkreis, alle Radien auf \varnothing 105 mm-Anlaufring abgestimmt, Messer R 15/20 mm montiert, Austauschprofil R 12/18 mm im Lieferumfang enthalten, spandickenbegrenzt und rückschlagarm, für manuellen Vorschub geeignet.

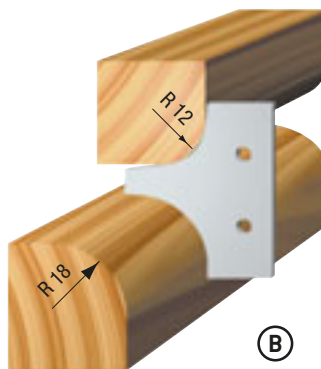
Set fornito in cassetta di plastica
Set supplied in a plastic box
Set wird in Kunststoff-Box geliefert

\varnothing D [mm]	B [mm]	\varnothing d [mm]	Z	R [mm]	RPM min-max	Art. Nr.	€
147	45	30 (-50)	2	12- 15 -18- 20	5100 - 8800	YS108BZM	

PROFILO MONTATO DI SERIE STANDARD MOUNTED KNIVES WERKSKONFIGURATION



PROFILI DI RICAMBIO SPARE KNIVES ERSATZMESSE



Ricambi / Spare Parts / Ersatzteile					
Art. Nr.	YH111BAM	Ⓐ 601412 R 15/20	Ⓑ 601413 R 12/18	340030	501404
Dim.		45x34,5x2	45x34,5x2	42	M8x20
Pcs		2	2	2	10
€					

YS105BZM**R4 - R6 - R8**

MAN | HW

SET PER RAGGI CONCAVI E CONVESSI
TOOLING SET FOR CONCAVE AND CONVEX QUARTER ROUNDS
DOPPELRADIUSFRÄSER-SET


Questo set è stato ideato per la realizzazione di molteplici raggi concavi e convessi ed è composto da una testa in lega leggera con due coltelli di R 4 montati sull'utensile e quattro coltelli con R 6 mm e R 8 mm di ricambio.

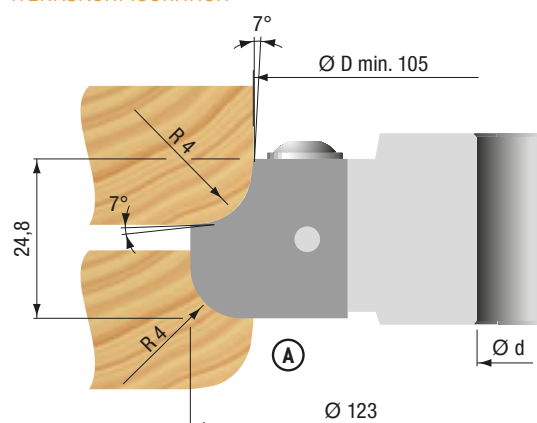
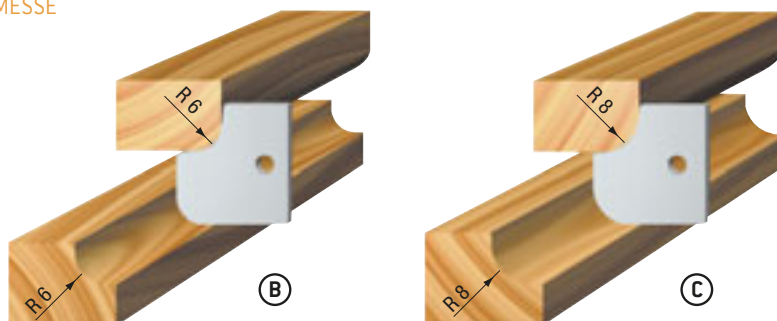
This set was designed to produce a variety of concave and convex rounds. It consists of a light alloy cutterhead with two R 4 mm knives mounted on the tool and four spare R 6 and R 8 mm knives.

Grundkörper aus hochfestem Aluminium zur Aufnahme von 3 verschiedenen Radiusmessern, zum Fräsen von konkaven und konvexen Rundungen an Weich- und Harthölzern.

Set YS105BZM montiert mit Messern R 4 mm und Messer R 6 und R 8 mm im Lieferumfang enthalten.

Set fornito in cassetta di plastica
Set supplied in a plastic box
Set wird in Kunststoff-Box geliefert

Ø D [mm]	B [mm]	Ø d [mm]	Z	R [mm]	RPM min-max	Art. Nr.	€
123	25	30 (-50)	2	④ - 6 - 8	6100 - 10600	YS105BZM	

PROFILO MONTATO DI SERIE
STANDARD MOUNTED KNIVES
WERKSKONFIGURATION

PROFILI DI RICAMBIO
SPARE KNIVES
ERSATZMESSE


Ricambi / Spare Parts / Ersatzteile							
Set YS105BZM	Art. Nr.	YH108BAM	④ 601414 R 4	⑤ 601415 R 6	⑥ 601416 R 8	340025	501404
	Dim.		24,8x23x2	24,8x23,5x2	24,8x23,5x2	22	M8x20
	Pcs		2	2	2	2	10
	€						

YS104BZM**R 8 - R 9 - R 10**

MAN | HW

**SET MEZZITONDI
HALF-ROUND SETS
HALBSTABFRÄSER-SET**

Questo utensile con corpo in lega leggera a due taglienti è stato pensato per eseguire mezzitondi. Il set include, oltre all'utensile con due coltelli di R 10 mm montati, 2+2 coltelli di ricambio con R 8 e R 9 mm.

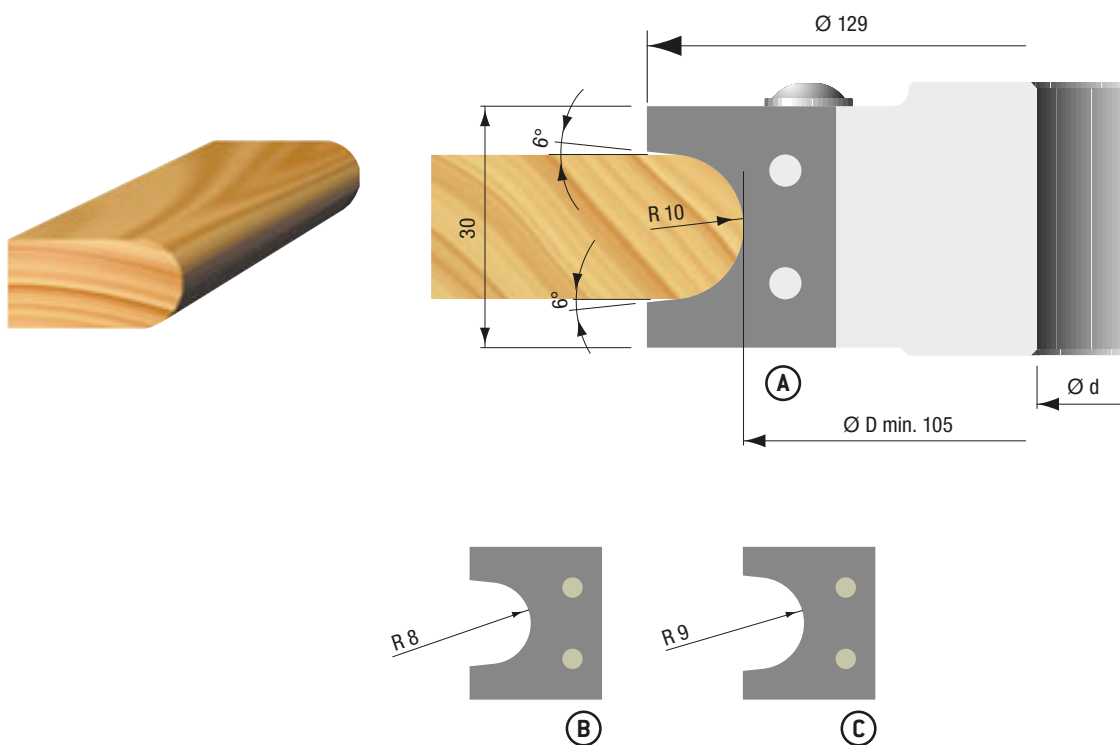
This tool, consisting of a light alloy body with two knives has been designed to work half rounds. The set, besides the two R 10 mm knives, includes 2+2 R 8 and R 9 mm spare knives.

Set YS104BZM ist mit Messer R 10 mm montiert und die Austauschmesser R 8 mm und R 9 mm sind im Lieferumfang enthalten.

Tragkörper aus hochfestem Aluminium, für manuelle Vorschübe geeignet.

Set fornito in cassetta di plastica
Set supplied in a plastic box
Set wird in Kunststoff-Box geliefert

Ø D [mm]	B [mm]	Ø d [mm]	Z	R [mm]	RPM min-max	Art. Nr.	€
129	30	30 (-50)	2	8-9-10	5800 - 10200	YS104BZM	



Ricambi / Spare Parts / Ersatzteile							
Set YS104BZM	Art. Nr.	YH107BAM	Ⓐ 601408 R 10	Ⓑ 601406 R 8	Ⓒ 601407 R 9	340020	501404
	Dim.		30x26,5x2	30x26,5x2	30x26,5x2	27	M8x20
	Pcs		2	2	2	2	10
	€						

TH48TM

MAN | HW

TESTA PER PIATTABANDE MULTIPROFILO CON COLTELLI IN HW PANEL RAISING CUTTERHEAD WITH KNIVES IN HW PROFILPLATTEN-ABPLATTFRÄSER



Testa con coltellini in HW per piattabande multiprofilo.

La testa è disponibile in due versioni: tipo 1 (con posizionamento del legno sotto), tipo 2 (con posizionamento del legno sopra).

La testa può montare tutti i coltelli indicati nella pagina successiva ottenendo in questo modo i profili indicati. La testa tipo 1 viene fornita corredata con i coltellini rif. G1+E1.

La testa tipo 2 viene fornita corredata con i coltelli rif. G2+E2, gli altri coltelli possono essere forniti a richiesta.

Steel body with tungsten carbide profiled knives, for high precision panel raising, cutter A fitted with profiles G1 / E1, cutter B fitted with profiles G2 / E2, cutters can be equipped with further profiles as indicated below, chip thickness limitation and reduced recoil, suitable for both manual and mechanical feed.

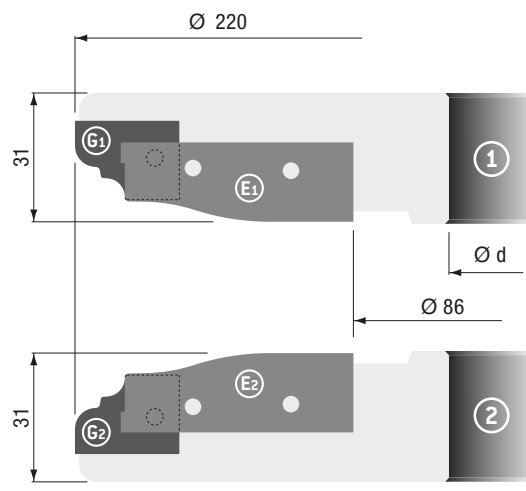
Anwendung

Zum Fräsen von unterschiedlichen Abplattprofilen, für Türen und Küchenmöbel in Massivholz und allen Plattenwerkstoffen.

Technische Daten

Grundkörper aus Stahl, Werkzeug A mit Schneiden G1 / E1, Werkzeug B mit Schneiden G2 / E2 geliefert, weitere Profile (siehe unten) auf Anfrage, spandickenbegrenzt und rückschlagarm, für manuelle sowie mechanische Vorschübe geeignet.

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	t max [mm]	RPM min-max	Art. Nr.	€
220	31	30 (-50)	2 + 2	-	70	3500 - 6000	① TH48TM30	
220	31	30 (-50)	2 + 2	-	70	3500 - 6000	② TH48TM31	



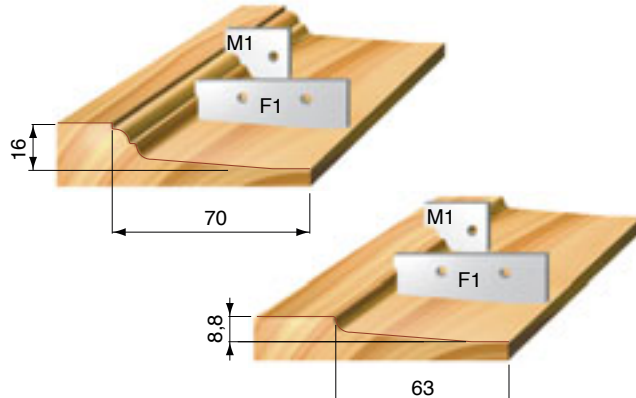
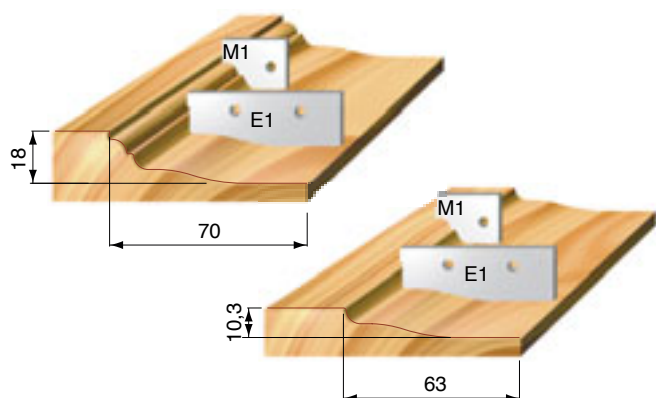
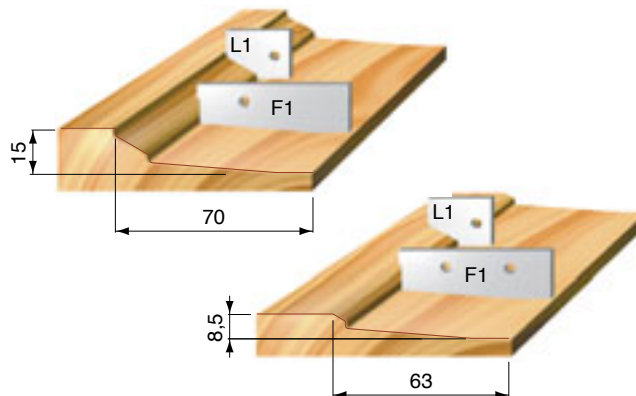
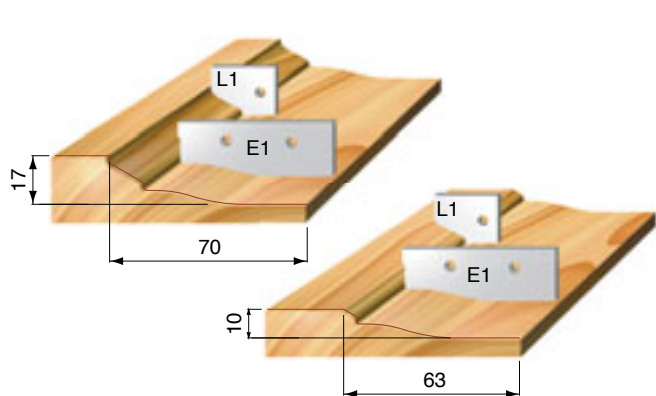
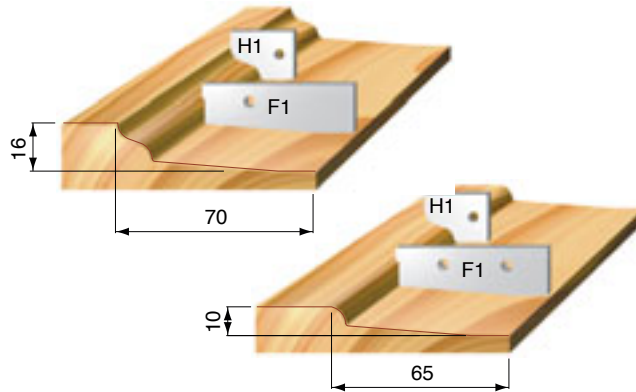
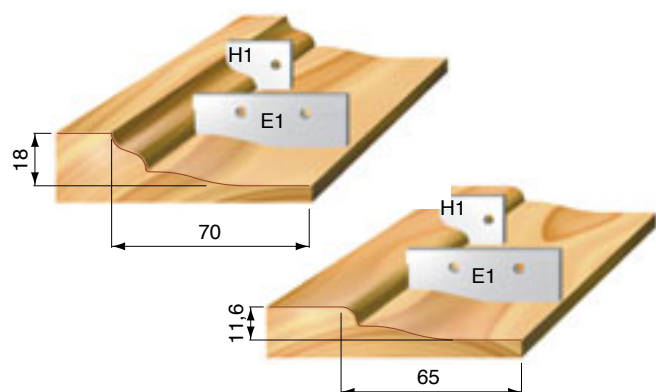
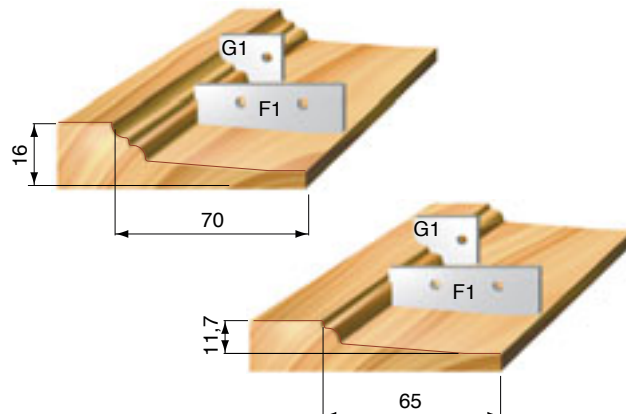
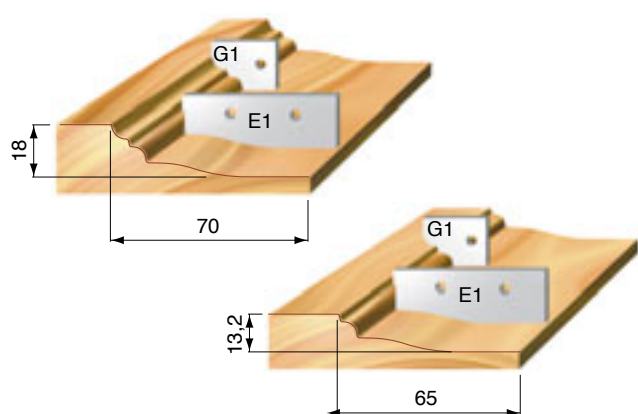
Ricambi / Spare Parts / Ersatzteile								
① TH48TM30	Art. Nr.	601480-E1	601481-F1	601482-G1	601483-H1	601484-L1	601485-M1	
	Dim.	60x17x2	60x15,4x2	19,3x27,5x2	19,3x27,5x2	19,3x27,5x2	19,3x27,5x2	
	Pcs	2	2	2	2	2	2	
	€							
		Art. Nr.	350010	502404	303040	502402		
		Dim.	54	M7x19	17	M7x21		
② TH48TM31	Art. Nr.	601490-E2	601491-F2	601492-G2	601493-H2	601494-L2	601495-M2	
	Dim.	60x17x2	60x15,4x2	19,3x27,5x2	19,3x27,5x2	19,3x27,5x2	19,3x27,5x2	
	Pcs	2	2	2	2	2	2	
	€							
		Art. Nr.	350010	502404	303039	502402		
		Dim.	54	M7x19	17	M7x21		
	Pcs	2	10	2	10			
	€							

TH48TM

MAN | HW

TESTA PER PIATTABANDE MULTIPROFILO CON COLTELLI IN HW
 PANEL RAISING CUTTERHEAD WITH KNIVES IN HW
 WENDEPLATTEN-ABPLATTFRÄSER

TESTA PER PIATTABANDE CON LEGNO SOTTO / PANEL RAISING CUTTERHEAD WITH WOOD UNDERNEATH / ABPLATTMESSERKOPF, HOLZ UNTEN

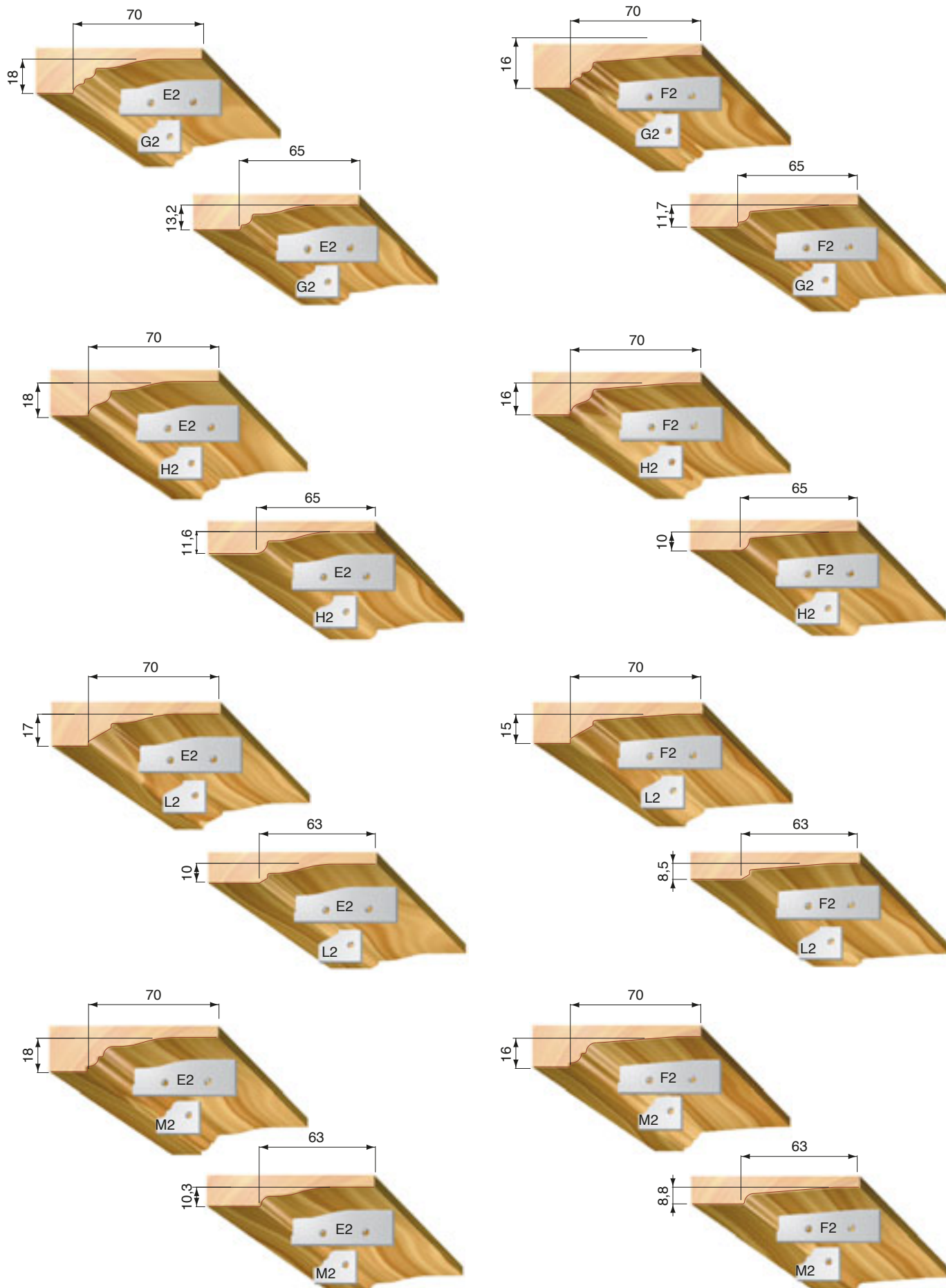


TH48TM

MAN | HW

TESTA PER PIATTABANDE MULTIPROFILO CON COLTELLI IN HW
 PANEL RAISING CUTTERHEAD WITH KNIVES IN HW
 WENDEPLATTEN-ABPLATTFRÄSER

TESTA PER PIATTABANDE CON LEGNO SOPRA / PANEL RAISING CUTTERHEAD WITH WOOD ABOVE / ABPLATTMESSERKOPF, HOLZ OBEN



YS149AZM

MAN | HW

SET PIATTABANDA PROFESSIONALE PROFESSIONAL PANEL RAISING SET PROFILPLATTEN-ABPLATTFRÄSER



Testa in lega leggera a due taglienti ideata per realizzare 12 differenti profili (due profili per ogni coltello). Grazie alla speciale spina di posizionamento dei coltelli, la lavorazione e la sostituzione dei taglienti risulta molto facile e precisa. Il set è composto dalla testa compresa dei due coltelli A. I coltelli con profilo B, C, D, E e F sono disponibili su richiesta.

Light alloy body with tungsten carbide standard profiled knives for panel raising for machining up to a total amount of 12 different profiles, chip thickness limitation and suitable for manual feed. Each set includes the head equipped with 2 knives, while profiled knives type B, C, D, E and F are available on request.

Anwendung

Abplattfräser bestückt mit Profil A für Abplattungen in Massivholz und Plattenwerkstoffen. Profile B, C, D, E oder F passen in denselben Grundkörper und sind verfügbar auf Anfrage.

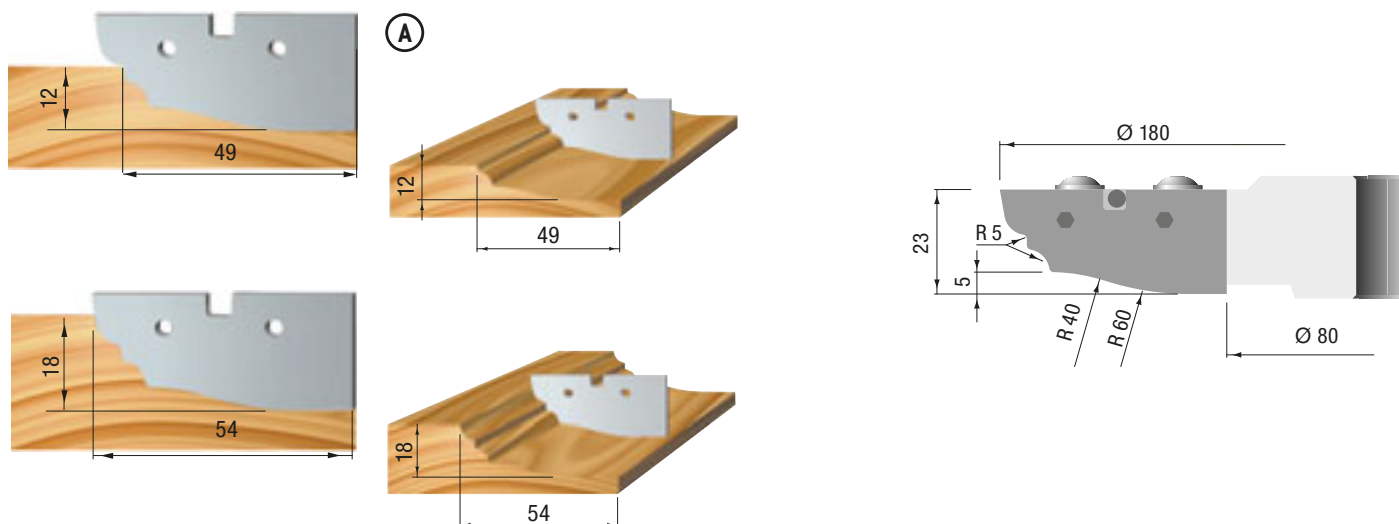
Technische Daten

Grundkörper aus hochfestem Aluminium zum Fräsen von bis zu 12 unterschiedlichen Abplatt-Profilen, spandickenbegrenzt und rückschlagarm, für manuelle Vorschübe geeignet.

Set fornito in cassetta di plastica
Set supplied in a plastic box
Set wird in Kunststoff-Box geliefert

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	t max [mm]	RPM min-max	Art. Nr.	€
180	23	30 (-50)	2	-	54	4200 - 7300	YS149AZM	

STANDARD



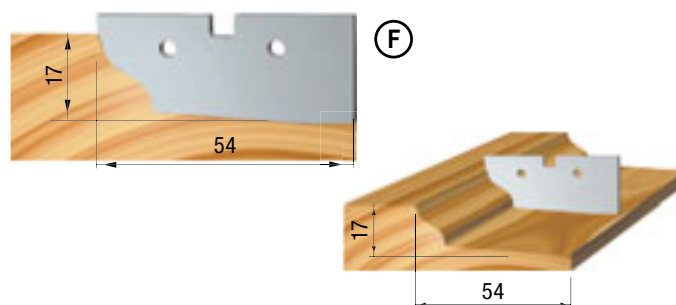
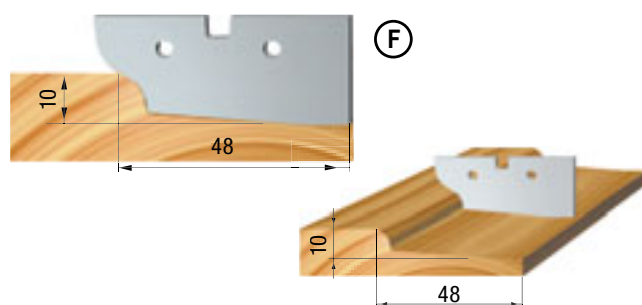
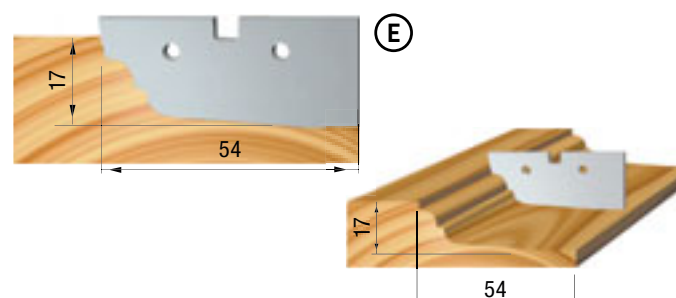
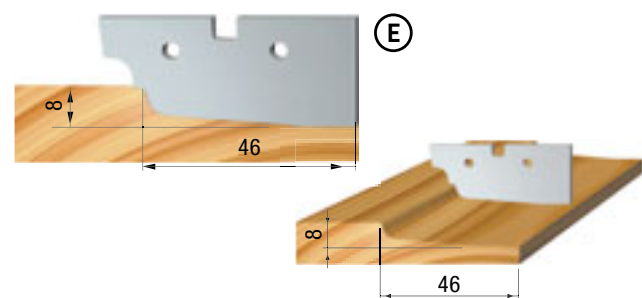
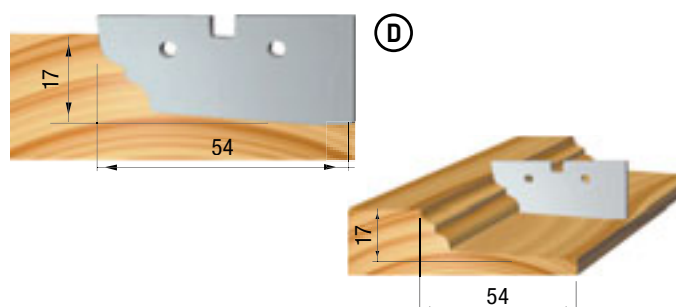
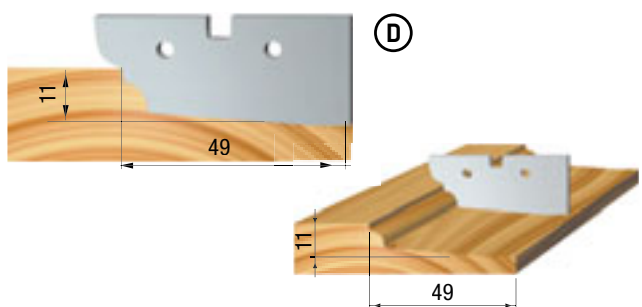
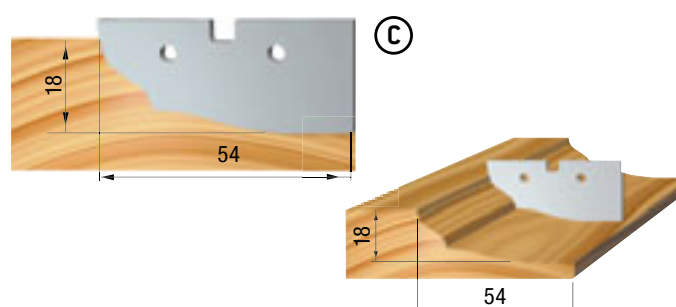
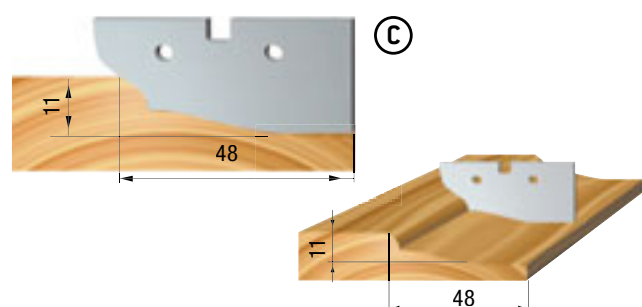
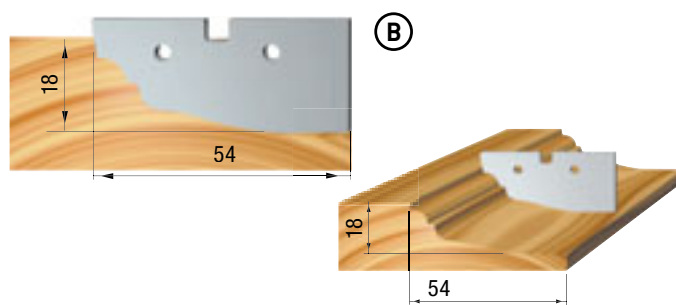
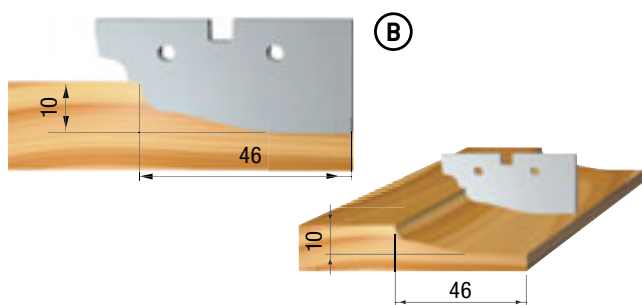
Ricambi / Spare Parts / Ersatzteile									
YS149AZM	Art. Nr.	YH112AAM	601424	601425	601426	601427	601428	601429	501203
	Dim.		52x25x2	52x25x2	52x25x2	52x25x2	52x25x2	52x25x2	M5x10
	Pcs		2	2	2	2	2	2	10
	€								

YS149AZM

MAN | HW

SET PIATTABANDA PROFESSIONALE
PROFESSIONAL PANEL RAISING SET
PROFILPLATTEN-ABPLATTFRÄSER

OPTIONAL



YS119AZM

MAN | HW

SET PIATTABANDA A TRE PROFILI PANEL RAISING SET WITH THREE PROFILES ABPLATTFRÄSER-SET



Testa in lega leggera a due taglienti profilati da entrambi i lati ideata per realizzare 3 differenti profili. Il set è composto dalla testa compresa dei due coltelli profilo A montati sull'utensile e di 2+2 coltelli profilo B e C di ricambio.

In virtù dei coltelli utilizzati, il prezzo del set risulta molto competitivo.

Light alloy body with tungsten carbide reversible profiled knives for panel raising for machining up to a total amount of 3 different profiles, suitable for manual feed.

Each set is supplied with cutterhead equipped with profiled on 2 sides knives type A, while profiled knives type B and C are available as spare parts.

Thanks to the supplied knives, the set is quite price competitive.

Anwendung

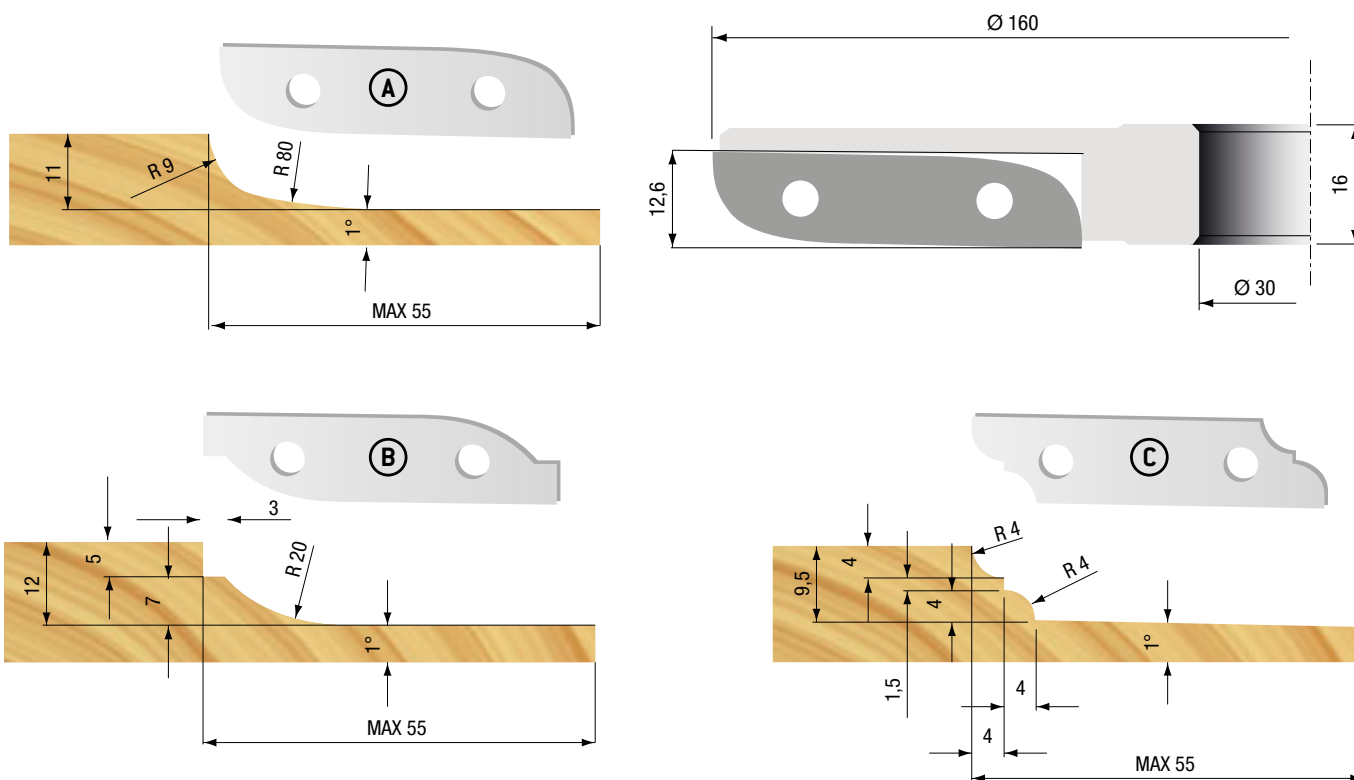
Abplattfräser bestückt mit Profil A, zum Herstellen von 3 unterschiedlichen Abplattprofilen. Laut Abbildung, Profile B und C auf Anfrage.

Technische Daten

Grundkörper aus Aluminium, Standard-HW-Profilplatten, spandickenbegrenzt und Rückschlagarm, für manuelle Vorschübe geeignet.

Set fornito in cassetta di plastica
Set supplied in a plastic box
Set wird in Kunststoff-Box geliefert

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	t max [mm]	RPM min-max	Art. Nr.	€
160	12	30 (-35)	2	-	55	4800 - 8200	YS119AZM	



Ricambi / Spare Parts / Ersatzteile							
YS119AZM	Art. Nr.	YH144AAM	601496	601497	601498	502301	300462
	Dim.		50x12,5	50x12,5	50x12,5	M4 x 6	8 x 1
	Pcs		2	2	2	10	10
	€						

YS101AZM YS101BZM

MAN | HW

SET CONTROPROFILO-PIATTABANDA KITCHEN CABINET SET KONTERPROFILER-ABPLATTFRÄSER-SET



Il set è composto da due teste portacoltelli con corpo in lega leggera.

La testa per l'esecuzione del profilo-controprofilo è equipaggiata di serie con coltellini in HW per ottenere il profilo A [vedi disegno], ma può utilizzare anche coltellini per l'esecuzione dei profili B, C e D che vengono forniti esclusivamente su richiesta.

La testa per piattabanda monta 4 coltellini in HW posizionati con angolo assiale con i quali si possono ottenere i tre profili indicati nei disegni.

Set with 2 cutters in light alloy execution, standard tungsten carbide profiled knives, profile A included in the set, profiles B, C and D can be obtained on request and mounted onto the same cutter head, panel raising cutter with contour knives aligned in axial angle for excellent end-grain cutting surfaces, chip thickness limitation and reduced recoil, suitable for manual feed.

Anwendung

Werkzeugset zum Herstellen von Profilrahmen mit Füllung, für Holzstärken von 22-25 mm, Profil- und Konterprofil wird ohne Schneidenwechsel lediglich durch Spindelverstellung gefräst, Profilfräser mit Profil A bestückt, Profile B, C und D können auf Wunsch dazubestellt und in den gleichen Tragkörper eingebaut werden.

Technische Daten

2-teiliger Werkzeugsatz mit Tragkörpern aus hochfestem Aluminium, Standard-Hartmetall-Schneiden für lange Standwege, Profilschneiden des Abplattfräasers mit Achswinkel für ausrissfreies Fräsen im Hirnholz, spandickenbegrenzt und rückschlagarm, für manuellen Vorschub geeignet.

Set fornito in cassetta di plastica
Set supplied in a plastic box
Set wird in Kunststoff-Box geliefert

Set composto da / including / bestehend aus:	Ø D [mm]	B [mm]	Ø d [mm]	Z	V	t max [mm]	RPM min-max	Art. Nr.	€
YS101AZM	120	40	30 (-40)	2	-	-	6400 - 11000	① YH102AAM	
	183	30	30 (-40)	2 + 2	-	60	4100 - 7100	② YH101AAM	
YS101BZM	130	40	50	2	-	-	5800 - 10200	① YH102BAM	
	200	30	50	2 + 2	-	60	3800 - 6500	② YH101BAM	



Ricambi / Spare Parts / Ersatzteile

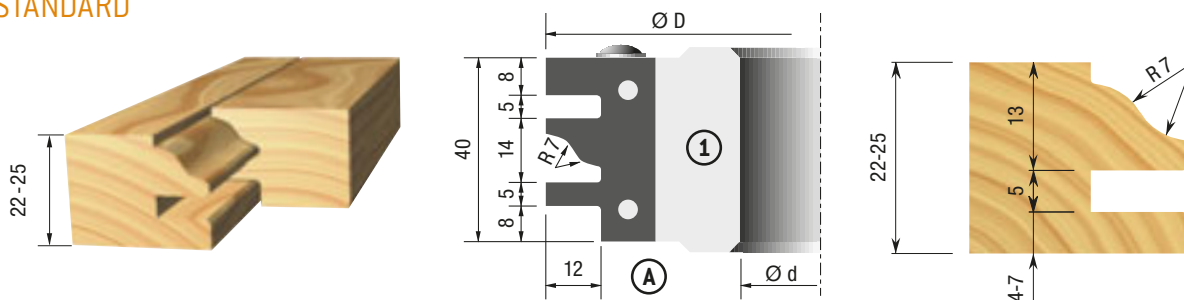
①									
	Art. Nr.	YH102AAM	YH102BAM	Ⓐ 602075	Ⓑ 602076	Ⓒ 602077	Ⓓ 602078	340016	501315
	Dim.			40x25x2	40x25x2	40x25x2	40x25x2	39	M6x25
	Pcs			2	2	2	2	2	10
€									
②									
	Art. Nr.	YH101AAM	YH101BAM	Ⓔ 601097	340013	501315	Ⓕ 601050	340014	501315
	Dim.			20x12x1,5	16	M6x25	60x12x1,5	54	M6x25
	Pcs			2	2	10	2	2	10
€									

YS101AZM YS101BZM

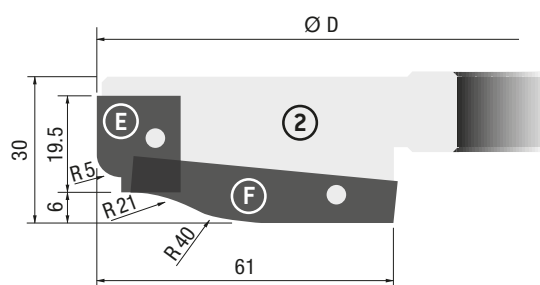
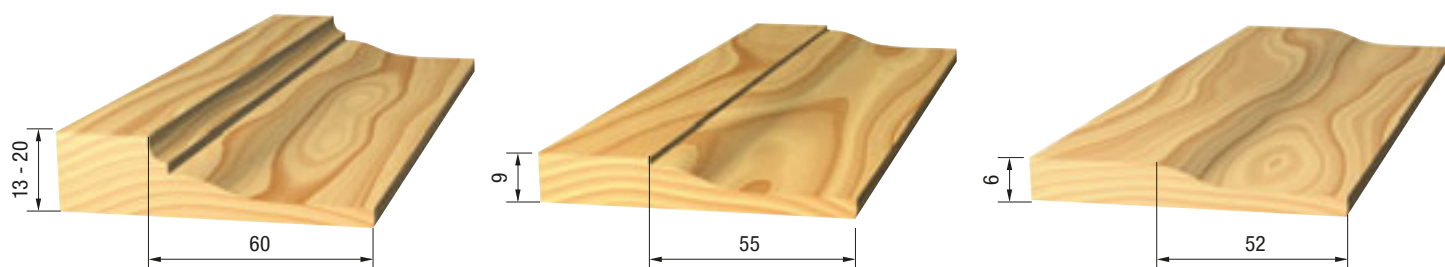
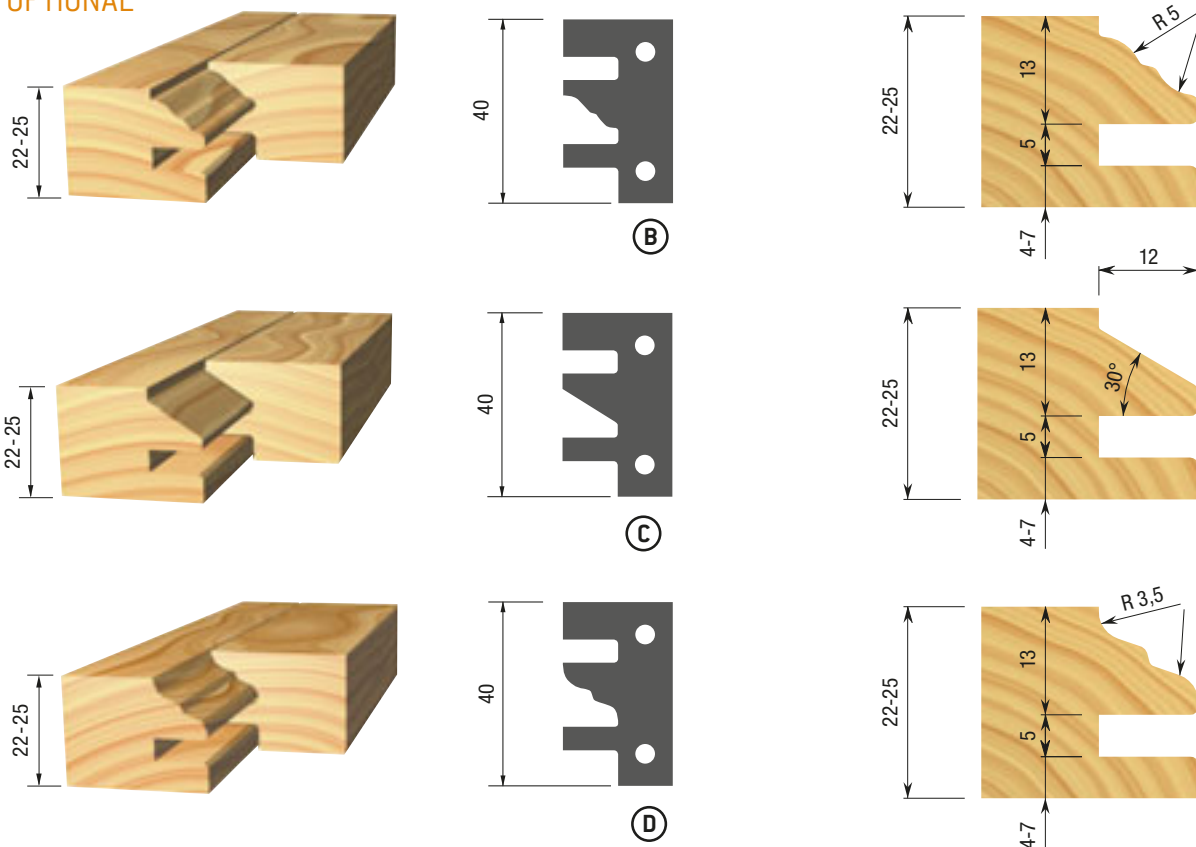
MAN | HW

SET CONTROPROFILO-PIATTABANDA
KITCHEN CABINET SET
KONTERPROFILER-ABPLATTFRÄSER-SET

STANDARD



OPTIONAL



YH102AAM

MAN | HW

TESTA PROFILO-CONTROPROFILO PROFILE-COUNTERPROFILE CUTTERHEAD KONTERPROFILFRÄSER



La testa ha corpo in lega leggera. È equipaggiata di serie con coltellini in HW per ottenere il profilo A, mentre i profili B, C e D possono essere forniti su richiesta e montati sulla stessa testa. Testa con limitatore di truciolo, adatta per l'avanzamento manuale.

Body in light alloy execution, standard tungsten carbide profiled knives, profile A mounted on cutter, profiles B, C and D can be obtained on request and mounted onto the same cutter head, chip thickness limitation and reduced recoil, suitable for manual feed.

Anwendung

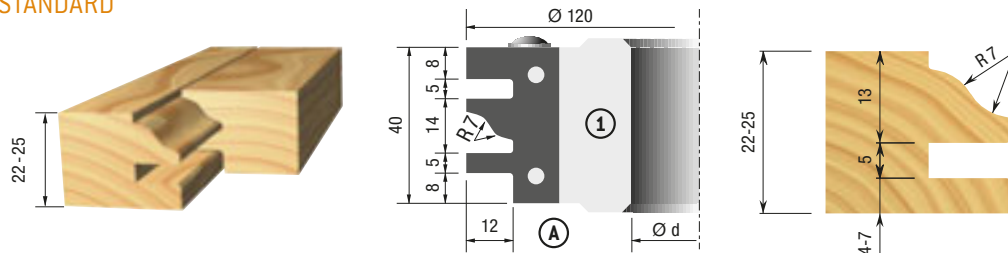
Werkzeug zum Herstellen von Profilrahmen mit Holzstärken von 22-25mm, Profil- und Konterprofil wird ohne Schneidenwechsel lediglich durch Spindelverstellung gefräst, Profilfräser mit Profil A bestückt, Profile B, C und D können auf Wunsch dazubestellt und in den gleichen Tragkörper eingebaut werden.

Technische Daten

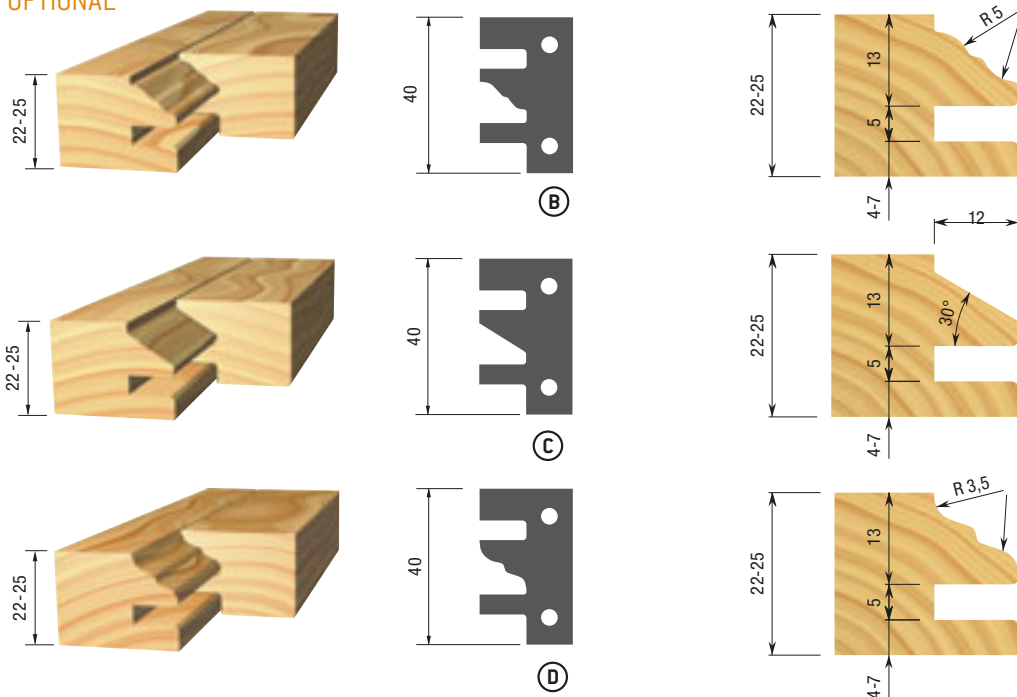
Tragkörper aus hochfestem Aluminium, Standard-Hartmetall-Schneiden für lange Standwege, spandickenbegrenzt und rückschlagarm, für Handvorschub geeignet.

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	t max [mm]	RPM min-max	Art. Nr.	€
120	40	30 (-40)	2	-	-	5800 - 10200	YH102AAM	

STANDARD



OPTIONAL



Ricambi / Spare Parts Ersatzteile								
Art. Nr.	YH102AAM	(A) 602075	(B) 602076	(C) 602077	(D) 602078	340016	501315	
Dim.		40x25x2	40x25x2	40x25x2	40x25x2	39	M6x25	
Pcs		2	2	2	2	2	10	
€								

YS112AZM YS112BZM

MAN | HW

SET UTENSILI PER ANTINE E PORTE INTERNE DOORS AND KITCHEN CABINET SET KONTERPROFIL-FRÄSERATZ

Il set, composto da 2 teste a profilare, 1 testa per incastri regolabile e di anelli distanziali di regolazione, è stato creato per realizzare con la massima flessibilità antine e porte (cinque profili diversi possibili). L'incastro registrabile presente nel gruppo può essere utilizzato anche singolarmente per l'esecuzione di incastri regolabili da 8 a 15 mm di spessore. Inoltre, grazie alla vite di posizionamento presente sulle teste sagomate, il montaggio del coltello di ricambio risulta molto facile e preciso.

Set consisting of 2 profile cutters in light alloy execution and an adjustable groover 8-15 mm (can also be used separately!), for machining door profiles and counterprofiles with maximum flexibility, 5 different profiles can be mounted on the same cutterhead, set complete with spacing collars and Profile A mounted on the cutters, other profiles on request, easy fitting of spare knives by means of positioning screws, suitable for manual feed.

Anwendung

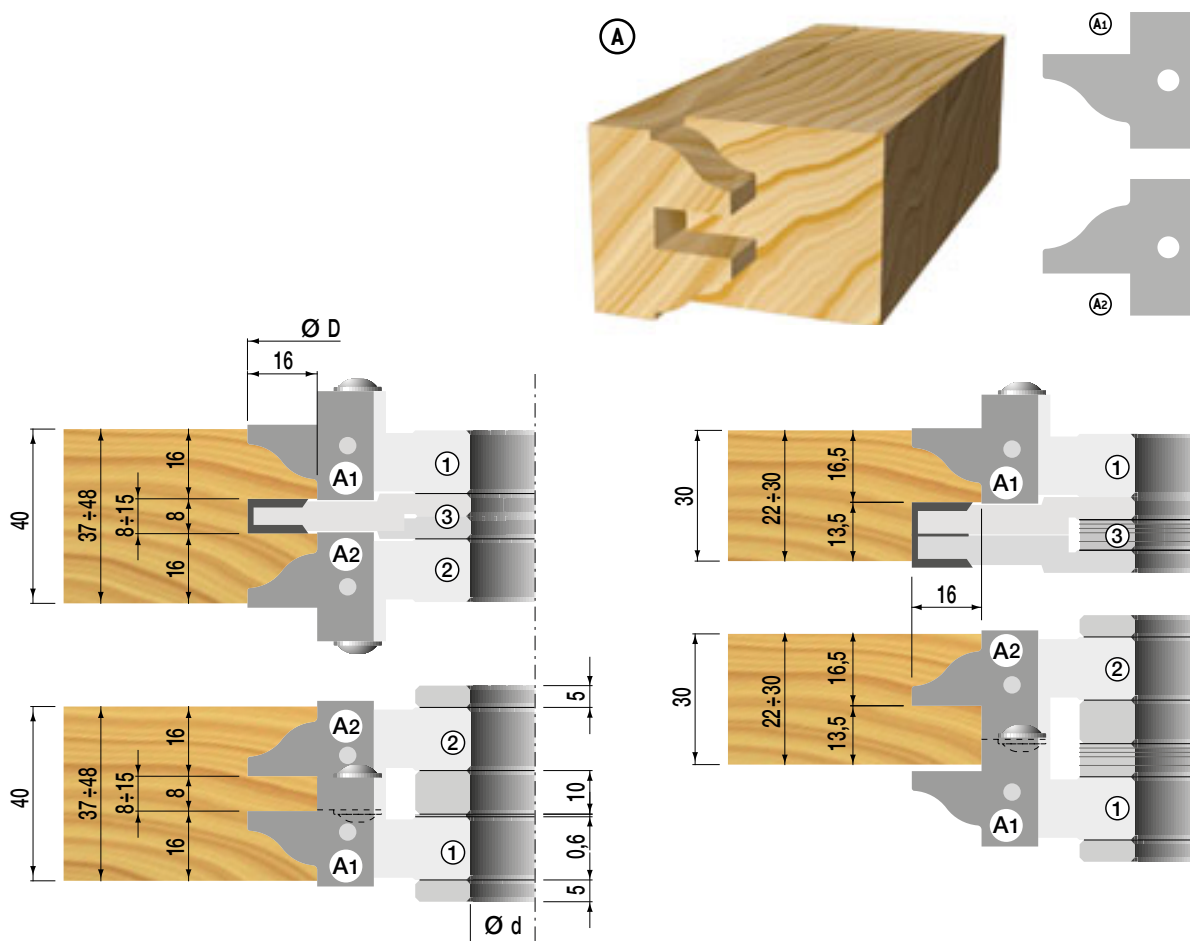
Zur Herstellung von Möbel- und Zimmertüren, für Hart- sowie Weichhölzer, Profil A im Lieferumfang enthalten, weitere Profile B-E (Siehe Ersatzteilliste sowie Profilbeispiele) sind im selben Grundkörper individuell nachrüstbar, Set komplett mit Zwischenringen sowie separater Bedienungsanleitung.

Technische Daten

3-teiliger Fräsersatz, Profilfräser ① und ② aus hochfestem Aluminium, Verstellnutter ③ aus Stahl, Standard-HW-Profilplatten, konstanter Messerflugkreis, Profilmesser A1/A2 montiert, spandickenbegrenzt und rückschlagarm, für manuellen Vorschub geeignet.

	Ø D [mm]	B [mm]	Ø d [mm]	Z	V	Type	t max [mm]	RPM min-max	Art. Nr.	€
YS112AZM	132	25	30 (-35)	2	-	A1	-	5700 - 9800	① YH115AAM	
	132	25	30 (-35)	2	-	A2	-	5700 - 9800	② YH116AAM	
	132	8 - 15	30 (-35)	2	4	-	-	5700 - 9800	③ YH117AAM	
YS112BZM	147	25	40 (-50)	2	-	A1	-	5100 - 8800	① YH115BAM	
	147	25	40 (-50)	2	-	A2	-	5100 - 8800	② YH116BAM	
	147	8 - 15	40 (-50)	2	4	-	-	5100 - 8800	③ YH117BAM	









Set fornito in cassetta di plastica
Set supplied in a plastic box
Set wird in Kunststoff-Box geliefert

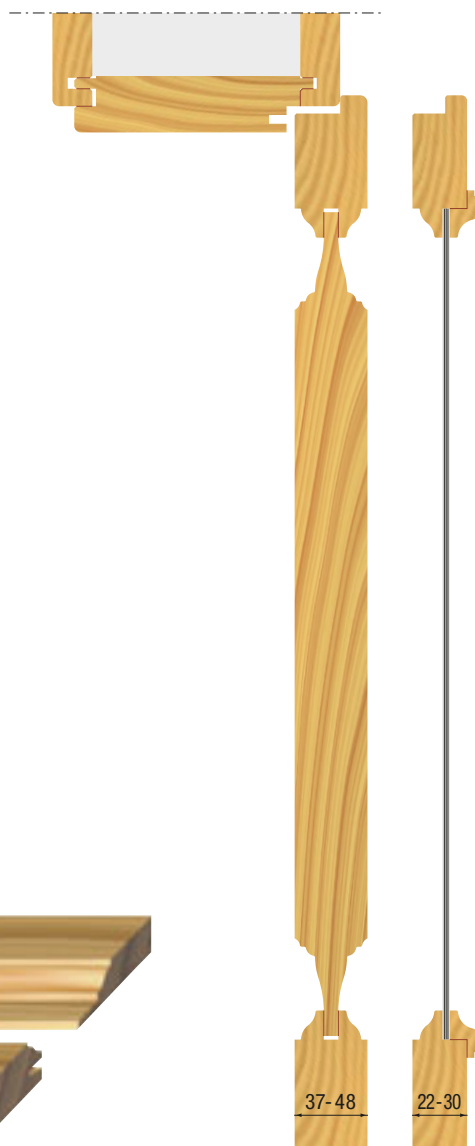


YS112AZM YS112BZM

MAN | HW

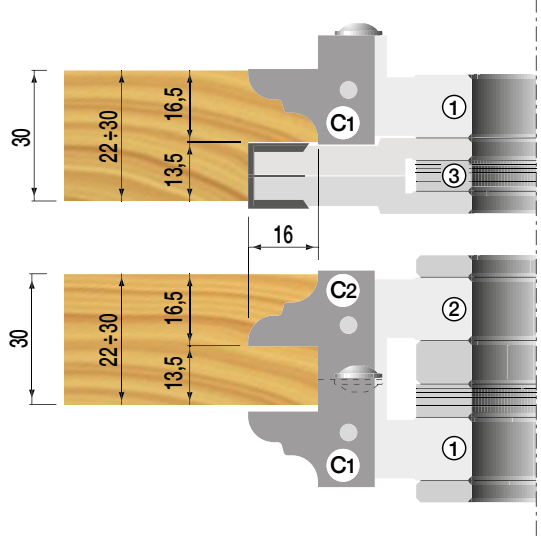
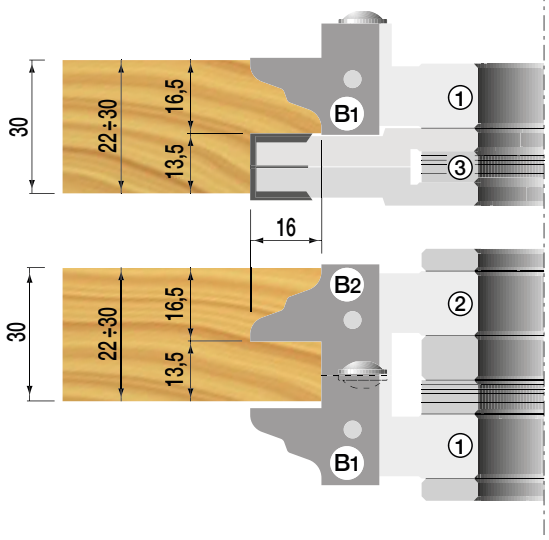
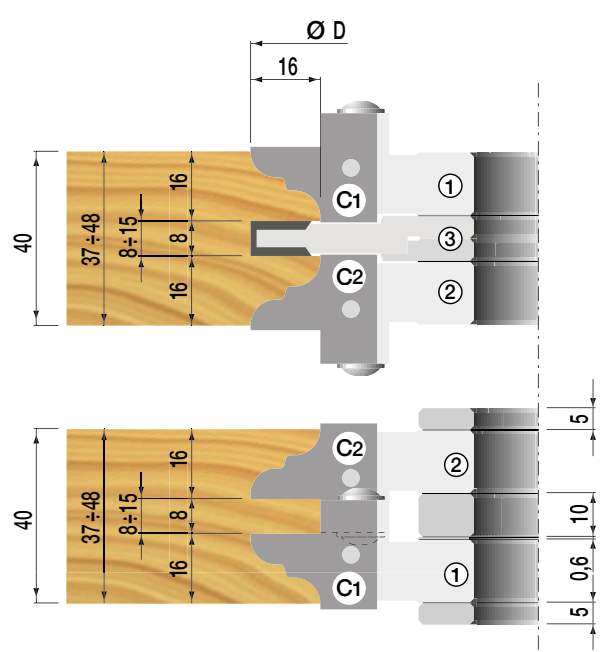
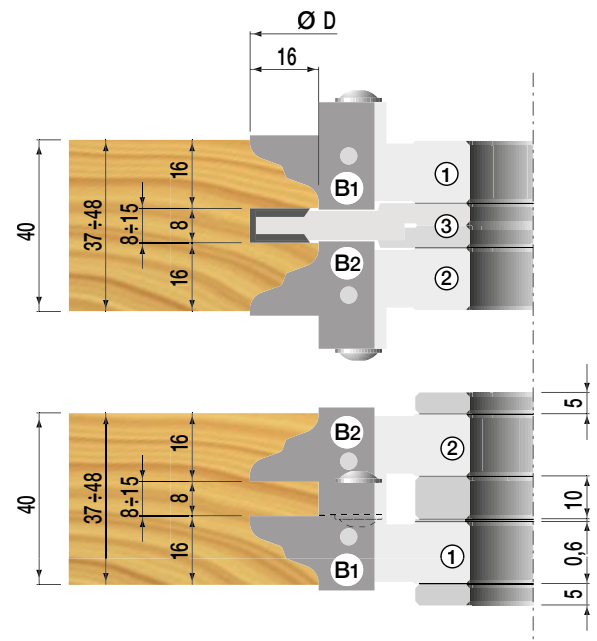
SET UTENSILI PER ANTINE E PORTE INTERNE
DOORS AND KITCHEN CABINET SET
KONTERPROFIL-FRÄSERATZ

Ricambi / Spare Parts / Ersatzteile						
①  YH115AAM YH115BAM	Art. Nr.	Ⓐ 601439	340018	501316		
	Dim.	25x29,8x2	23	M6x20		
	Pcs	2	2	10		
	€					
Optional	Art. Nr.	Ⓑ 601441	Ⓒ 601443	Ⓓ 601445	Ⓔ 601447	
	Dim.	25x29,8x2	25x29,8x2	25x29,8x2	25x29,8x2	
	Pcs	2	2	2	2	
	€					
②  YH116AAM YH116BAM	Art. Nr.	Ⓐ 601440	340019	501316		
	Dim.	25x29,8x2	23	M6x20		
	Pcs	2	2	10		
	€					
Optional	Art. Nr.	Ⓑ 601442	Ⓒ 601444	Ⓓ 601446	Ⓔ 601448	
	Dim.	25x29,8x2	25x29,8x2	25x29,8x2	25x29,8x2	
	Pcs	2	2	2	2	
	€					
③  YH117AAM YH117BAM	Art. Nr.	600001	350021	502403	600201	500002
	Dim.	7,65x12x1,5	6,8	M5x18	14x14x2	M5x7
	Pcs	10	2	10	10	10
	€					



YS112AZM
YS112BZM
MAN | HW

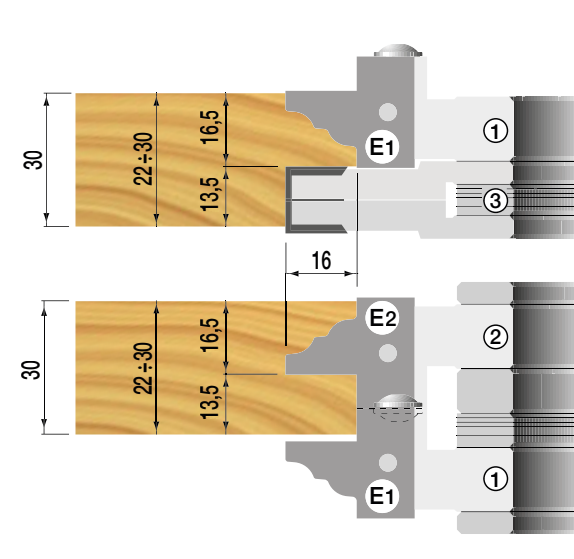
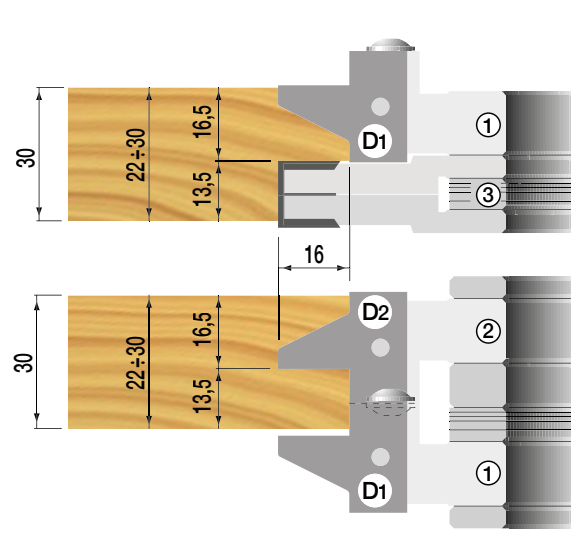
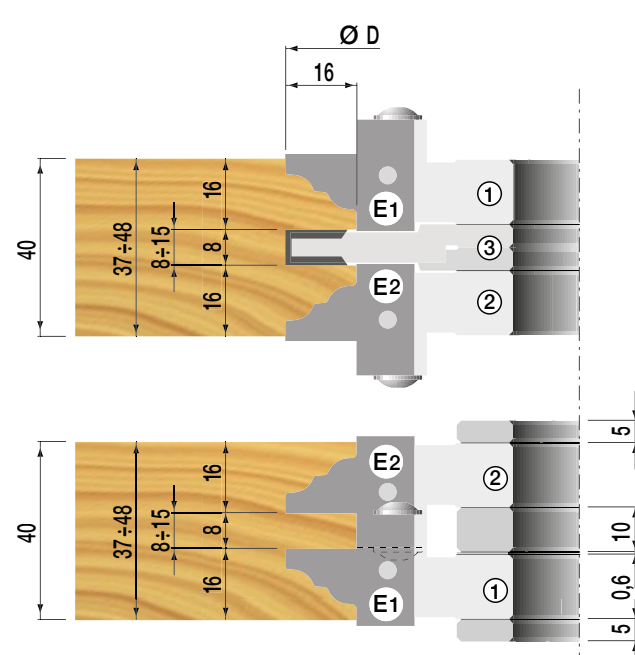
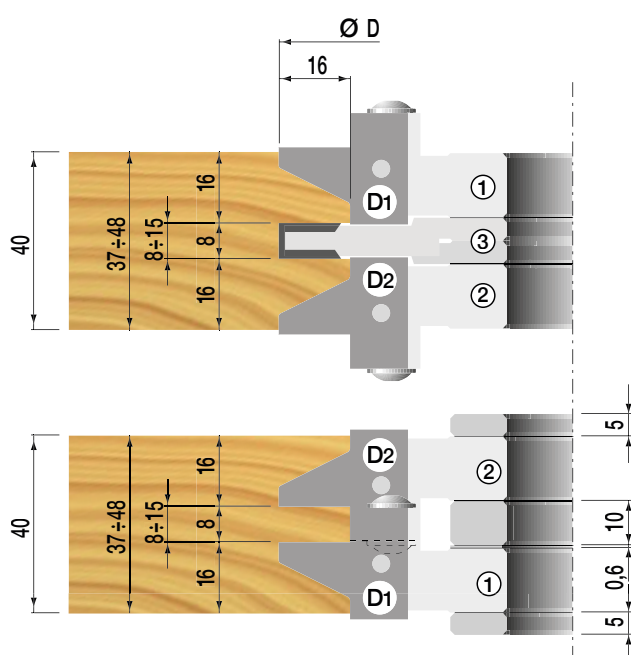
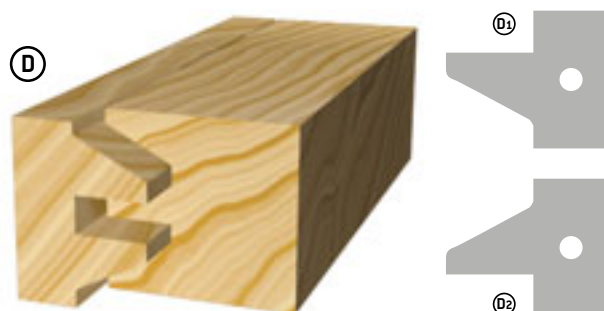
SET PER ANTINE E PORTONCINI: ESEMPI
DOORS AND KITCHEN CABINET SET: EXAMPLES
KONTERPROFIL-FRÄSERSATZ PROFILBEISPIELE



YS112AZM YS112BZM

MAN | HW

SET PER ANTINE E PORTONCINI: ESEMPI
SET FOR PROFILE AND COUNTERPROFILE: EXAMPLES
KONTERPROFIL-FRÄSERSATZ PROFILBEISPIELE



TH20TM60

MAN | HW

GRUPPO TESTE CON COLTELLINI IN HW PER PARCHETTI E PERLINE TONGUE AND GROOVE CUTTERSET WITH REVERSIBLE KNIVES VERSTELLBARER NUT- UND FEDERFRÄSER



Set di teste con coltellini per la lavorazione di parchetti e perline. Il gruppo base è composto da quattro teste (nr. 1-2-3-4) montate su boccola, corredato da una serie di anelli distanziali.

Al set base possono essere aggiunte tre teste opzionali (nr. 5-6-7) che aumentano il numero di profili ottenibili.

Set of heads with HW knives for the working of wood flooring and matchboarding. The basic unit is made up of four heads (n. 1-2-3-4) mounted on a bushing, fitted with a series of distance rings.

Three optional heads (n. 5-6-7) can be added to the basic set to increase the amount of profiles that can be obtained.

Anwendung

Für Nut- und Federverbindungen im Innenausbau. Für Weich- und Harthölzer.

Universal-Werkzeug, für 3 Profile verwendbar.

Technische Daten

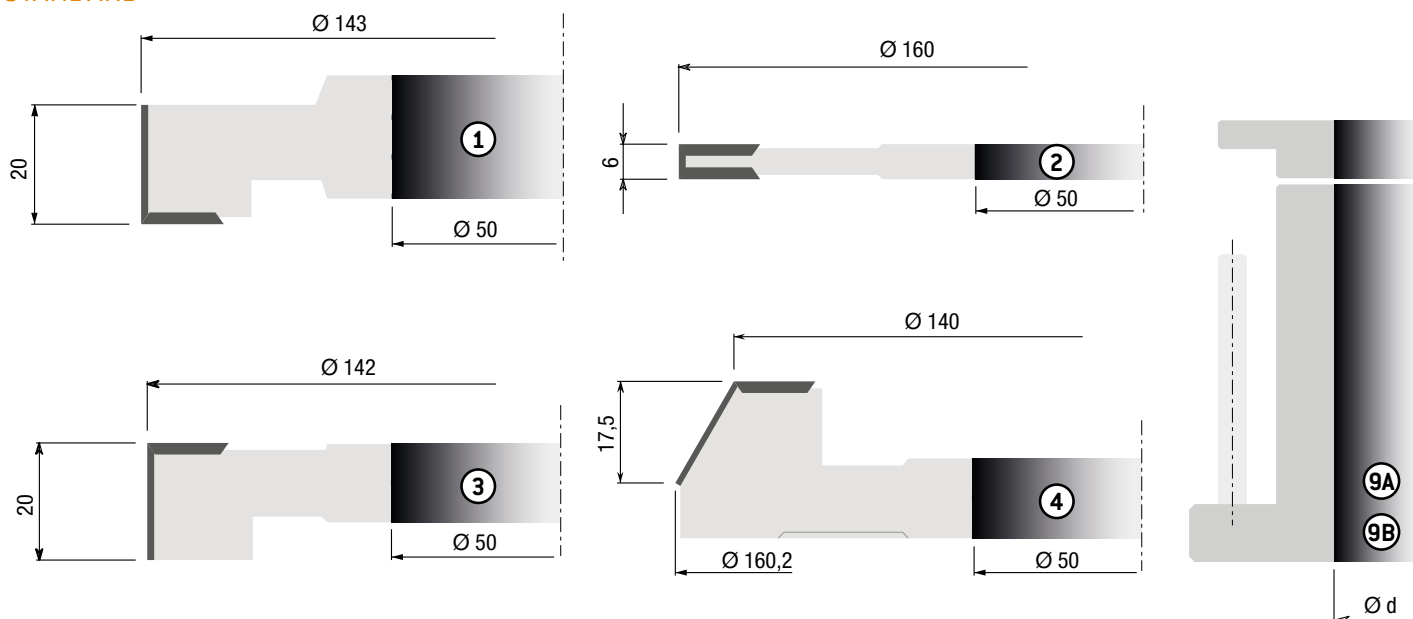
Vierteiliges Werkzeug mit Ringsatz für Holzstärken von 12 - 40 mm. Werkzeug 2-schneidig, auf Büchse verschraubt. Das Basis-Set kann durch die Einzelfräser 5, 6 und 7 ergänzt werden, damit weitere Profilvarianten machbar sind.

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	Type	t max [mm]	RPM min-max	Art. Nr.	€	SET
143	20	50	2	2	1	-	5300 - 9100	TH20TM61		TH20TM60
160	6	50	2	4	2	-	4800 - 8200	TH20TM62		
142	20	50	2	2	3	-	5300 - 9100	TH20TM63		
160,2	17,5	50	2	2	4	-	4800 - 8200	TH20TM64		
		30			9-A	-		1400TH206030		
		40			9-B	-		1400TH206040		
		50			8	-		1400TH206050		

Teste opzionali / Extra cutterheads / Einzelfräser

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	Type	t max [mm]	RPM min-max	Art. Nr.	€
129	9,6	40/50	2	-	5	-	5800 - 10200	TH20TM65	
105	9,6	40/50	2	-	6	-	7300 - 13200	TH20TM67	
156	24,6	40/50	2	-	7	-	4800 - 8200	TH20TM68	

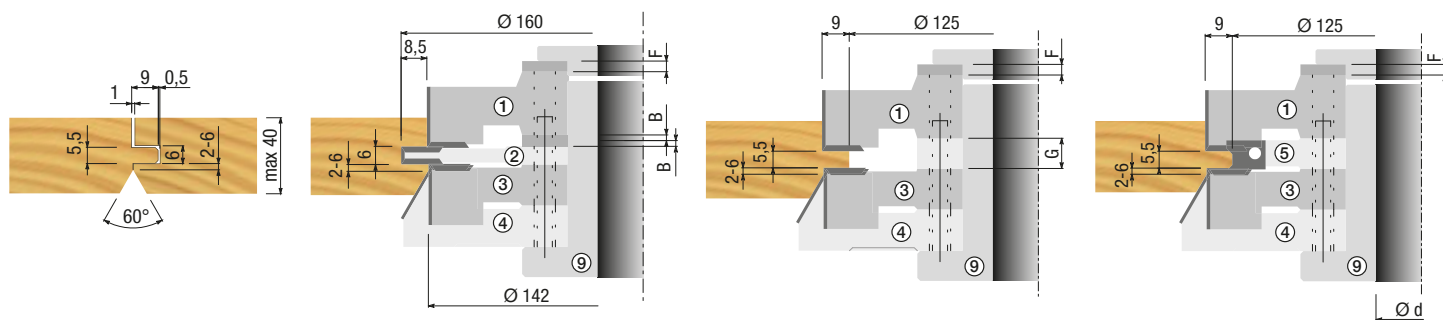
STANDARD



TH20TM60

MAN | HW

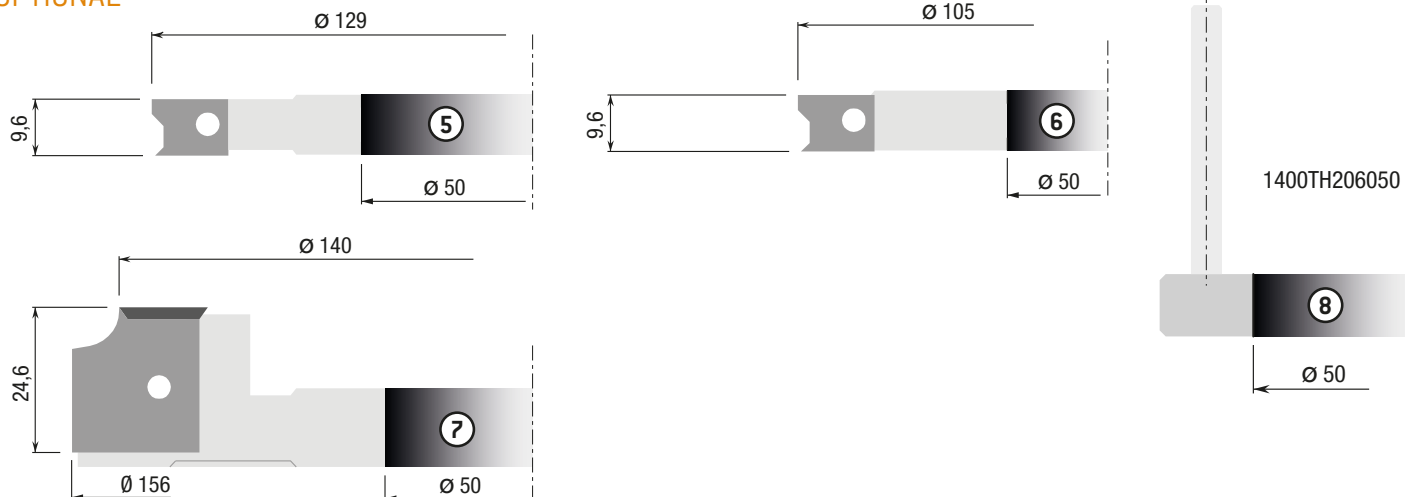
GRUPPO TESTE CON COLTELLINI IN HW PER PARCHETTI E PERLINE
TONGUE AND GROOVE CUTTERSET WITH REVERSIBLE KNIVES
VERSTELLBARER NUT- UND FEDERFRÄSER



Ricambi / Spare Parts / Ersatzteile

TYPE								
①	TH20TM61	Art. Nr.	600004	350024	502404	600201	500002	
		Dim.	20x12x1,5	17,6	M7x19	14x14x2	M5x7	
		Pcs	10	2	10	10	10	
		€						
③	TH20TM63	Art. Nr.	600004	350025	502404	600201	500002	
		Dim.	20x12x1,5	16	M7x19	14x14x2	M5x7	
		Pcs	10	2	10	10	10	
		€						
④	TH20TM64	Art. Nr.	600004	350005	502404	600201	500002	
		Dim.	20x12x1,5	16	M7x19	14x14x2	M5x7	
		Pcs	10	2	10	10	10	
		€						
⑤	TH20TM65	Art. Nr.	602140	302504	501323			
		Dim.	9,6x14,5x2	8	M5x14,5			
		Pcs	10	2	10			
		€						
⑥	TH20TM67	Art. Nr.	602140	302504	501323			
		Dim.	9,6x14,5x2	8	M5x14,5			
		Pcs	10	2	10			
		€						
⑦	TH20TM68	Art. Nr.	602141	350026	502404	600201	500002	
		Dim.	24,8x21x2	22,6	M7x19	14x14x2	M5x7	
		Pcs	10	2	10	10	10	
		€						
TYPE								
②	TH20TM62	Art. Nr.	600303	500402	501102	600204	500402	501002
		Dim.	18x18x2,95	M4x4	12x2,2	14x14x1,7	M4x4	10x2,1
		Pcs	10	10	2	10	10	10
		€						

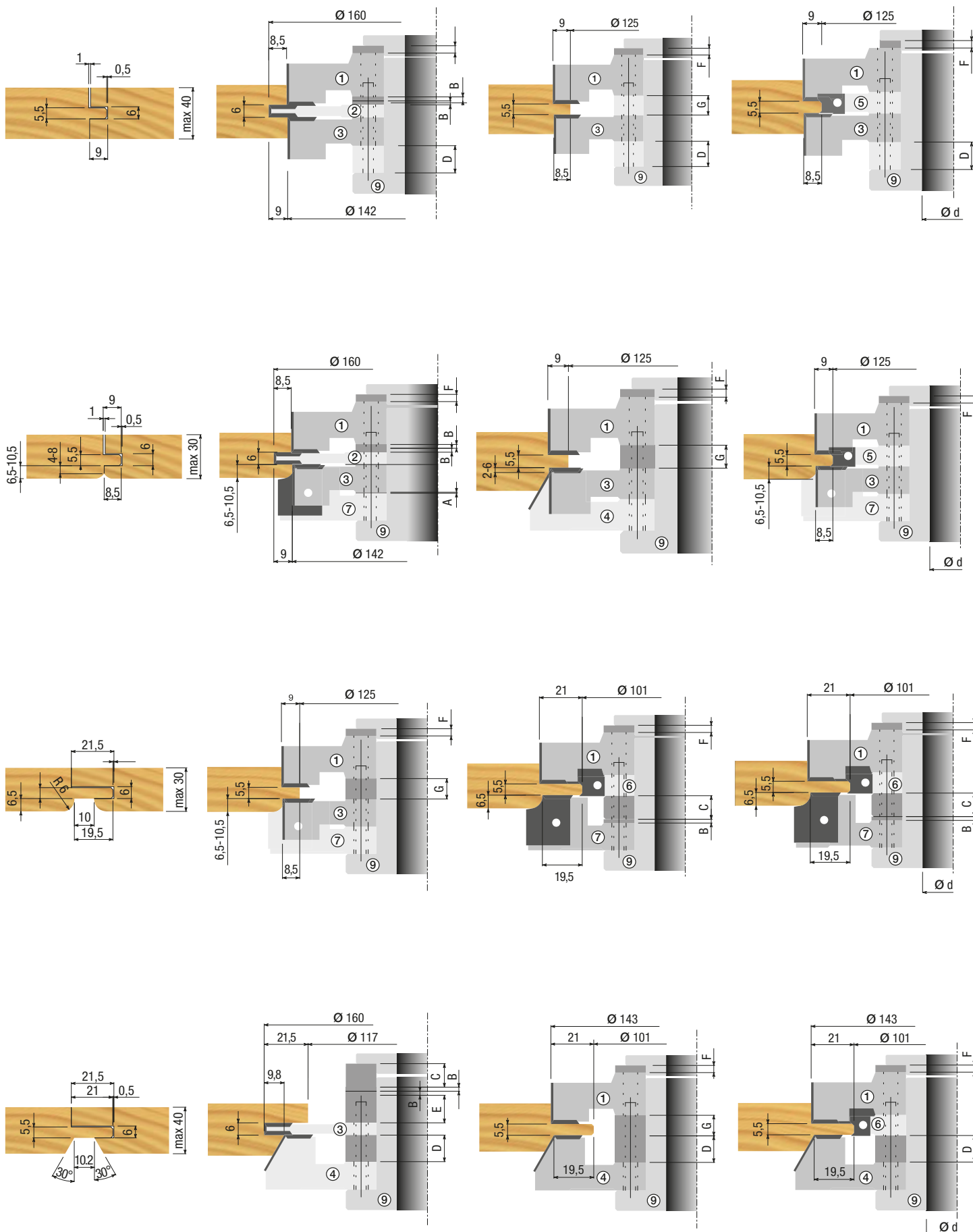
OPTIONAL



TH20TM60

MAN | HW

GRUPPO TESTE CON COLTELLINI IN HW PER PARCHETTI E PERLINE
TONGUE AND GROOVE CUTTERSET WITH REVERSIBLE KNIVES
VERSTELLBARER NUT- UND FEDERFRÄSER



YS113AZM

MAN | HW



Set fornito in cassetta di plastica

Set supplied in a plastic box

Set wird in Kunststoff-Box geliefert

SET UTENSILI PER PARCHETTI E PERLINE TONGUE AND GROOVE TOOLING SET NUT- UND FEDERFRÄSER-SET

Questo set è stato ideato per realizzare diverse tipologie di parchetti e perline con spessore di legno variabile. Al set base, composto da due gruppi in lega leggera e realizzato per produrre parchetti, si possono combinare delle teste aggiuntive per produrre cinque tipi diversi di perline. Gli utensili sono forniti completi di anelli distanziali.

Set with 4 cutters in light alloy and steel execution, standard tungsten carbide profiled knives, cutters 1-4 included in the set, cutters 5+6 can be obtained on request for further profiles, chip thickness limitation and reduced recoil, suitable for manual feed.

Anwendung

Werkzeugset zum Herstellen unterschiedlichster Nut- und Federprofile, Für Holzstärken von 12-40 mm, Basis-Set bestehend aus Fräsern 1-4, Zusatzfräser 5+6 können auf Wunsch einzeln dazu bestellt werden.

Technische Daten

4-teiliger Werkzeugsatz mit Tragkörpern aus hochfestem Aluminium und Stahl, Standard-Hartmetall-Schneiden für lange Standwege, spandickenbegrenzt und rückschlagarm, für manuellen Vorschub geeignet.

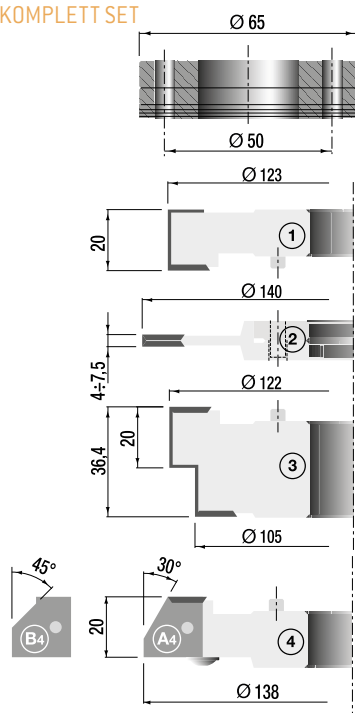
Set YS113AZM composto da / including / bestehend aus:

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	RPM min-max	Art. Nr.	€
123	20	30 (-35)	2	2	6100 - 10600	① YH118AAM	
140	4 - 7,5	30 (-35)	4	4	5500 - 9400	② YH123ACM	
122	36,4	30 (-35)	2 + 2	4	6100 - 10600	③ YH119AAM	
138	20	30 (-35)	2	2	5500 - 9400	④ YH120AAM	

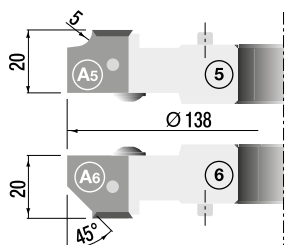
Teste aggiuntive / Extra cutterheads / Zusatzwerkzeuge:

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	RPM min-max	Art. Nr.	€
138	20	30 (-35)	2	2	5500 - 9400	⑤ YH121AAM	
138	20	30 (-35)	2	2	5500 - 9400	⑥ YH122AAM	

SET COMPLETO TOOLING SET KOMPLETT SET



TESTE AGGIUNTIVE EXTRA CUTTERHEADS ZUSATZWERKZEUGE



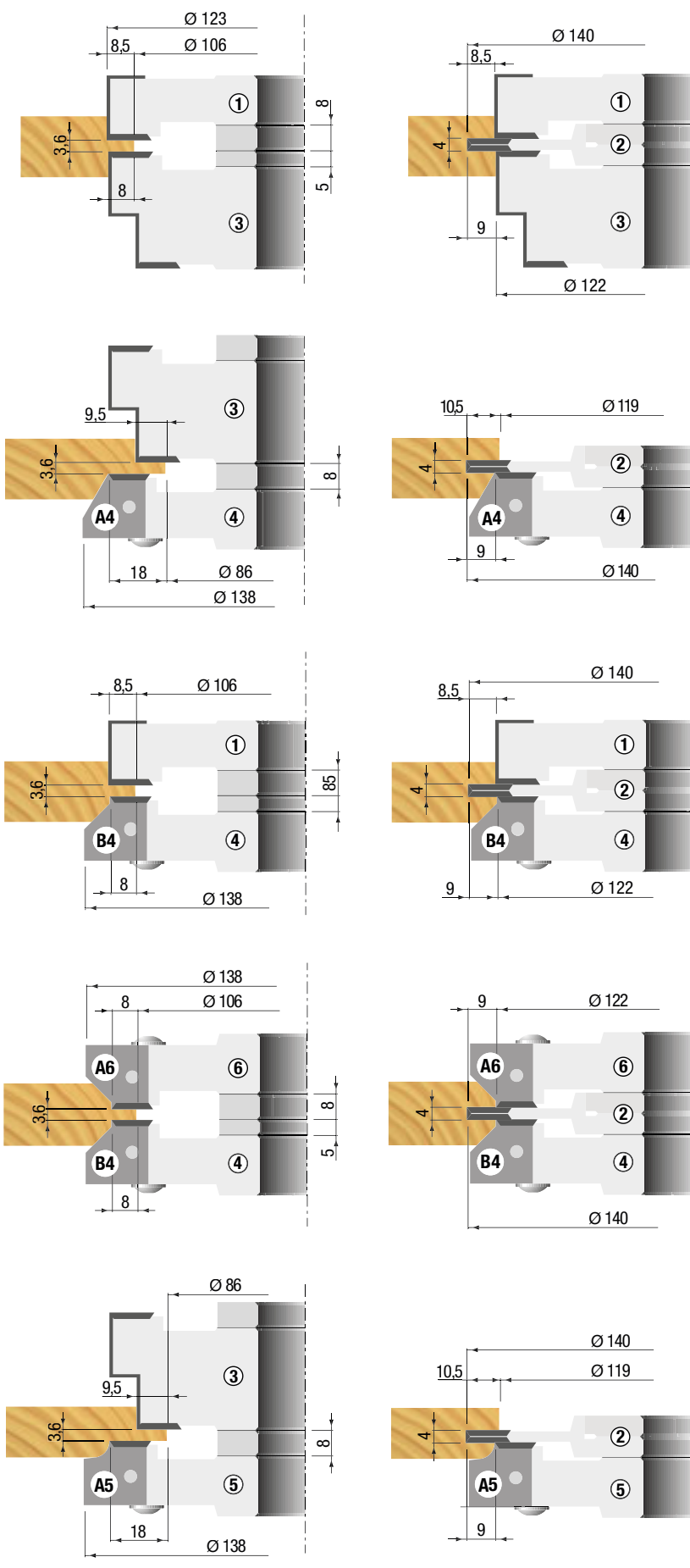
Ricambi / Spare Parts / Ersatzteile

TYPE								
①	YH118AAM	Art. Nr.	600004	340024	501404	600201	500002	
		Dim.	20x12x1,5	17	M8x20	14x14x2	M5x7	
		Pcs	10	2	10	10	10	
		€						
②	YH123ACM	Art. Nr.	600301	501101	500401	600202	500401	501001
		Dim.	18x18x1,95	12x1,7	M4x3	14x14x1,2	M4x3	10x1,65
		Pcs	10	10	10	10	10	10
		€						
③	YH119AAM	Art. Nr.	600004	340024	501404	600201	500002	
		Dim.	20x12x1,5	17	M8x20	14x14x2	M5x7	
		Pcs	10	2	10	10	10	
		€						
④	YH120AAM	Art. Nr.	601435-A4	601436-B4	340024	501404	600201	500002
		Dim.	19,8x22x2	19,8x22x2	17	M8x20	14x14x2	M5x7
		Pcs	2	2	2	10	10	10
		€						
⑤	YH121AAM	Art. Nr.	601437-A5	340024	501404	600201	500002	
		Dim.	19,8x22x2	17	M8x20	14x14x2	M5x7	
		Pcs		2	10	10	10	
		€						
⑥	YH122AAM	Art. Nr.	601438-A6	340024	501404	600201	500002	
		Dim.	19,8x22x2	17	M8x20	14x14x2	M5x7	
		Pcs		2	10	10	10	
		€						

YS113AZM

MAN | HW

SET UTENSILI PER PARCHETTI E PERLINE: ESEMPI
 TONGUE AND GROOVE TOOLING SET: EXAMPLES
 NUT- UND FEDERFRÄSER-SET: PROFILBEISPIELE



YH133AAM YH133BAM

MAN | HW

TESTA CON COLTELLINI PER GIUNZIONI A 45° 45° MITRE JOINT CUTTERHEAD GEHRUNGSVERLEIMFRÄSER 45°



Testa in lega leggera a due taglienti per eseguire giunzioni a 45°.

La giunzione si ottiene con due successive lavorazioni: la prima con il legno in fase di lavorazione posto in posizione orizzontale, la seconda con il legno in posizione verticale.

Body in light alloy execution, standard tungsten carbide profiled knives for high precision 45° mitre joints, chip thickness limitation and reduced recoil, suitable for manual feed.

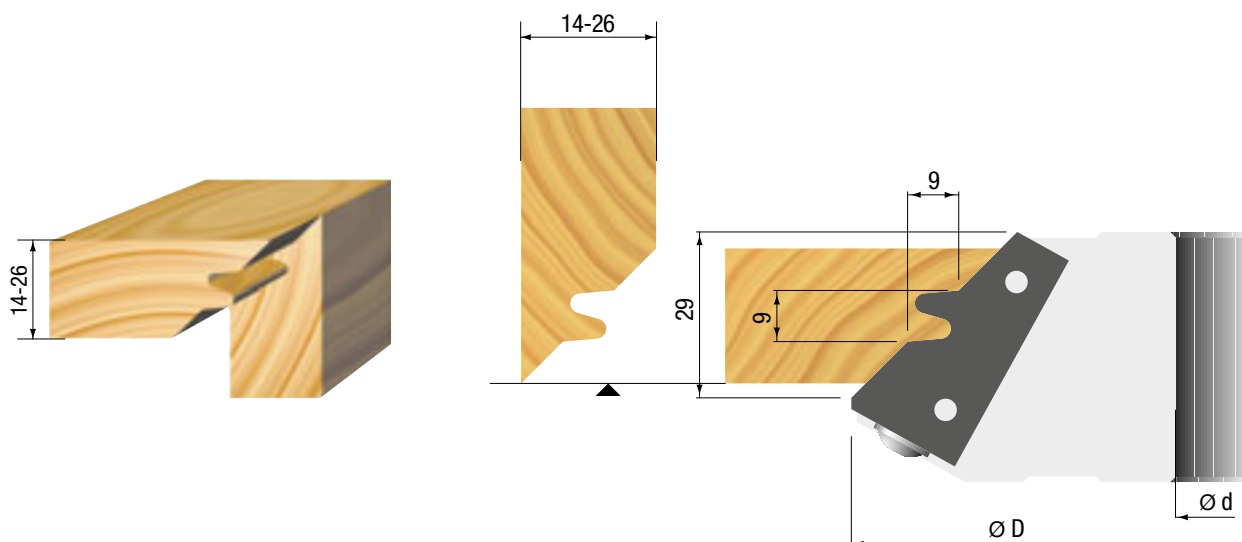
Anwendung




Für rechtwinklige Softline-Gehrungseckverbindungen an Korpusen und Rahmen, für Massivholz sowie Plattenwerkstoffe mit Stärken von 14-26 mm hervorragend geeignet.

Technische Daten

Werkzeugkörper aus hochfestem Aluminium, konstanter Flugkreis und exakte Profiltreue durch Standard-Hartmetall-Profilplatten, spandickenbegrenzt und rückschlagarm, für manuellen Vorschub geeignet.

Ø D [mm]	B [mm]	Ø d [mm]	Z	RPM min-max	Art. Nr.	€
140	32	30 (-40)	2	5500 - 9400	YH133AAM	
150	32	50	2	5100 - 8800	YH133BAM	



Ricambi / Spare Parts / Ersatzteile				
YH133AAM YH133BAM	Art. Nr.	601401	340030	501404
	Dim.	43x23x2	42	M8x20
	Pcs	2	2	10
	€			

TH24TM01

MAN | HW

TESTA CON COLTELLINI PER GIUNZIONI A 45°
45° MITRE JOINT CUTTERHEAD
GEHRUNGSVERLEIMFRÄSER 45°


Testa con coltellini in HW per eseguire giunzioni a 45°. Lo spessore legno lavorabile va da un minimo di 13 mm a un massimo di 35 mm. La giunzione si ottiene con due successive lavorazioni: la prima con il legno da lavorare in posizione orizzontale, la seconda con il legno in posizione verticale.

Steel body, standard tungsten carbide profiled knives for high precision 45° mitre joints, chip thickness limitation and reduced recoil, suitable for both manual and mechanical feed.

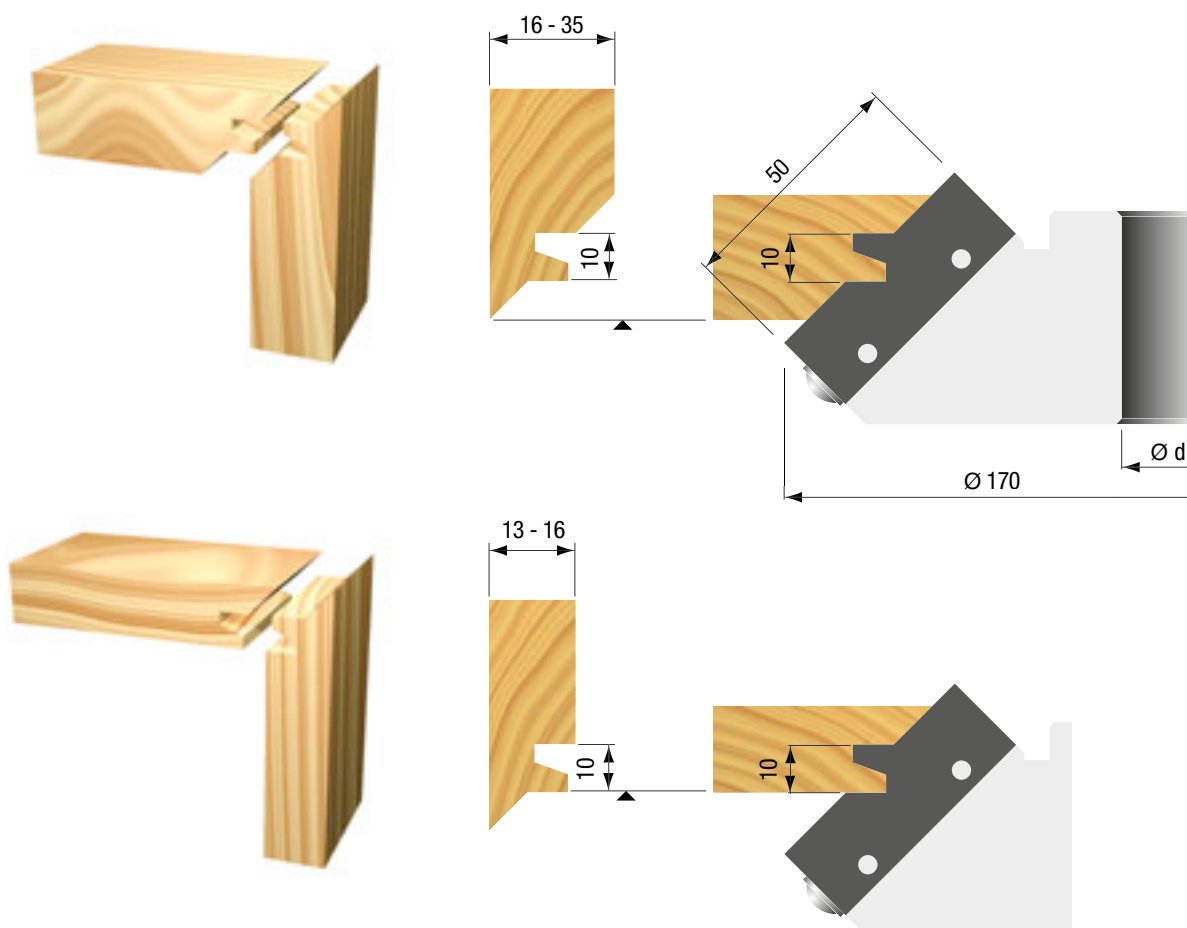
Anwendung




Für selbsthemmende Gehrungseckverbindungen an Korpuse und Rahmen, für Massivholz sowie Plattenwerkstoffe mit Stärken von 13-16 mm bzw. von 16-35 mm ausgelegt.

Technische Daten

Werkzeugkörper aus Stahl, konstanter Flugkreis und exakte Profiltreue durch Standard-Hartmetall-Profilplatten, spandickenbegrenzt und rückschlagarm, für manuelle sowie mechanische Vorschübe geeignet.

Ø D [mm]	B [mm]	Ø d [mm]	Z	RPM min-max	Art. Nr.	€
170	50	30 (-40)	2	4500 - 7700	TH24TM01	



Ricambi / Spare Parts / Ersatzteile				
TH24TM01	Art. Nr.	602082	350009	502402
	Dim.	50x25x2	46	M7x21
	Pcs		2	10
	€			

YH152AAM YH156AAM

MAN | HW

TESTE PER GIUNZIONI LUNGO VENA O TRAVERSO VENA CUTTERHEADS FOR ALONG OR ACROSS THE GRAIN JOINTS VERLEIMPROFILFRÄSER



Utensile a due taglienti con corpo in lega leggera e coltelli in HW. Adatto per realizzare giunzioni lungo e trasverso vena da 20 a 48 mm e da 26 a 58 mm. YH152AAM: giunzioni lungo vena. YH156AAM: giunzioni trasverso vena.

Light alloy body, standard tungsten carbide profiled knives for high precision jointing of hardwood and softwood, chip thickness limitation and reduced recoil, suitable for manual feed. YH152AAM: along the grain joints. YH156AAM: across the grain joints.

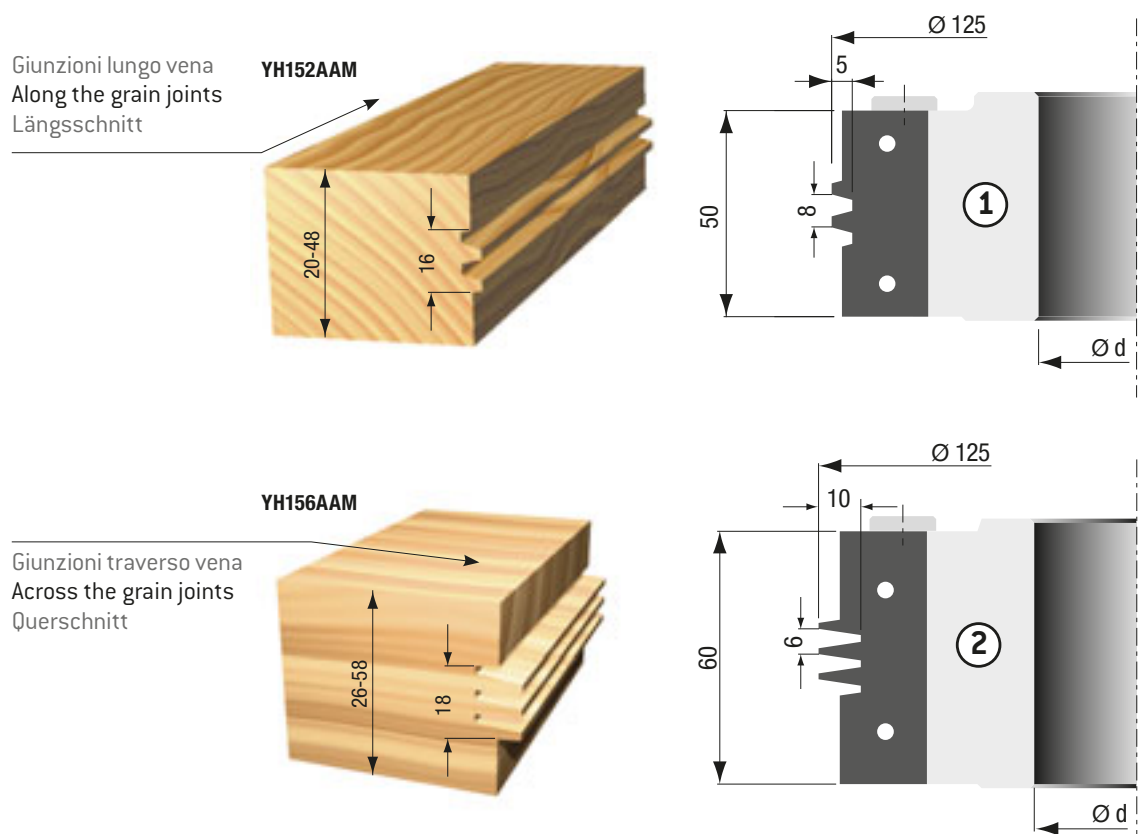
Anwendung




Für Verleimverbindungen in Hart- und Weichhölzern mit Holzstärken von 20-48 mm und 26-58 mm.

Technische Daten

Werkzeugkörper aus hochfestem Aluminium, konstanter Flugkreis und exakte Profiltreue durch Standard-Hartmetall-Profilplatten, spandickenbegrenzt und rückschlagarm, für Handvorschub geeignet. YH152AAM: Längsschnitt. YH156AAM: Querschnitt.

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	RPM min-max	Art. Nr.	€
125	50	30 (-50)	2	-	6100 - 10600	① YH152AAM	
125	60	30 (-50)	3	-	6100 - 10600	② YH156AAM	



Ricambi / Spare Parts / Ersatzteile				
YH152AAM ①	Art. Nr.	605002	340011	501403
	Dim.	50x19x2	48	M8x16
	Pcs	2	2	10
	€			
YH156AAM ②	Art. Nr.	605004	340041	501403
	Dim.	60x24x2	58	M8x16
	Pcs	3	3	10
	€			

SH95TM

MAN | HW

TESTA PER GIUNZIONI TRAVERSO VENA A SPESSORE VARIABILE ADJUSTABLE CUTTERHEAD FOR ACROSS THE GRAIN JOINTS VERSTELLBARER VERLEIMPROFILFRÄSER



Testa con coltellini in HW a 2 taglienti per eseguire giunzioni di spessore variabile su qualsiasi tipo di legno. Adatta per giunzioni di testa e per giunzioni ad angolo. Utensile idoneo per la realizzazione di profili ad arco, è completo di anelli distanziali.

Steel body, standard tungsten carbide profiled knives for high precision jointing in hardwood and softwood, suitable for end grain and corner joints (windows), for wood thicknesses 38-94 mm, suitable for both manual and mechanical feed.

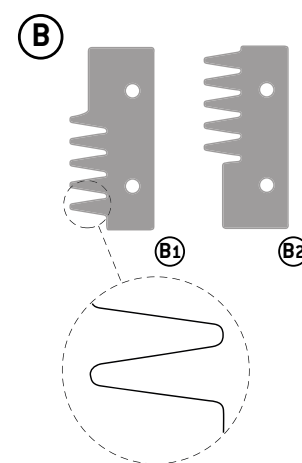
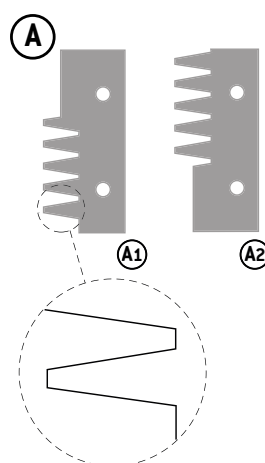
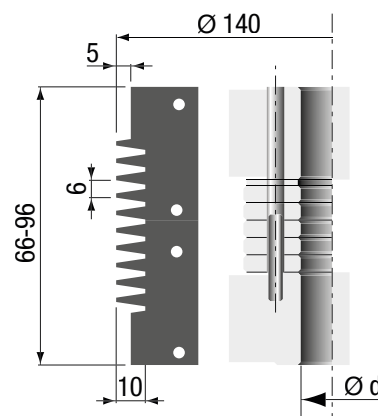
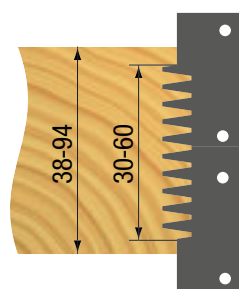
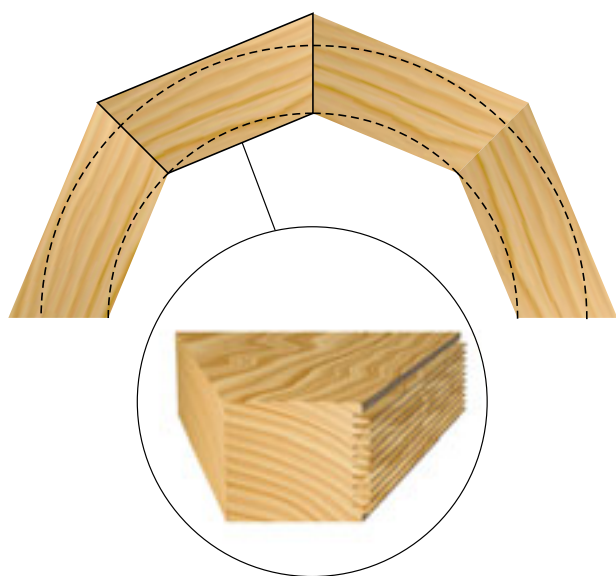
Anwendung

Für Stirnholzverbindungen an Bögen und Fenstern und anderen Leim-verbindingen mit großen Holzquerschnitten oder statischer Beanspruchung, für Hart- und Weichhölzer mit Stärken von 38-94 mm.

Technische Daten

Zweiteiliges Werkzeug aus Stahl inkl. Ringsatz zur exakten Einstellung der Holzstärke, Hartmetall-Profilplatten, Wahlweise mit Trapez- oder Softline-Profil, für manuelle sowie mechanische Vorschübe geeignet.

Ø D [mm]	B [mm]	Ø d [mm]	Z	RPM min-max	Art. Nr.	€
140	66 - 96	30 (-40)	2 + 2	5500 - 9400	Ⓐ SH95TM43	
140	66 - 96	30 (-40)	2 + 2	5500 - 9400	Ⓑ SH95TM42	



Ricambi / Spare Parts / Ersatzteile							
Ⓐ SH95TM43	Art. Nr.	Ⓐ1 602027	Ⓐ2 602028			340002	501410
Ⓑ SH95TM42	Art. Nr.			Ⓑ1 602093	Ⓑ2 602094	340002	501410
	Dim.	50x22,5x2	50x22,5x2	50x22,5x2	50x22,5x2	46	M8x25
	Pcs	2	2	2	2	2	10
	€						

TS06TC02

MAN | HS

TESTA CON COLTELLINI PER MULTI PROFILI 60/80 MM MULTIPROFILE SET WITH DISPOSABLE KNIVES UNIVERSAL-MESSERKOPF 60/80 MM



Testa a 2 taglienti da equipaggiare con coltelli in HS e limitatori. I coltelli da 7,5 mm di spessore, permettono di ottenere vari tipi di profilo. La testa singola viene equipaggiata con 2 coltelli standard in HS o coltelli speciali e 2 limitatori.

La testa può montare due tipi di coltelli con altezza B=60 mm e B=80 mm.

Cutterhead with steel body to be fitted with 2 HS (18%W) standard or special knives and chip limiters, body can be fitted with either height 60 or 80 mm knives, suitable for manual feed.

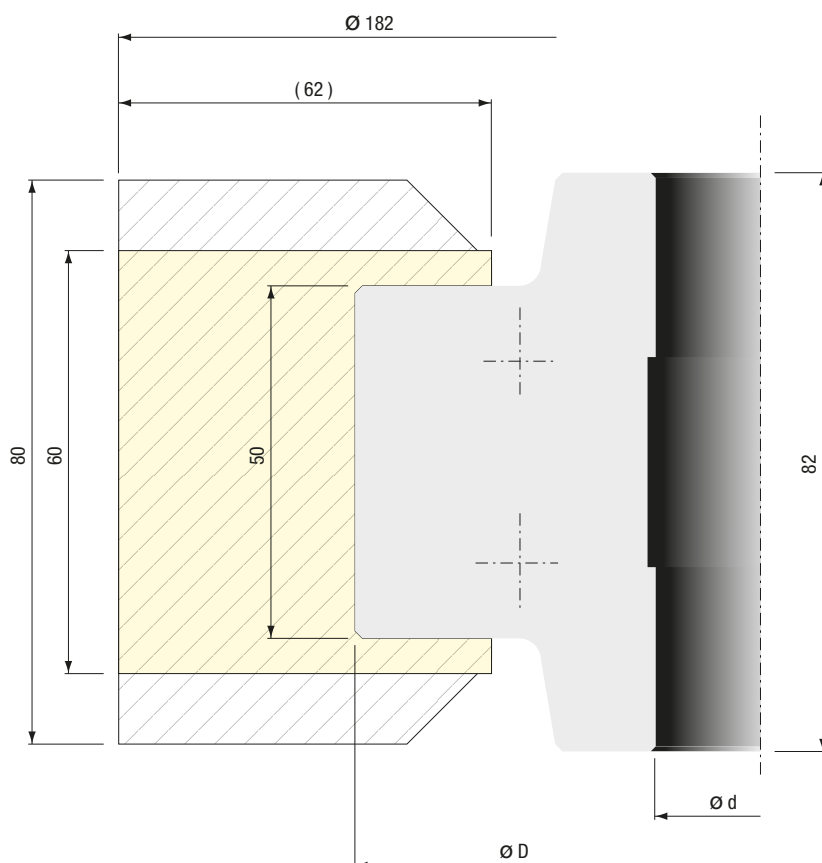
Anwendung



Werkzeug zur Aufnahme von unterschiedlichsten, hochwertigen HSS-Standard- und Sonderprofilplatten. Es müssen immer 2 Profilplatten und 2 dazugehörige Abweiser montiert werden. Optimale Profil-Variation!

Technische Daten

Sicherheitsmesserkopf aus Stahl, bestückt mit HSS-Profilmessern (18% Wolfram-Anteil). Messer und Abweiser sind auf konstanten Flugkreis fixiert. Werkzeug kann mit 60 und 80 mm Profilplatten bestückt werden, für Handvorschub geeignet.

Ø D [mm]	B [mm]	Ø d [mm]	Z	RPM min-max	Art. Nr.	€
115	80	30 (-40)	2	4000 - 6500	TS06TC02	



Ricambi / Spare Parts / Ersatzteile			
TS06TC02	Art. Nr.	301403	501411
	Dim.	49	M12x20
	Pcs	2	10
	€		

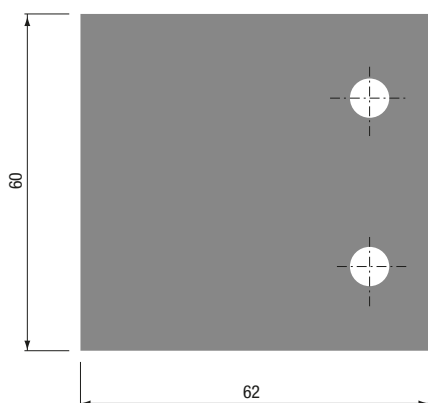
TS06TC02
MAN | HS

COLTELLI PROFILATI IN HS E LIMITATORI
HS KNIVES AND CHIP LIMITORS WITH SPECIAL PROFILES
HS PROFILIERTE MESSER UND ABWEISER

TESTA CON COLTELLINI PER MULTI PROFILI 60/80 MM
MULTIPROFILE SET WITH DISPOSABLE KNIVES
UNIVERSAL-MESSERKOPF 60/80 MM

Profilo nr. Profile nr. Profil nr.	Coltelli profilati (CS) Profiled knives (CS) Profilmesser (CS)	Pcs	Limitatori (CC) Chip limiter (CC) Abweiser (CC)	Pcs	€
1	CS040S10	2	CC040S10	2	
2	CS040S11	2	CC040S11	2	
3	CS040S12	2	CC040S12	2	
4	CS040S13	2	CC040S13	2	
5	CS040S14	2	CC040S14	2	
6	CS040S15	2	CC040S15	2	
7	CS040S16	2	CC040S16	2	
8	CS040S17	2	CC040S17	2	
9	CS040S18	2	CC040S18	2	
10	CS040S19	2	CC040S19	2	
11	CS040S20	2	CC040S20	2	
12	CS040S21	2	CC040S21	2	

I coltelli da affilare e i limitatori sono forniti separatamente
Blank knives and chip limitors are supplied separately
Blanketts und Abweiser sind auch einzeln erhältlich

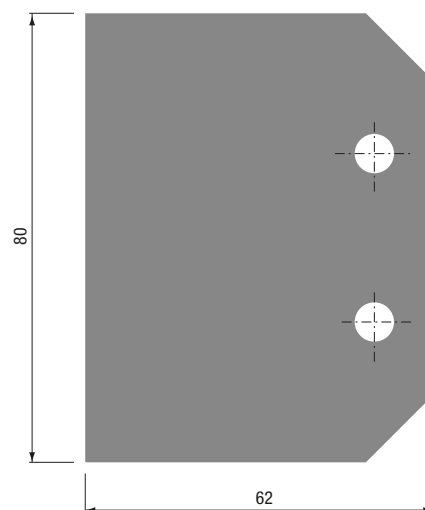


Coltelli in HS grezzi
HS blank knives
Blanketts aus HS
60 x 63 x 7,5

Art. Nr. CS040S00,

Limitatori grezzi
Blank chip limitors
Abweiser für Blanketts
58 x 59 x 5,6

Art. Nr. CC040S00,



Coltelli in HS grezzi
HS blank knives
Blanketts aus HS
80 x 63 x 7,5

Art. Nr. CS040S01,

Limitatori grezzi
Blank chip limitors
Abweiser für Blanketts
78 x 59 x 5,6

Art. Nr. CC040S01,

Coltelli in HS e limitatori con profili speciali – profondità massima 45 mm
HS knives and chip limitors with special profiles - max resharpening measure 45 mm
Sonderprofilmesser HS - Profiltiefe max. 45 mm

	Art. nr.	€
Gruppo 1 - Prezzo del set incluso limitatore Group 1 - Price including chip limiter Profilgruppe 1 Setpreis inkl. Abweiser	CS/CC04 SP	
Gruppo 2 - Prezzo del set incluso limitatore Group 2 - Price including chip limiter Profilgruppe 2 Setpreis inkl. Abweiser	CS/CC04 SP	
Gruppo 3 - Prezzo del set incluso limitatore Group 3 - Price including chip limiter Profilgruppe 3 Setpreis inkl. Abweiser	CS/CC04 SP	
Dima di profilatura 1 Template for profile 1 Schleifschablone Profilgruppe 1		
Dima di profilatura 2 Template for profile 2 Schleifschablone Profilgruppe 2		
Dima di profilatura 3 Template for profile 3 Schleifschablone Profilgruppe 3		
La dima di profilatura viene fornita con il gruppo di coltelli profilati The template is supplied together with the profiled knives Bei Sonderprofilmessersätzen wird die Schleif-Schablone mitgeliefert		

Coltelli in HS e limitatori con profili speciali – profondità massima 45 mm
HS knives and chip limitors with special profiles - max resharpening measure 45 mm
Sonderprofilmesser HS - Profiltiefe max. 45 mm

	Art. nr.	€
Gruppo 1 - Prezzo del set incluso limitatore Group 1 - Price including chip limiter Profilgruppe 1 Setpreis inkl. Abweiser	CS/CC024 SP	
Gruppo 2 - Prezzo del set incluso limitatore Group 2 - Price including chip limiter Profilgruppe 2 Setpreis inkl. Abweiser	CS/CC024 SP	
Gruppo 3 - Prezzo del set incluso limitatore Group 3 - Price including chip limiter Profilgruppe 3 Setpreis inkl. Abweiser	CS/CC024 SP	
Dima di profilatura 1 Template for profile 1 Schleifschablone Profilgruppe 1		
Dima di profilatura 2 Template for profile 2 Schleifschablone Profilgruppe 2		
Dima di profilatura 3 Template for profile 3 Schleifschablone Profilgruppe 3		
La dima di profilatura viene fornita con il gruppo di coltelli profilati The template is supplied together with the profiled knives Bei Sonderprofilmessersätzen wird die Schleif-Schablone mitgeliefert		

SH04TM
MAN | HW

TESTA PER ALLOGGIAMENTO FERRAMENTA CUTTERHEADS FOR WINDOWS HARDWARE FITTINGS KANTENGETRIEBEFRÄSER



Testa con corpo in acciaio e coltellini sagomati in HW per eseguire le sedi della ferramenta sui serramenti.

Steel body, standard tungsten carbide profiled knives for milling hardwood and softwood, chip thickness limitation and reduced recoil, suitable for both manual and mechanical feed.

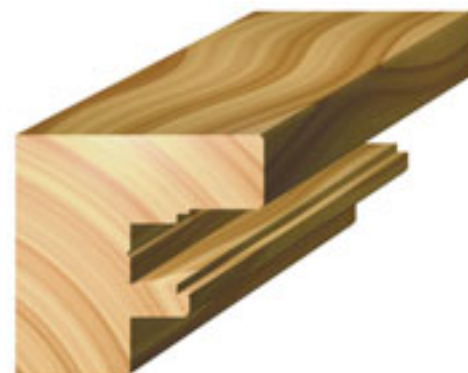
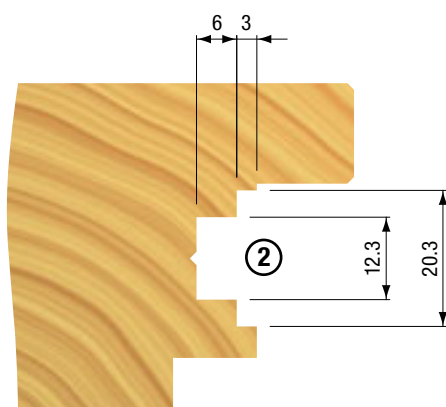
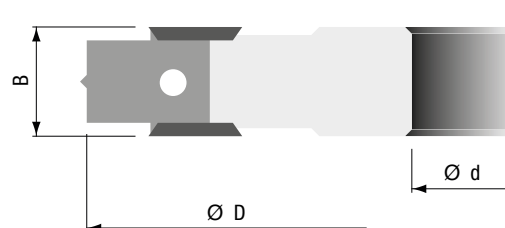
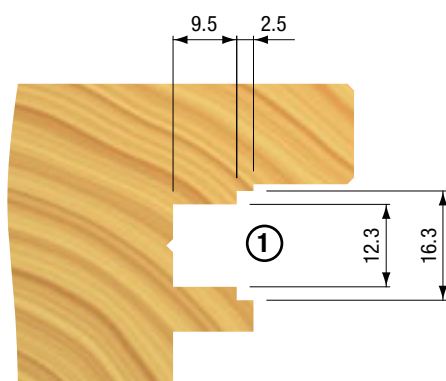
Anwendung






Zum Einfräsen der Getriebeut für Dreh- und Drehkippschläge an Fenstern und Haustüren.

Technische Daten

Werkzeugkörper aus Stahl, konstanter Flugkreis durch Standard-Hartmetall-Profilplatten, für manuelle sowie mechanische Vorschübe geeignet.

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	RPM min-max	Art. Nr.	€
185	16,3	30 (-60)	2	4	4100 - 7100	① SH04TM04	
173	20,3	30 (-60)	2	4	4400 - 7500	② SH04TM05	



Ricambi / Spare Parts / Ersatzteile						
① SH04TM04	Art. Nr.	601464	350017	502402	600201	500002
	Dim.	16x24,5x2	14	M7x21	14x14x2	M5x7
	Pcs	2	2	10	10	10
	€					
② SH04TM05	Art. Nr.	601465	350005	502402	600201	500002
	Dim.	20x22x2	16	M7x21	14x14x2	M5x7
	Pcs	2	2	10	10	10
	€					

SH17TM50

MAN | HW

TESTA CON COLTELLINI IN HW PER L'ESECUZIONE DI TELAI PER PORTE INTERNE CUTTERHEAD WITH HW KNIVES FOR DOOR FRAMES HW-WENDEPLATTENWERKZEUGE FÜR INNEN-TÜREN



Testa con coltelli in HW corredata di 3 anelli nr. 2-3-4 ed una serie di anelli decimali per un totale di 3 mm di spessore per eseguire 4 diversi profili programmati sui due spessori di legno previsti.

La testa viene equipaggiata con il raggiatore R 3 mm, mentre a richiesta possono essere forniti i raggiatori R 1,5 e R 2 e gli spigolatori a 45°.

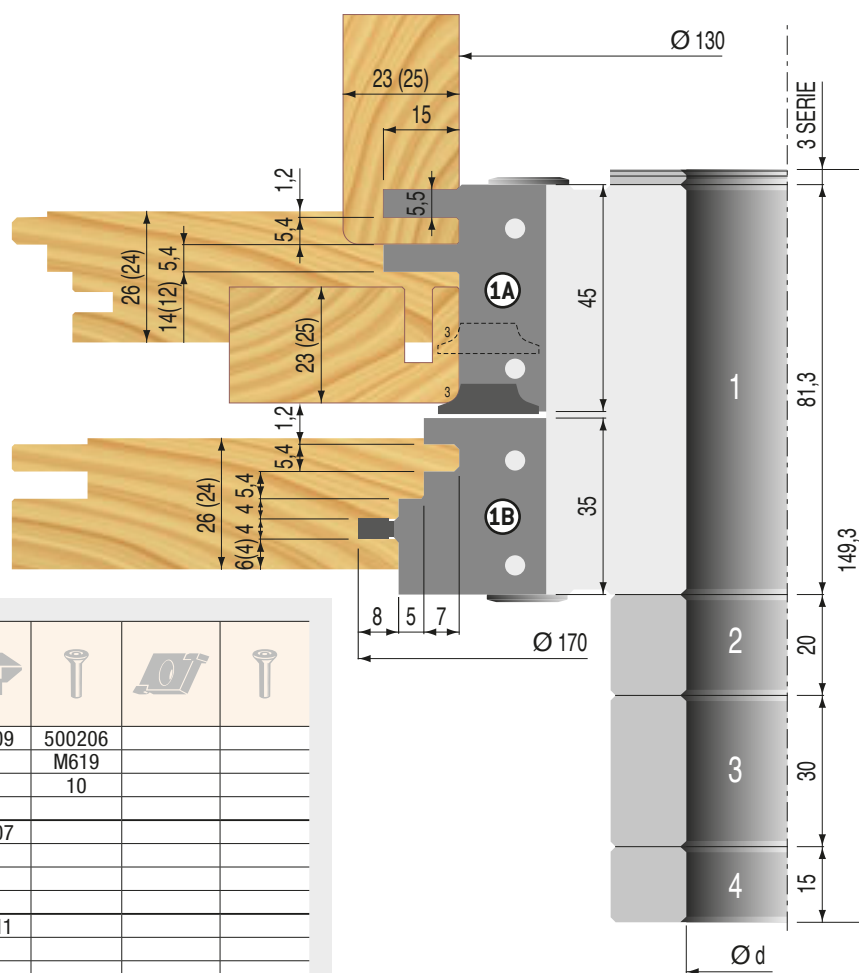
Cutterhead with HW knives equipped with 3 rings nr. 2-3-4 and a series of decimal rings with 3 mm total thickness to make 4 different profiles programmed on the 2 fixed wood thicknesses.

The head is equipped with radius knives R 3 mm, while on request are also supplied radius knives R 1,5 and R 2 and 45° chamfering.

Messerkopf mit HW-Messern bestückt. Durch die Ringe 2,3 und 4, sowie einem Satz zehntel Ringen ist es möglich 4 verschiedene Profile, sowie zwei Holzstärken zu produzieren. Der Messerkopf ist bestückt mit Messern R 3 Mm, aber auch R 1,5 und R 2, sowie Fase-Messer 45° sind lieferbar.

Gruppi / Sets / Fräsersätze

Ø D [mm]	B [mm]	Ø d [mm]	Z	S	I	V	RPM min-max	Art. Nr.	€
170	81,3	30 (-50)	2	2	2	-	4800 - 8200	SH17TM50	



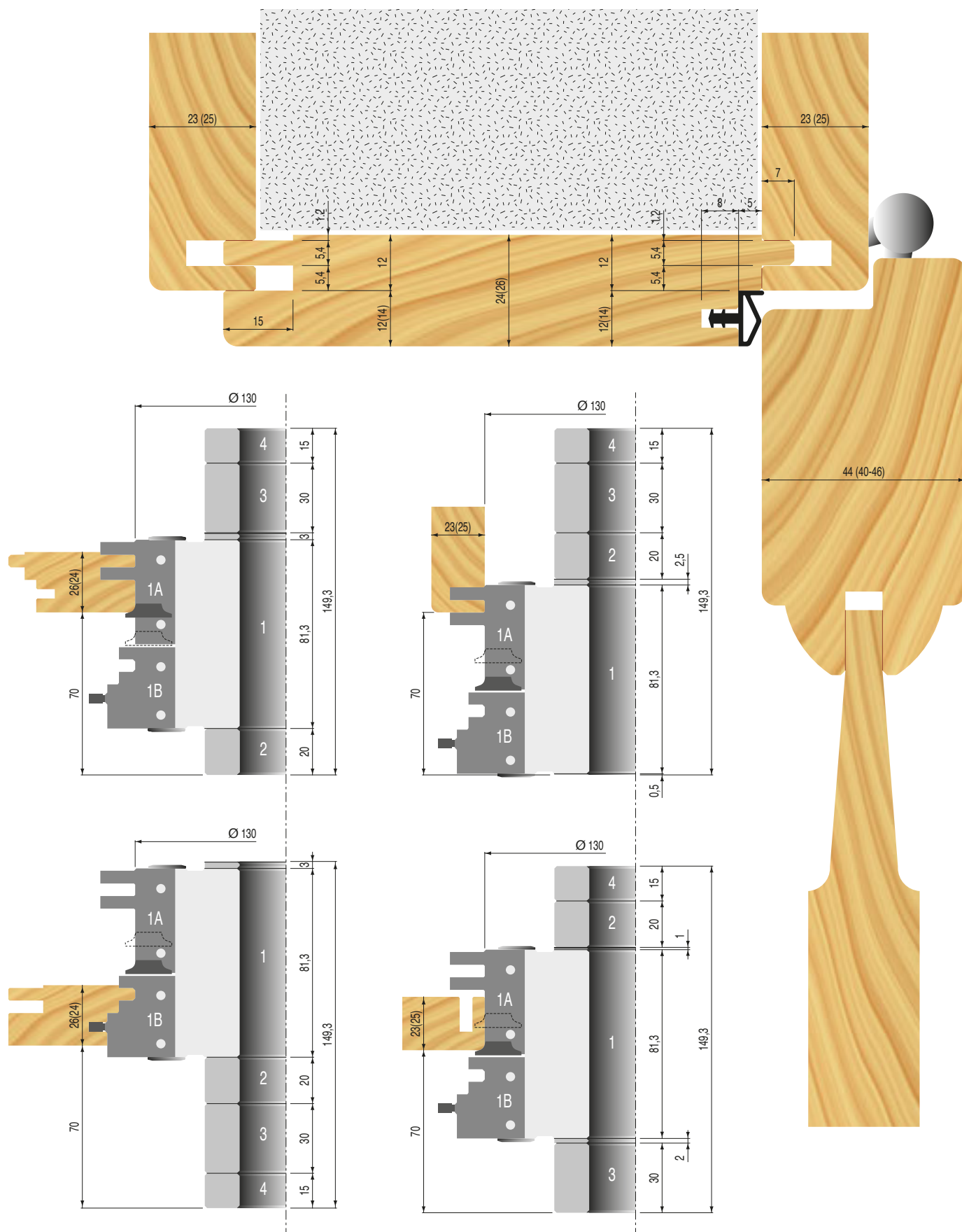
Ricambi Spare Parts Ersatzteile								
1A	Art. Nr.	601397	350088	502402	600609	500206		
	Dim.	45x29x2	40	M7x21	R 3	M619		
	Pcs	2	2	10	2	10		
	€							
Optional	Art. Nr.				600607			
	Dim.				45°			
	Pcs				2			
Optional	Art. Nr.				600611			
	Dim.				R 2			
	Pcs				2			
Optional	Art. Nr.				600617			
	Dim.				R 1,5			
	Pcs				2			
1B	Art. Nr.	601398	350074	502402		600762	500201	
	Dim.	35x27,4x2	31	M7x21		37x16x4	M6x12	
	Pcs	2	2	10		2	10	
	€							

SH17TM50

MAN | HW

TESTA CON COLTELLINI IN HW PER L'ESECUZIONE DI TELAI PER PORTE INTERNE
 CUTTERHEAD WITH HW KNIVES FOR DOOR FRAMES
 HW-WENDEPLATTENWERKZEUGE FÜR INNEN-TÜREN

PROGRAMMA TESTE CON COLTELLINI IN HW PER LA REALIZZAZIONE DI TELAI PER PORTE
 CUTTERHEAD PROGRAM WITH REVERSIBLE KNIVES IN HW TO MAKE DOOR FRAMES
 WENDEPLATTEN-FRÄSWERKZEUGE FÜR INNENTÜREN



"PRIMUS" SH08TM75

MAN | HW

PROGRAMMA TESTE PER L'ESECUZIONE DI PORTE CUTTERSET FOR DOOR REBATING EINFACHFALZGARNITUR



Sistema modulare in acciaio montato su boccia di accoppiamento (anelli distanziatori inclusi) completo di coltelli reversibili in HW con angolo di allineamento assiale per i migliori risultati di fresatura e limitatore di truciolo. Adatto per avanzamento manuale.

Modular tooling system in steel execution mounted on coupling bush, (spacing rings included) standard tungsten carbide reversible knives with axial angle alignment for best milling results, chip thickness limitation and reduced recoil, suitable for manual feed.

Anwendung

Werkzeugsatz zur Herstellung von Haustürprofilen 68-78 mm mit Einfachfalz.

Technische Daten

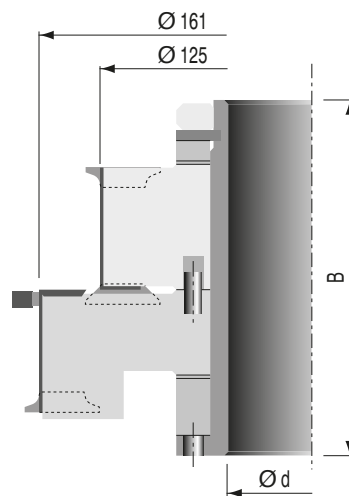
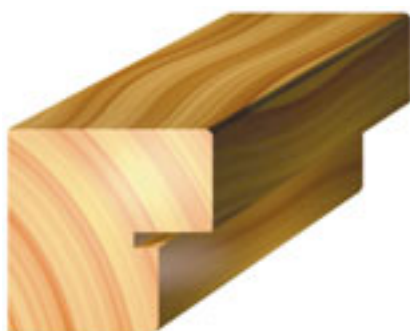
Werkzeugkörper aus Stahl montiert auf Büchse inkl. Distanzringen, modulares Baukastenprinzip für individuelle Ansprüche, Standard-HW-Wendepfandentechnik, zweischneidig mit Achswinkel für optimale Schnittgüte und verminderten Schnittdruck, spandickenbegrenzt und rückschlagarm, für manuellen Vorschub geeignet.

Gruppi completi di boccia e anelli
Groups complete with bush and rings
Sätze komplett mit Büchse und Ringen

Ø D [mm]	B [mm]	Ø d [mm]	Z	Type	RPM min-max	Art. Nr.	€
177	112	30 (-50)	2	A	4600 - 7900	SH08TM75	

Teste singole
Single cutterheads
Messerköpfe einzeln

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	S	I	Type	RPM min-max	Art. Nr.	€
125	36	60	2		2			6100 - 10600	SH08TM60	
161	50	60	2	2	4	2		4600 - 7900	SH08TM66	
208	27	30 (-50)	2	2			B	3600 - 6200	SH08TM62	
171	32,5	30 (-50)	2				C	4400 - 7500	SH08TM65	



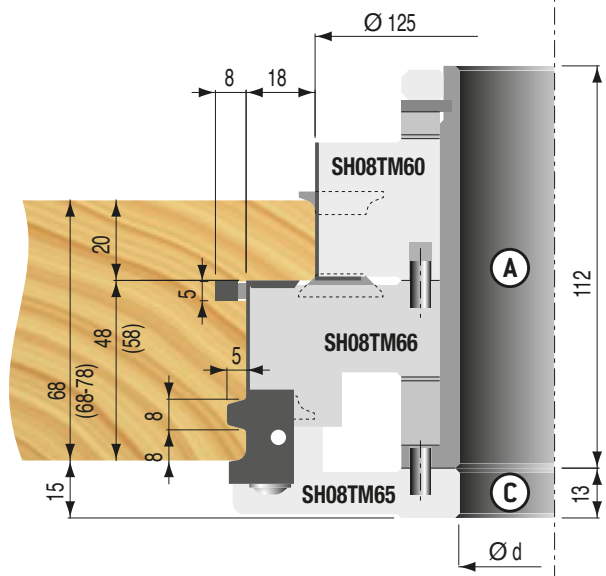
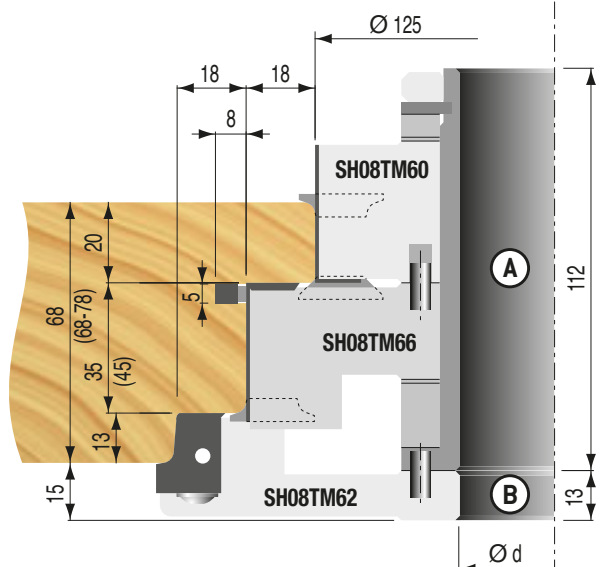
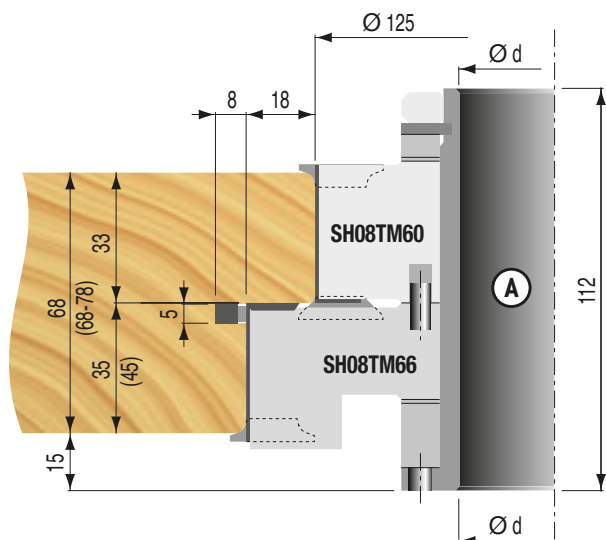
Ricambi / Spare Parts / Ersatzteile

SH08TM60	Art. Nr.	600018	350083	502402			600610	500206		
	Dim.	36x12x1,5	33	M7x21			R 3	M6x19		
	Pcs	10	2	10			2	10		
	€									
SH08TM66	Art. Nr.	600006	350035	502402	600719	500205	600607	500206	600205	500002
	Dim.	50x12x1,5	46	M7x21	40x5x20	M6x15	45°	M6x19	22x19x2	M5x7
	Pcs	10	2	10	2	10	2	10	10	10
	€									
	Art. Nr.						600609	500206		
Dim.						R 3	M6x19			
€						2	10			
SH08TM62	Art. Nr.	601468	340005	502402					600206	500002
	Dim.	20x18x2	16	M7x21					22x19x2 R 3	M5x7
	Pcs	2	2	10					10	10
	€									
SH08TM65	Art. Nr.	601469	350026	502402						
	Dim.	25x19,8x2	22,6	M7x21						
	Pcs	2	2	10						
	€									

"PRIMUS" SH08TM75

MAN I HW

PROGRAMMA TESTE PER L'ESECUZIONE DI PORTE: ESEMPI
CUTTERSET FOR DOOR REBATING : EXAMPLES
WENDEPLATTEN-EINFACHFALZGARNITUR: PROFILBEISPIELE



Profilatura montanti, traverso superiore telaio, controprofilo telaio.
Inside Jumbs and head profiling. Frame counterprofile.

Ⓐ

Rahmen Innenprofil seitlich und oben sowie Rahmen-Konterprofil.
Werkzeug auf Spannbüchse verschraubt.

Profilatura montanti e traverso superiore porta.

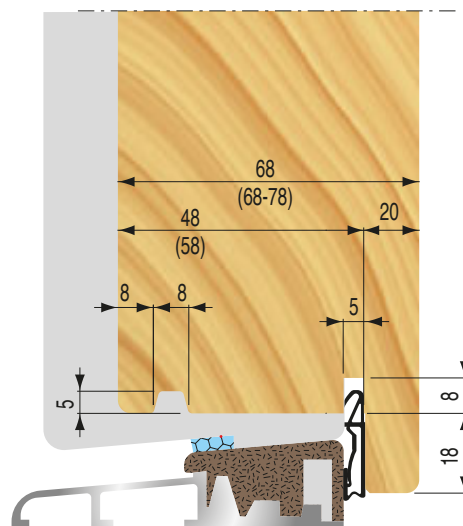
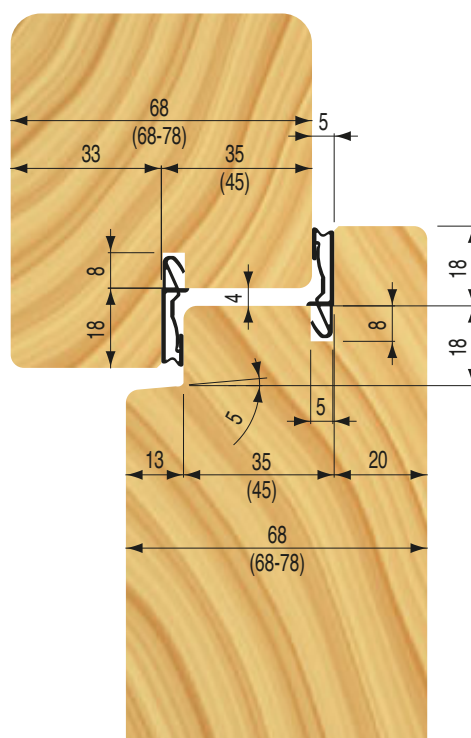
Ⓐ+Ⓑ

Outside sash stile and sash rail top profiling.
Türblatt Außenprofil seitlich und oben Zusatzfräser lose.

Profilatura traverso inferiore porta.

Ⓐ+Ⓒ

Outside sash rail bottom profiling.
Türblatt unten Bodenschwelle Zusatzfräser lose.



“DUO” SH08TM80

MAN | HW

PROGRAMMA TESTE PER L'ESECUZIONE DI PORTE CUTTERSET FOR DOOR REBATING DOPPELFALZ-GARNITUR



Sistema modulare in acciaio montato su boccia di accoppiamento (anelli distanziatori inclusi) completo di coltelli reversibili in HW con angolo di allineamento assiale per i migliori risultati di fresatura e limitatore di truciolo. Adatto per avanzamento manuale.

Modular tooling system in steel execution mounted on coupling bush, (spacing rings included) standard tungsten carbide reversible knives with axial angle alignment for best milling results, chip thickness limitation and reduced recoil, suitable for manual feed.

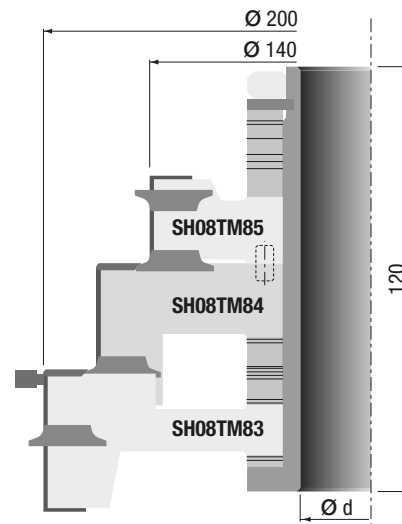
Anwendung

Werkzeugsatz zur Herstellung von Haustürprofilen 68-106 mm mit Doppelfalz.

Technische Daten

Dreiteilige Werkzeug-Garnitur aus Stahl montiert auf Büchse inkl. Distanzringen, Standard-HW-Wendeplattentechnik mit Achswinkel für optimale Schnittgüte und verminderten Schnittdruck, spandickenbegrenzt und rückschlagarm, für manuellen Vorschub geeignet.

Ø D [mm]	B [mm]	Ø d [mm]	Z	Type	RPM min-max	Art. Nr.	€
200	120	30 (-50)	2	A	3800 - 6500	SH08TM8040	
200	120	30 (-50)	2	B	3800 - 6500	SH08TM8050	
Le due teste (A+B) sono disponibili anche in kit Both heads A and B are also available in kit. Die beiden Fräser (A + B) sind auch im Satz erhältlich						SH08TM8060	



Ricambi / Spare Parts / Ersatzteile										
SH08TM85	Art. Nr.	600005	350051	502402			600610	500203		
	Dim.	30x12x1,5	26	M7x21			R 3	M6x20		
	Pcs	10	2	10			2	10		
	€									
	Art. Nr.		350060				600611	500206		
SH08TM84	Art. Nr.	600011	350060	502402	600763	500211			600208	500002
	Dim.	40x12x1,5	27	M7x21	37x16x5	M6x14,5			18,8x17,1x2	M5x7
	Pcs	10	2	10	2	10			10	10
	€									
	Art. Nr.				600739	500207				
Optional	Dim.				35x16x11	M6x21				
	Pcs				2	10				
	€									
	Art. Nr.	600011	350060	502402	600763	500211	600611	500206	600208	500003
	Dim.	40x12x1,5	27	M7x21	37x16x5	M6x14,5	R 2	M6x19	18,8x17,1x2	M5x14
SH08TM83	Pcs	10	2	10	2	10	2	10	10	10
	€									
	Art. Nr.						600609	500202		
	Dim.						R 3	M6x16		
	Pcs						2	10		
€										

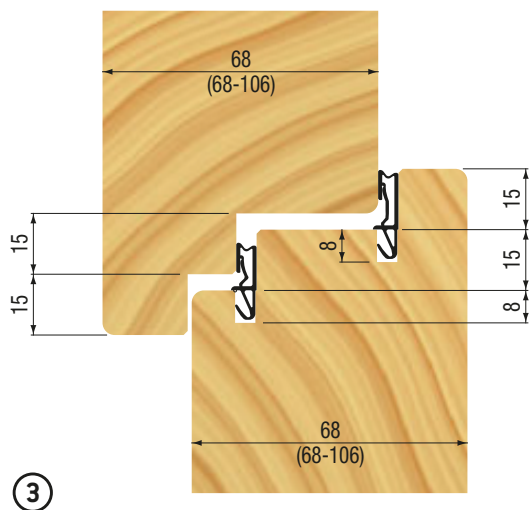
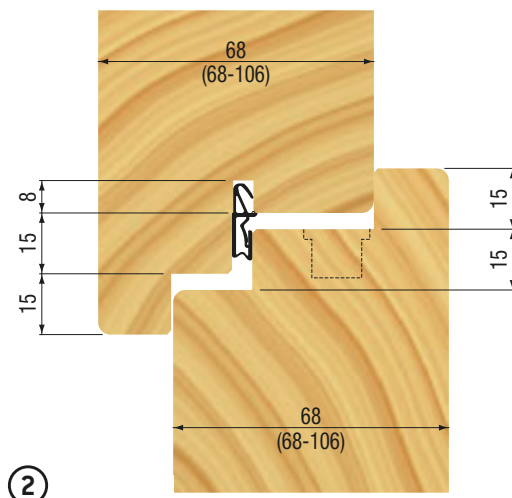
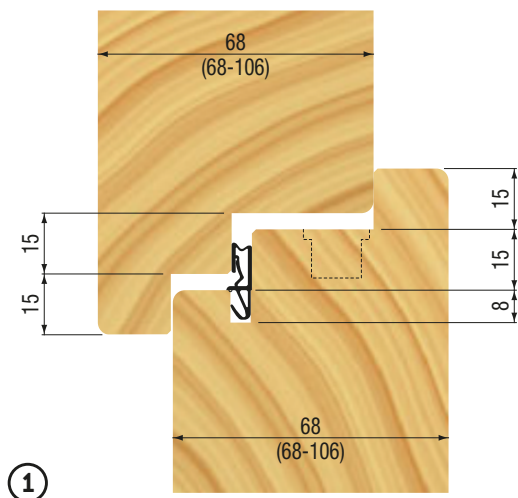
"DUO" SH08TM80

MAN | HW

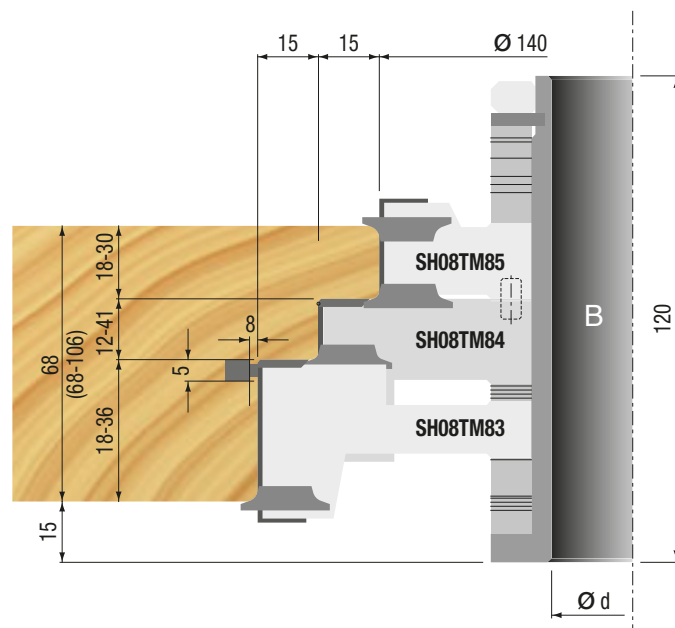
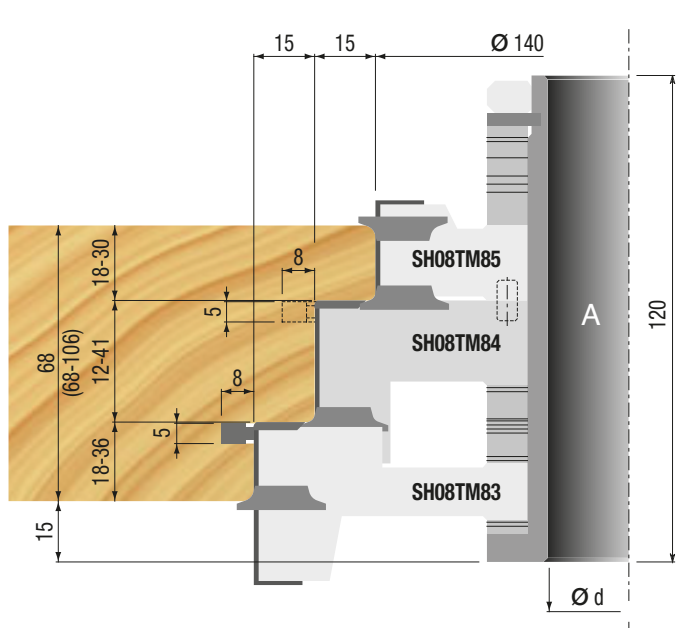
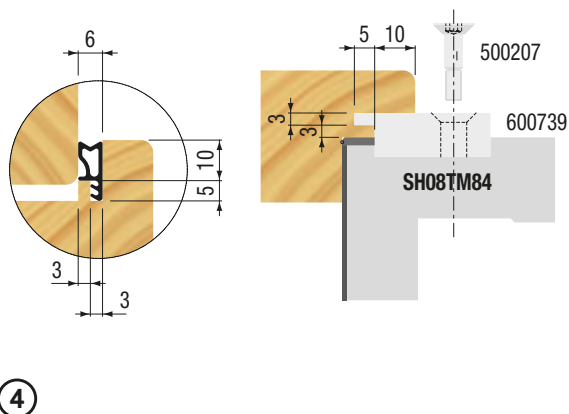
PROGRAMMA TESTE PER L'ESECUZIONE DI PORTE : ESEMPI

CUTTERSET FOR DOOR REBATING: EXAMPLES

DOPPELFALZ-GARNITUR: PROFILBEISPIELE



OPTIONAL



SH09TM60

MAN | HW

GRUPPO TESTE CON COLTELLINI PER BATTUTE DI INFISSI CUTTERHEAD SET FOR REBATES WPL-TÜRENÜBERSCHLAG-MESSERKOPF VERSCHRAUBT



Gruppo teste componibili con coltellini in HW per esecuzione di battute di finestre, porte e scuretti. La testa sagomata SH09TM61 viene fornita con coltello 605861, mentre su richiesta possono essere forniti altri 4 tipi di coltelli profilati.

Set of cutterheads with disposable HW knives for cutting rebates on window frames, window shutters, etc. The profiled cutterhead SH09TM61 is supplied with knife 605861, while on request other 4 different profiled knives can be supplied.

Anwendung

Zum Fügen und Fälzen von Zimmertüren, mit oder ohne Dichtung.

Technische Daten

Zweiteiliges Werkzeug, auf Büchse verschraubt, durch Zwischenringe verstellbar.








Der Profilmesserkopf SH09TM61 ist bestückt mit Messer 605861. Weitere 4 Profile können verwendet werden.

Gruppi completi di boccola e anelli
Groups complete with bush an rings
Sätze komplett mit Büchse und Ringen

Ø D [mm]	B [mm]	Ø d [mm]	Z	RPM min-max	Art. Nr.	€
185	112	30 (-50)	2	4500-7700	SH09TM60	

Teste singole
Single cutterheads
Messerköpfe einzeln

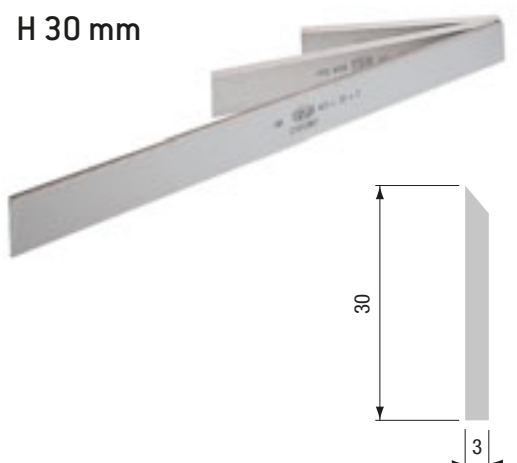
Ø D [mm]	B [mm]	Ø d max [mm]	Z	S	I	RPM min-max	Art. Nr.	€
152	35	60	2			4900 - 8500	SH09TM61	
170	35	60	2	2	2	4500 - 7700	SH09TM62	

Ricambi / Spare Parts / Ersatzteile								
SH09TM61	Art. Nr.	605861	350075	502402				
	Dim.	35x19,5x2	31	M7x21				
	Pcs	2	2	10				
	€							
Optional	Art. Nr.	605863						
	Dim.	35x19,5x2						
	Pcs	2						
	€							
	Art. Nr.	605864						
	Dim.	35x19,5x2						
	Pcs	2						
	€							
	Art. Nr.	605865						
	Dim.	35x19,5x2						
	Pcs	2						
	€							
SH09TM62	Art. Nr.	605862	350076	502404	600763	500211	600609	500203
	Dim.	35x29x2	31	M7x19	37x16x5	M6x14,5	R 3	M6x20
	Pcs	2	2	10	2	10	2	10
	€							
Optional	Art. Nr.						600607	
	Dim.						45°	
	Pcs						2	
	€							

CT010S CT040M

HW | HS

H 30 mm



COLTELLI PER TESTE PIALLA KNIVES FOR PLANNING CUTTERHEADS STREIFENHOBELMESSER

Coltelli pialla di due qualità: HS per legni teneri, resinosi e di media durezza. Coltelli con riporti in HW per legni sabbiosi, duri e composti. Dimensioni: altezza 30 mm, spessore 3 mm.

Our planning knives can be offered in 2 grades: HS for soft, resinous woods; knives carbide tipped for abrasive, compact hardwoods. Sizes: 30 mm height, 3 mm thick.

HS-Streifenhobelmesser oder Hartmetallbestückt. Messerhöhe 30 mm. Messerdicke 3 mm nach DIN 8828, Schneide allseitig geschliffen und geläppt.

Dimensioni / Dimensions / Abmessungen	Materiali / Materials / Material	Art. Nr.	€
1000X30X3	HS	CT010S	
1000X30X3	HW	CT040M	

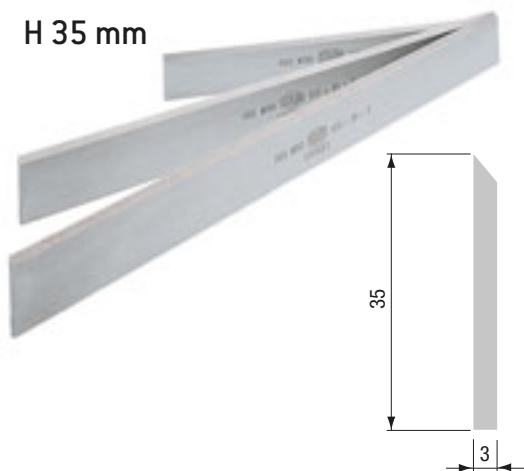
HS Barra / Bar: 1080 mm

HW Barra / Bar: 1050 mm

CP010S CP040M

HW | HS

H 35 mm



COLTELLI PER TESTE PIALLA KNIVES FOR PLANNING CUTTERHEADS STREIFENHOBELMESSER

Coltelli pialla di due qualità: HS per legni teneri, resinosi e di media durezza. Coltelli con riporti in HW per legni sabbiosi, duri e composti. Dimensioni: altezza 35 mm, spessore 3 mm.

Our planning knives can be offered in 2 grades: HS for soft, resinous woods; knives carbide tipped for abrasive, compact hardwoods. Sizes: 35 mm height, 3 mm thick.

HS-Streifenhobelmesser oder Hartmetallbestückt. Messerhöhe 35 mm. Messerdicke 3 mm nach DIN 8828, Schneide allseitig geschliffen und geläppt.

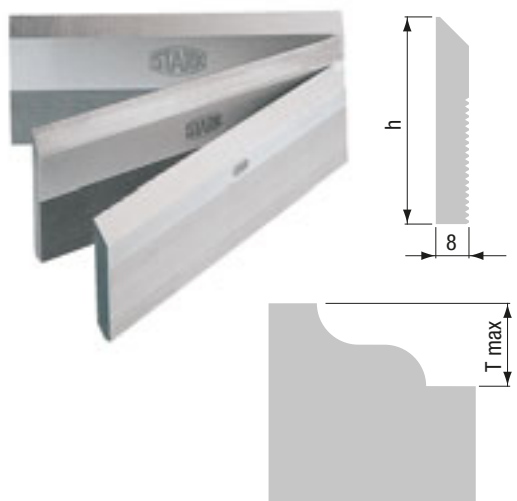
Dimensioni / Dimensions / Abmessungen	Materiali / Materials / Material	Art. Nr.	€
1000X35X3	HS	CP010S	
1000X35X3	HW	CP040M	

HS Barra / Bar: 1080 mm

HW Barra / Bar: 1050 mm

CT050S

HS



COLTELLI NON PROFILATI ZIGRINATI SERRATED BACK KNIVES RÜCKENVERZAHNTE BLANKETTS

Coltelli in HS non profilati da 8 mm di spessore e zigrinati sul dorso (millerighe).

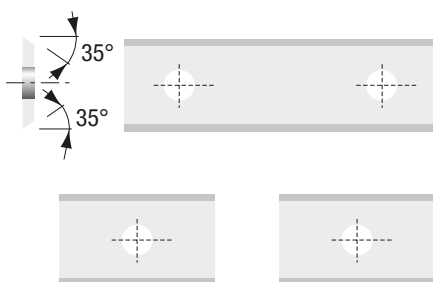
Unprofiled serrated back knives (8 mm thickness).

HS DM05 rückenverzahnte Blanketts.

Dimensioni / Dimensions / Abmessungen	Materiali / Materials / Material	Art. Nr.	€
650X50X8	HS	CT050S11	
650X60X8	HS	CT050S22	
650X70X8	HS	CT050S34	

h (mm)	T max [mm]
50	15
60	25
70	35

COLTELLINI DIRITTI REVERSIBILI (ANGOLO DI SPOGLIA 35°)
REVERSIBLE STRAIGHT KNIVES (CUTTING ANGLE 35°)
HW WENDEPLATTEN STANDARD (35°)



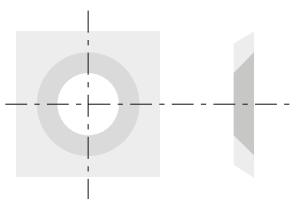
Dimensioni / Dimensions / Abmessungen	Materiali / Materials / Material	Nr. pz./pc./St.	Art. Nr.	€
7,65x12x1,5	HC05	10	600001	
12x12x1,5	HC05	10	600002	
15x12x1,5	HC05	10	600003	
20x12x1,5	HC05	10	600004	
24,7x12x1,5	HC05	10	600017	
30x12x1,5	HC05	10	600005	
40x12x1,5	HC05	10	600011	
50x12x1,5	HC05	10	600006	
60x12x1,5	HC05	10	600007	
20x12x1,5	SMG02 *	10	600044	
30x12x1,5	SMG02 *	10	600045	
40x12x1,5	SMG02 *	10	600049	
50x12x1,5	SMG02 *	10	600046	

* Consigliato per materiali molto duri ed abrasivi: MDF, truciolare, melaminico...

* Suitable for cutting hard materials: MDF, particle board, melamine...

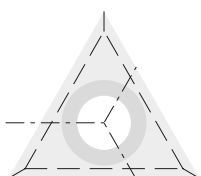
* Geeignet zum Schneiden von harten Materialien: MDF, Spanplatten, Melamin...

RASANTI / SPURS / VORSCHNEIDER



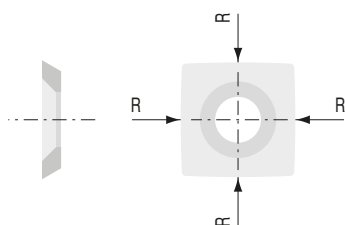
Dimensioni / Dimensions / Abmessungen	Nr. pz./pc./St.	Art. Nr.	€
14x14x1,2	10	600202	
14x14x1,7	10	600204	
14x14x2,0	10	600201	

RASANTI TRIANGOLARI / TRIANGULAR SPURS / VORSCHNEIDER



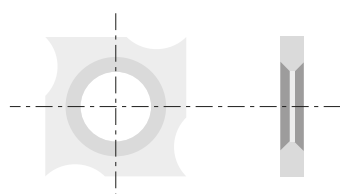
Dimensioni / Dimensions / Abmessungen	Nr. pz./pc./St.	Art. Nr.	€
22x19x2,0	10	600205	

COLTELLO PER TESTE A SVILUPPO ELICOIDALE / KNIFE FOR HELICAL CUTTERHEADS / ERSATZMESSER FÜR SPIRALFÜGEFRÄSER



Dimensioni / Dimensions / Abmessungen	Nr. pz./pc./St.	Art. Nr.	€
15x15x2,5	10	600207	

COLTELLI / KNIVES / HW-MESSER FÜR NUTFRÄSER BIS 8 MM SCHNITTBREITE



Dimensioni / Dimensions / Abmessungen	Nr. pz./pc./St.	Art. Nr.	€
18x18x1,95	10	600301	
18x18x2,45	10	600302	

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TP10FC

MEC | HS | HW



Angoli di taglio
 Rake angles
 Spanwinkel
 30°

TESTA PIALLA CON CORPO IN ACCIAIO PLANING HEAD WITH STEEL BODY HOBELKOPF AUS STAHL


Testa portacoltelli a 4 taglienti equipaggiata con coltelli pialla in HS. Corpo in acciaio ad alta resistenza, coltelli da 3 mm di spessore per 30 di altezza. Il posizionamento dei coltelli viene effettuato mediante l'apposito calibro.

La testa può essere equipaggiata anche con coltelli con riporti in HW.

High tensile steel tool body fitted with four HS planing knives. Positioning of the 30 x 3 mm regrindable knives with appropriate gauge. Tool fitting with Tungsten Carbide planing knives on request.

Technische Daten

Werkzeugkörper aus Stahl, bestückt mit vier gerade liegenden, nachschleifbaren HS Messern 30 x 3 mm, Druckfederspannung, Messerpositionierung mittels Einstelllehre. Werkzeugbestückung mit Hartmetallmessern auf Anfrage, für mechanische Vorschübe.

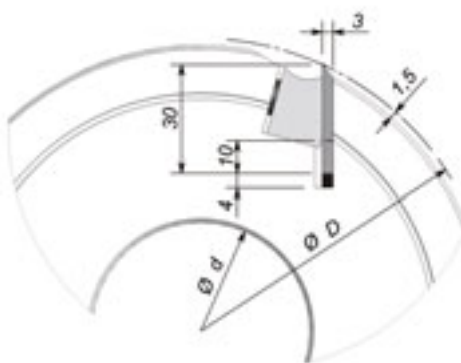
Ø D [mm]	B [mm]	Ø d [mm]	Z	RPM min-max	Art. Nr. 	Art. Nr.	€
125	80	40 (-50)	4	9000	301107	TP10FC21	
125	100	40 (-50)	4	9000	301109	TP10FC22	
125	120	40 (-50)	4	9000	301111	TP10FC23	
125	130	40 (-50)	4	9000	301112	TP10FC24	
125	150	40 (-50)	4	9000	301114	TP10FC25	
125	160	40 (-50)	4	9000	301115	TP10FC32	
125	170	40 (-50)	4	9000	301116	TP10FC26	
125	180	40 (-50)	4	9000	301117	TP10FC27	
125	190	40 (-50)	4	9000	301118	TP10FC28	
125	210	40 (-50)	4	9000	301120	TP10FC29	
125	230	40 (-50)	4	9000	301122	TP10FC30	
125	240	40 (-50)	4	9000	301123	TP10FC31	
125	250	40 (-50)	4	9000	301124	TP10FC33	





Tutte le altre dimensioni sono disponibili su richiesta.

Possiamo fornire altre dimensioni fino a 680 mm di lunghezza.

All other dimensions on request. Cutting widths up to 680 mm possible.

Andere Abmessungen auf Anfrage. Hobelbreiten bis 680 mm lieferbar.



Ricambi / Spare Parts / Ersatzteile					
TP10FC	Art. Nr.	vedi/siehel/see CT/CP010S	501602	501309	400004
	Dim.		36 x 95	M10 x 25	5 mm
	Pcs		10	10	1
	€				

TP20FA

MEC | HS | HW

TESTA PIALLA CON CORPO IN LEGA LEGGERA PLANING HEAD WITH LIGHT ALLOY BODY HOBELKOPF AUS HOCHFESTEM ALUMINIUM




Testa portacoltelli a 4 taglienti equipaggiata con coltelli pialla in HS. L'utensile presenta il corpo in lega leggera e viene equipaggiato con coltelli da 3 mm di spessore per 30 mm di altezza. Il posizionamento dei coltelli viene eseguito mediante l'apposito calibro. La testa può essere equipaggiata anche con coltelli con riporti in HW.

Light alloy tool body fitted with four HS planing knives. Positioning of the 30 x 3 mm regrindable knives with appropriate gauge. Tool fitted with Tungsten Carbide planing knives on request.

Technische Daten

Werkzeugkörper aus hochfestem Aluminium, bestückt mit vier gerade liegenden, nachschleifbaren HS Messern 30 x 3 mm, Druckfederspannung, Messerpositionierung mittels Einstelllehre.
Werkzeugbestückung mit Hartmetallmessern auf Anfrage, für mechanische Vorschübe.

Angoli di taglio
Rake angles
Spanwilken
30°

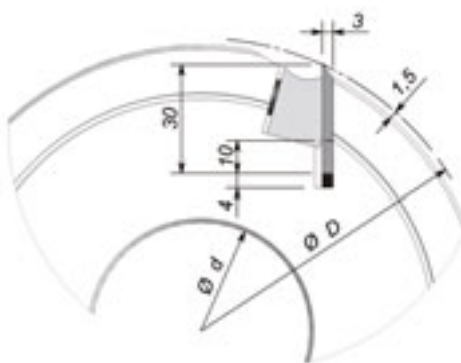
Ø D [mm]	B [mm]	Ø d [mm]	Z	RPM min-max	Art. Nr. 	Art. Nr.	€
125	60	40 (-50)	4	9000	301105	TP20FA06	
125	80	40 (-50)	4	9000	301107	TP20FA07	
125	100	40 (-50)	4	9000	301109	TP20FA08	
125	120	40 (-50)	4	9000	301111	TP20FA01	
125	130	40 (-50)	4	9000	301112	TP20FA02	
125	150	40 (-50)	4	9000	301114	TP20FA03	
125	160	40 (-50)	4	9000	301115	TP20FA11	
125	180	40 (-50)	4	9000	301117	TP20FA04	
125	190	40 (-50)	4	9000	301118	TP20FA09	
125	230	40 (-50)	4	9000	301122	TP20FA05	
125	240	40 (-50)	4	9000	301123	TP20FA10	
125	250	40 (-50)	4	9000	301124	TP20FA12	





Tutte le altre dimensioni sono disponibili su richiesta.

Possiamo fornire altre dimensioni fino a 680 mm di lunghezza.

All other dimensions on request. Cutting widths up to 680 mm possible.

Andere Abmessungen auf Anfrage. Hobelbreiten bis 680 mm lieferbar.



Ricambi / Spare Parts / Ersatzteile					
TP20FA	Art. Nr.	vedi/siehel/see CT/CP010S	501602	501309	400004
	Dim.		36 x 95	M10 x 25	5 mm
	Pcs		10	10	1
	€				

CT010S I CT040M

Altezza del coltello / Knife height
Messerhöhe: 30 mm

COLTELLI PIALLA PLANER KNIVES STREIFENHOBELMESSER



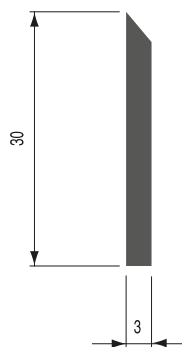
Coltelli pialla di due qualità: HS per legni teneri, resinosi e di media durezza.

Coltelli con riporti in HW per legni sabbiosi, duri e composti. Dimensioni: altezza 30 mm, spessore 3 mm.

Planing knives in quality HS or Tungsten Carbide tipped, height 30 mm and thickness 3 mm.

Technische Daten

Streifenhobelmesser in Qualität HS oder Hartmetall (HW) bestückt, Messerhöhe 30 mm, Messerdicke 3 mm, Schneide allseitig geschliffen und geläppt.



CT010S

HS

L [mm]	Art. Nr.	€
60	CT010S01	
80	CT010S02	
100	CT010S03	
120	CT010S04	
130	CT010S05	
140	CT010S06	
150	CT010S07	
160	CT010S08	
170	CT010S09	
180	CT010S10	
190	CT010S11	
200	CT010S12	
210	CT010S30	
230	CT010S13	
240	CT010S31	
250	CT010S14	
300	CT010S15	
350	CT010S16	
400	CT010S17	
410	CT010S18	
500	CT010S19	
510	CT010S20	
520	CT010S21	
530	CT010S22	
600	CT010S23	
610	CT010S24	
630	CT010S25	
640	CT010S26	
710	CT010S27	
810	CT010S28	
1050	CT010S29	
1080	CT010S39	

CT040M

HW

L [mm]	Art. Nr.	€
60	CT040M01	
80	CT040M02	
100	CT040M03	
120	CT040M04	
130	CT040M05	
140	CT040M06	
150	CT040M07	
160	CT040M08	
170	CT040M09	
180	CT040M10	
190	CT040M11	
200	CT040M12	
210	CT040M30	
230	CT040M13	
240	CT040M31	
250	CT040M14	
300	CT040M15	
350	CT040M16	
400	CT040M17	
410	CT040M18	
500	CT040M19	
510	CT040M20	
520	CT040M21	
530	CT040M22	
600	CT040M23	
610	CT040M24	
630	CT040M25	
640	CT040M26	
710	CT040M27	
810	CT040M28	
1010	CT040M29	
1050	CT040M39	

CP010S | CP040M

Altezza del coltello / Knife height
Messerhöhe: 35 mm

COLTELLI PIALLA PLANER KNIVES STREIFENHOBELMESSER



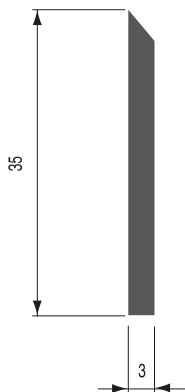
Coltelli pialla di due qualità: HS per legni teneri, resinosi e di media durezza.

Coltelli con riporti in HW per legni sabbiosi, duri e composti. Dimensioni: altezza 35 mm, spessore 3 mm.

Planing knives in quality HS or Tungsten Carbide tipped, height 35 mm and thickness 3 mm.

Technische Daten

Streifenhobelmesser in Qualität HS oder Hartmetall (HW) bestückt, Messerhöhe 35 mm, Messerdicke 3 mm, Schneide allseitig geschliffen und geläppt.



CP010S

HS

L [mm]	Art. Nr.	€
150	CP010S01	
160	CP010S02	
180	CP010S03	
200	CP010S04	
210	CP010S05	
230	CP010S06	
240	CP010S29	
250	CP010S07	
260	CP010S08	
300	CP010S09	
310	CP010S10	
350	CP010S11	
400	CP010S12	
410	CP010S13	
450	CP010S14	
460	CP010S15	
500	CP010S16	
510	CP010S17	
520	CP010S18	
530	CP010S19	
550	CP010S20	
600	CP010S21	
610	CP010S22	
630	CP010S23	
640	CP010S24	
680	CP010S25	
710	CP010S26	
810	CP010S27	
1050	CP010S28	
1080	CP010S38	

CP040M

HW

L [mm]	Art. Nr.	€
150	CP040M01	
160	CP040M02	
180	CP040M03	
200	CP040M04	
210	CP040M05	
230	CP040M06	
240	CP040M29	
250	CP040M07	
260	CP040M08	
300	CP040M09	
310	CP040M10	
350	CP040M11	
400	CP040M12	
410	CP040M13	
450	CP040M14	
460	CP040M15	
500	CP040M16	
510	CP040M17	
520	CP040M18	
530	CP040M19	
550	CP040M20	
600	CP040M21	
610	CP040M22	
630	CP040M23	
640	CP040M24	
680	CP040M25	
710	CP040M26	
810	CP040M27	
1010	CP040M28	
1050	CP040M38	

"PLANEX" TH73FS

MEC | HS | HW

TESTA PIALLA PLANING HEAD HOBELKOPF



Testa a piallare con coltelli reversibili intercambiabili adatta per lavorare legni teneri e duri, truciolari e composti, su scorniatrici e profilatrici automatiche. Il brevettato bloccaggio centrifugo consente la sostituzione rapida e precisa dei coltelli. L'utensile può montare indifferentemente coltelli in acciaio HS o in HW integrale. Equipaggiamento standard con coltelli in acciaio HS. I coltelli in HW devono essere ordinati separatamente.

Planing cutterhead in light alloy execution (steel on request) fitted with HS planing knives, solid carbide knives can be obtained in addition, patented centrifugal clamping system for fast, precise and comfortable knife exchange, further dimensions on request, suitable for mechanical feed.

Anwendung

Hochleistungs-Hobelkopf mit zweiseitig schneidenden Messern und patentierter Flieh-kraftspannung für schnellen und präzisen Messerwechsel. Einsatz auf Hobel- und Profil-fräsmaschinen sowie CNC.

Technische Daten

Werkzeugkörper aus hochfestem Aluminium (Stahl auf Anfrage), Standardausführung mit HS-Messern, Einsatz von HW-Messern möglich, konstanter Messerflugkreis, extreme Spanabnahme bei gleichbleibend hoher Schnittgüte erprobt, für mechanische Vorschübe geeignet.

Angoli di taglio
Rake angles
Spanwilken
25°

Ø D [mm]	B [mm]	Ø d [mm]	Z	RPM min-max	Art. Nr.	€
100	100	40	2	12500	TH73FS01	
100	170	40	2	12500	TH73FS02	
100	180	40	2	12500	TH73FS03	
100	100	40	4	12500	TH73FS04	
100	170	40	4	12500	TH73FS05	
100	180	40	4	12500	TH73FS06	
120	120	40 (-50)	4	10500	TH73FS07	
120	140	40 (-50)	4	10500	TH73FS08	
120	180	40 (-50)	4	10500	TH73FS09	
120	220	40 (-50)	4	10500	TH73FS10	
120	230	40 (-50)	4	10500	TH73FS11	
125	80	40 (-50)	4	10000	TH73FS12	
125	100	40 (-50)	4	10000	TH73FS13	
125	120	40 (-50)	4	10000	TH73FS14	
125	130	40 (-50)	4	10000	TH73FS15	
125	150	40 (-50)	4	10000	TH73FS16	
125	160	40 (-50)	4	10000	TH73FS26	
125	170	40 (-50)	4	10000	TH73FS17	
125	180	40 (-50)	4	10000	TH73FS18	
125	190	40 (-50)	4	10000	TH73FS19	
125	230	40 (-50)	4	10000	TH73FS20	
125	240	40 (-50)	4	10000	TH73FS21	
125	250	40 (-50)	4	10000	TH73FS28	
140	80	40 (-50)	4	9000	TH73FS22	
140	130	40 (-50)	4	9000	TH73FS23	
140	160	40 (-50)	4	9000	TH73FS27	
140	180	40 (-50)	4	9000	TH73FS24	
140	230	40 (-50)	4	9000	TH73FS25	
140	250	40 (-50)	4	9000	TH73FS29	

Possiamo fornire a richiesta altre dimensioni fino a 680 mm di lunghezza. Coltelli pialla in HS inclusi.

Other dimensions up to 680 mm length on request. HS planer knives included.

Andere Abmessungen auf Anfrage. Inklusive HS-Hobelmesser. Hobelbreiten bis 680 mm lieferbar.

“PLANEX” TH78FS

MEC | HS | HW

TESTA PIALLA CON INSERTI REGOLABILI PLANING HEAD WITH ADJUSTABLE INSERTS HOBELKOPF MIT EINSTELLBAREN PROFILMESSERN



Testa a piallare in lega leggera con coltelli reversibili intercambiabili in HS combinati con coltelli sagomati registrabili in HW. Indicata per lavorazioni di piallatura e contemporaneamente di profilatura/smussatura di legni teneri e duri, su scorniciati e profilatrici automatiche. I coltelli sagomati in HW sono registrabili su tutta la lunghezza dell'utensile. L'utensile può montare indifferentemente coltelli in acciaio HS o in HW integrale. Coltelli in HW disponibili su richiesta.

Light alloy planing cutter head fitted with HS reversible knives combined with adjustable profiled carbide knives. Suitable for planing and profiling on automated moulding- and profiling machines in one single working step. The profiled knives are adjustable along the entire width of the tool. Planers fitted with HS planing knives, HW execution on request.

Anwendung

Hochleistungs-Hobelkopf mit zweiseitig schneidenden Hobelmessern und präzise einstellbaren Profilmessern zum zeitgleichen Hobeln und Profilieren. Einsatz auf Profilfräsmaschinen sowie CNC.

Technische Daten

Werkzeugkörper aus hochfestem Aluminium, Standardausführung mit HS-Hobelmessern und HW-Profilmessern, Maximale Profiltiefe von 11,5 mm, Einsatz von HW-Hobelmessern möglich, für mechanische Vorschübe geeignet.

Ø D [mm]	B [mm]	Ø d [mm]	Z	I	RPM min-max	Art. Nr.	€
125	130	40 (-50)	4	2 + 2	7500	TH78FS01	
125	180	40 (-50)	4	2 + 2	7500	TH78FS02	
125	230	40 (-50)	4	2 + 2	7500	TH78FS03	
125	240	40 (-50)	4	2 + 2	7500	TH78FS10	
140	130	40 (-50)	4	2 + 2	7000	TH78FS04	
140	180	40 (-50)	4	2 + 2	7000	TH78FS05	
140	230	40 (-50)	4	2 + 2	7000	TH78FS06	
140	240	40 (-50)	4	2 + 2	7000	TH78FS11	

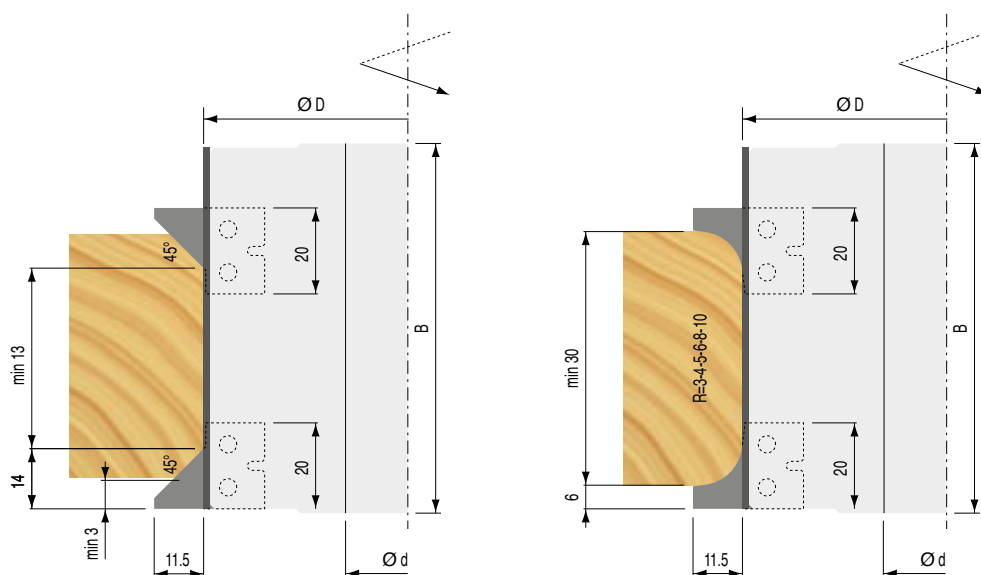
Altre dimensioni disponibili su richiesta. Prezzo testa con coltelli a piallare in HS inclusi. Inserti non compresi nel prezzo.

Other dimensions on request. HS planer knives included, inserts on request.

Andere Abmessungen auf Anfrage. Inklusive HS-Hobelmesser, ohne Profileinsätze.



Adatto per CNC
Suitable for CNC
Ausführung für CNC



"PLANEX" TH78FS

MEC | HS | HW

TESTA PIALLA CON INSERTI REGOLABILI
PLANING HEAD WITH ADJUSTABLE INSERTS
HOBELKOPF MIT EINSTELLBAREN PROFILMESSERN

PROFILI STANDARD STANDARD PROFILES STANDARDPROFILE

Tasselli / Wedges / Spannbacken



Art. Nr. 300050

Per il calcolo del prezzo.
Ogni singolo blocchetto
tagliante è così composto:
1 coltello
1 controcoltello
1 tassello

For price calculation:
Every adjustable profiled
knife group includes
1 knife
1 backing plate
1 wedge

Preisermittlung Einsätze:
1 Messer
1 Stützplatte
1 Spannkeil

Controcoltelli / Backing plates / Stützplatten



Art. Nr.



CC015003



CC015004

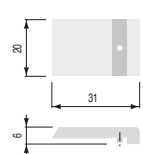


CC015001



CC015002

Coltelli da profilare / Blanks / Blanketts



Coltelli HW / HW knives / HW-Messer



Art. Nr.



601815 45°



601816 45°

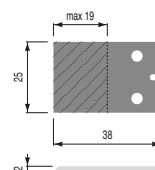


601801 R-3
601803 R-4
601805 R-5
601807 R-6
601809 R-8
601811 R-10

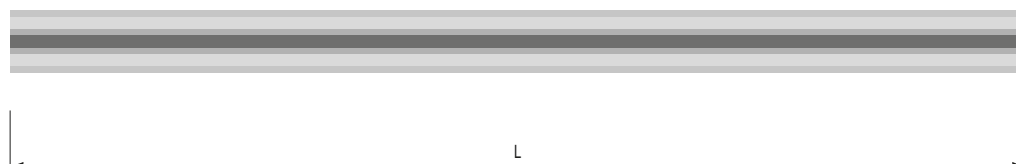


601802 R-3
601804 R-4
601806 R-5
601808 R-6
601810 R-8
601812 R-10

Coltelli da profilare / Blanks / Blanketts



COLTELLI PIALLA PLANING KNIVES HOBELMESSER



HS M42

L [mm]	Art. Nr.	€
80	CT080S01	
100	CT080S02	
120	CT080S03	
130	CT080S04	
150	CT080S06	
160	CT080S14	
170	CT080S07	
180	CT080S08	
190	CT080S09	
230	CT080S11	
240	CT080S12	
250	CT080S15	

HW

L [mm]	Art. Nr.	€
80	CT080M01	
100	CT080M02	
120	CT080M03	
130	CT080M04	
150	CT080M06	
160	CT080M14	
170	CT080M07	
180	CT080M08	
190	CT080M09	
230	CT080M11	
240	CT080M12	
250	CT080M15	

TH75FM

MEC | HW

TESTA RASANTE CON COLTELLI REVERSIBILI REFERENCE CUTTER HEAD FÜHRUNGSFALZ-FRÄSER



Testa rasante con coltelli reversibili per art. TH73FS, TH78FS e TH84FS

SISTEMA DI PRE-RADDRIZZAMENTO IN INGRESSO

Le facce del pezzo lavorato (1) risultano perfettamente ortogonali grazie all'utilizzo combinato della testa rasante (2) con l'utensile a piangere (3).

La testa rasante crea una lavorazione perpendicolare al piano di lavoro ottenendo così 2 lati a 90° che saranno di riferimento per le lavorazioni a seguire.

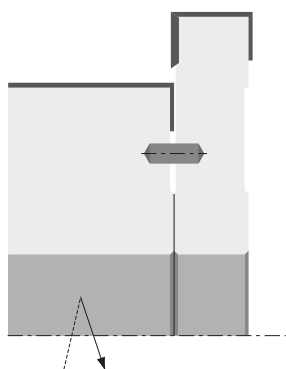
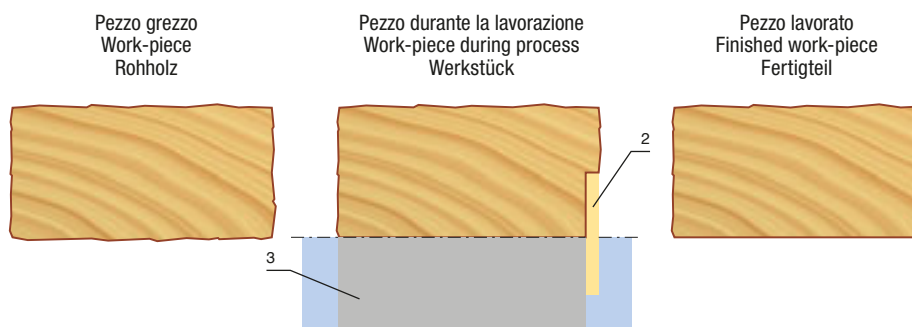
Rebating cutter head with TC-reversible knives for use in combination with planning cutters TH73FS and TH78FS. A 90° angle is obtained on the planned work piece (1) for perfect guidance (2 and 3) along successive milling operations. Steel body execution, suitable for mechanical feed.

Anwendung

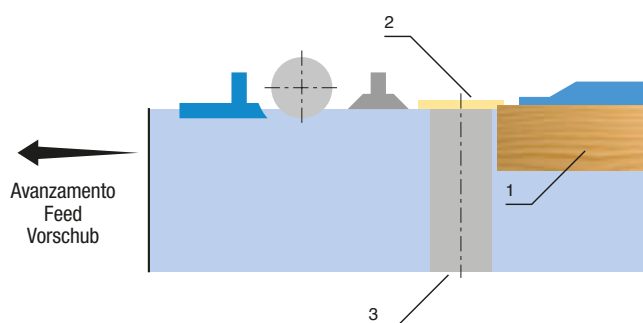
Fräser zum Anfräsen einer seitlichen Führungsfläche beim Abrichten auf der ersten unteren Welle in Kombination mit Hobelkopf in Vierseitern und Kehlautomaten. Das Werkstück (1) wird so rechtwinklig vorgefräst (2), um eine saubere Führung zu gewährleisten.

Technische Daten

Werkzeugkörper aus Stahl mit HW-Wendepplatten, zur Verwendung mit Hobelköpfen TH73FS und TH78FS, für mechanische Vorschübe geeignet.



Vista dall'alto / Top view / Draufsicht von oben



Ø D [mm]	B [mm]	Ø d [mm]	Z	V	RPM min-max	Art. Nr.	€
120	12	40	2	2	10000	TH75FM21	
120	12	40	4	2	10000	TH75FM22	
125	12	40	2	2	10000	TH75FM23	
125	12	40	4	2	10000	TH75FM24	
145	12	50	2	2	9000	TH75FM25	
150	12	50	4	4	8500	TH75FM26	
160	12	50	4	4	8000	TH75FM27	
165	12	50	4	4	8000	TH75FM28	

TS03FC

MEC | HS | HW



Angoli di taglio
Rake angles
Spanwinkel
23°

TESTA PORTACOLTELLI ZIGRINATI SERRATED KNIFE CUTTER HEAD UNIVERSAL-MESSERKOPF

Testa a 4 taglienti da equipaggiare con coltelli in HS di spessore 8 mm. Il sistema di bloccaggio dei coltelli e la loro zigrinatura sul dorso, assicurano un perfetto posizionamento. L'utensile viene fornito senza i coltelli (CT050S), questi ultimi sono elencati nell'apposita tabella e vengono profilati a richiesta e su preventivo. La testa può essere equipaggiata anche con coltelli in HW.

Steel body to be fitted with 4 (profiled) serrated back HS- or HW-knives, tool supplied without knives, blanks and/or profiled knives on request, suitable for mechanical feed only.

Anwendung

Zum Fräsen und individuellen Profilieren von Vollhölzern in Faserrichtung.

Technische Daten

Sicherheits-Profilmesserkopf aus Stahl mit exakter, formschlüssiger Messereinspannung, Verzahnung am Messerrücken und in der Messeraufnahme im Fräskörper. Zur Aufnahme von 8 mm und 10 mm dicken HSS- oder HW-Messern, Fräser wird ohne Messer geliefert, Profilierung auf Anfrage, lediglich für mechanische Vorschübe geeignet.

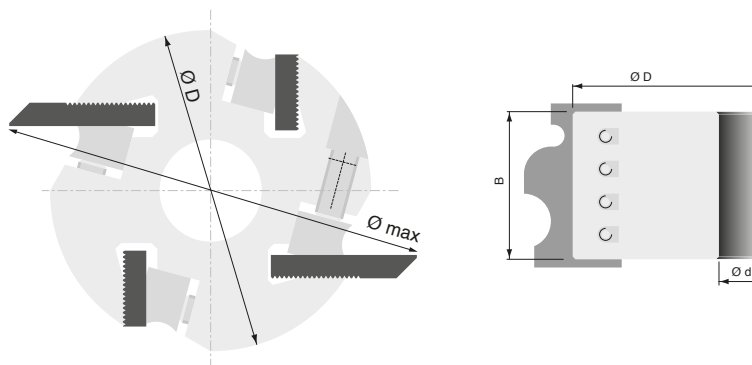
Falso coltello
Dummy
Blindstück

Ø D [mm]	B [mm]	Ø d [mm]	Z	RPM min-max	Art. Nr.	Art. Nr.	Art. Nr.	€
122	40	40	4	10000	301103	CT070S05	TS03FC06	
122	60	40	4	10000	301105	CT070S15	TS03FC15	
122	80	40	4	10000	301107	CT070S17	TS03FC17	
122	100	40	4	10000	301109	CT070S19	TS03FC19	
122	130	40	4	10000	301112	CT070S21	TS03FC21	
122	150	40	4	10000	301114	CT070S23	TS03FC23	
122	180	40	4	10000	301117	CT070S25	TS03FC25	
122	230	40	4	10000	301122	CT070S27	TS03FC27	
137	50	50	4	9000	301104	CT070S06	TS03FC29	
137	60	50	4	9000	301105	CT070S15	TS03FC30	
137	80	50	4	9000	301107	CT070S17	TS03FC31	
137	100	50	4	9000	301109	CT070S19	TS03FC33	
137	130	50	4	9000	301112	CT070S21	TS03FC36	
137	150	50	4	9000	301114	CT070S23	TS03FC39	
137	180	50	4	9000	301117	CT070S25	TS03FC42	
137	230	50	4	9000	301122	CT070S27	TS03FC43	

Possiamo fornire a richiesta altre dimensioni fino a 680 mm di lunghezza.

Other dimensions up to 680 mm length on request.

Andere Abmessungen auf Anfrage. Hobelbreiten bis 680 mm lieferbar.



Ricambi / Spare Parts / Ersatzteile

TS03FC	Art. Nr.	vedi/siehel/see CT050S...	501305
	Dim.		M10 x 20
	Pcs		10
	€		

CT050S

HS

**COLTELLI NON PROFILATI ZIGRINATI
SERRATED BACK KNIVES
RVZ BLANKETTS**

TS03FC | TY30FC | TY31FC

Coltelli in HS non profilati da 8 mm di spessore e zigrinati sul dorso (millerighe).

Unprofiled serrated back knives HS M2, 8 mm thickness.

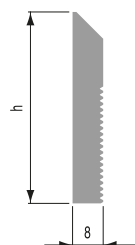
HS M2 rückenverzahnte Blanketts, 8 mm stark.

Profondità del profilo

Profile depths

Profiltiefen

H [mm]	T max [mm]
50	15
60	25
70	35



Prezzo dei coltelli in HW su richiesta

Prices for TCT knives on request

Preis für HW bestückte Blanketts auf Anfrage

B [mm]	h [mm]	Art. Nr.	€
40	50	CT050S01	
50	50	CT050S02	
60	50	CT050S03	
80	50	CT050S04	
100	50	CT050S05	
130	50	CT050S06	
150	50	CT050S07	
180	50	CT050S08	
230	50	CT050S09	
400	50	CT050S10	
650	50	CT050S11	
40	60	CT050S12	
50	60	CT050S13	
60	60	CT050S14	
80	60	CT050S15	
100	60	CT050S16	
130	60	CT050S17	
150	60	CT050S18	
180	60	CT050S19	
230	60	CT050S20	
400	60	CT050S21	
650	60	CT050S22	
40	70	CT050S23	
50	70	CT050S24	
60	70	CT050S25	
80	70	CT050S26	
100	70	CT050S27	
130	70	CT050S28	
150	70	CT050S29	
180	70	CT050S30	
230	70	CT050S31	
260	70	CT050S32	
400	70	CT050S33	
650	70	CT050S34	

TY10FB
MEC | HS | HW

TESTA PORTACOLTELLI A SERRAGGIO IDRAULICO HYDRO PLANING HEAD HYDRO-HOBELMESSERKOPF



Testa portacoltelli a serraggio idraulico costruita in acciaio ad alta resistenza e formata da due bussole per il serraggio idraulico dell'utensile all'albero della macchina. L'utensile può essere costruito con 4, 6, 8, 10, 12 taglienti con un angolo di taglio compreso tra 23° a 27° e viene equipaggiato con coltelli pialla in HS di dimensioni 30x3 mm.

High tensile steel planer head with hydraulic centering and clamping used in planing and moulding machines with multiple spindles, execution from Z = 4 up to Z = 12 (in relation to diameter), rake angles between 23° and 27°, tool fitted with resharpable 30 x 3 mm standard HS- or HW-knives, high concentricity, suitable for jointing, suitable for mechanical feed.

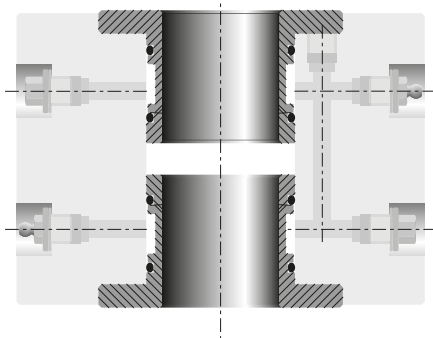
Anwendung

Werkzeug mit hydraulischer Zentrierspannung zum Vor- und Feinhobeln von Hartholz und Weichholz in mehrspindligen Hobel- und Kehlautomaten bei hohen Vorschüben bis 120 m/min. Spanabnahme beim Vorhobeln bis 5 mm, Feinhobeln bis 0,9 mm. Einsatz von nachschärfbaren 30 x 3 mm Standard HS- und HW-Hobelmessern.

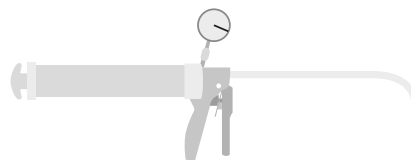
Technische Daten

Werkzeugkörper aus hochfestem Stahl, Z = 4 bis Z = 12 (abhängig von WKZ-Durchmesser) und Spanwinkeln von 23° bis 27°, Spannung der integrierten Hydrobüchse mittels Hochleistungs-Fettpresse, Messer im Tragkörper nachschleifbar, geeignet für Maschinen mit Jointeinrichtung, hohe Rundlaufgenauigkeit, nur für mechanische Vorschübe geeignet.

Boccola hydro con ingrassatori RADIALI
RADIAL alignment of grease nipples
RADIALE Anordnung der Schmiernippel

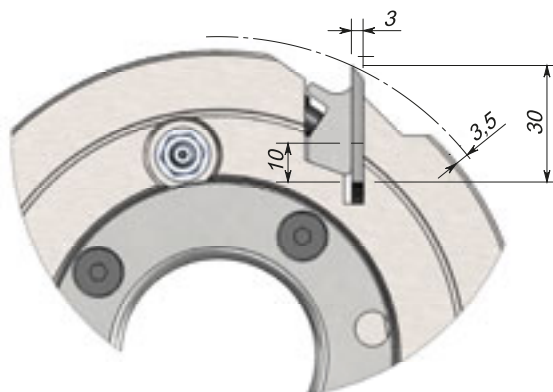


Pressione di serraggio massima:
Maximum bush clamping pressure:
Maximaler Pressdruck der Spannbüchse:
400 Bar



Istruzioni per l'uso: vedi pag. IND-19 Industrial Line
Handling: see pg. IND-19 Industrial Line
Handhabung: siehe S. IND-19 Industrial Line



Corpo in lega leggera a richiesta
Body in light alloy available on request
Körper aus Leichtmetall auf Anfrage



TY10FB

MEC | HS | HW

TESTA PORTACOLTELLI A SERRAGGIO IDRAULICO HYDRO PLANING HEAD HYDRO-HOBELMESSERKOPF

Ø D [mm]	B [mm]	Ø d [mm]	Z	RPM min-max	Art. Nr. 	Art. Nr. 	Art. Nr.	€
143	60	40	4	10500	311005	501409	TY10FB02	
143	100	40	4	10500	311009	501409	TY10FB03	
143	130	40	4	10500	311012	501409	TY10FB04	
143	150	40	4	10500	311014	501409	TY10FB05	
143	160	40	4	10500	311015	501409	TY10FB06	
143	230	40	4	10500	311022	501409	TY10FB08	
163	60	40-60	4	9200	311005	501409	TY10FB12	
163	100	40-60	4	9200	311009	501409	TY10FB13	
163	130	40-60	4	9200	311012	501409	TY10FB14	
163	150	40-60	4	9200	311014	501409	TY10FB15	
163	160	40-60	4	9200	311015	501409	TY10FB17	
163	170	40-60	4	9200	311016	501409	TY10FB91	
163	180	40-60	4	9200	311017	501409	TY10FB16	
163	230	40-60	4	9200	311022	501409	TY10FB18	
163	240	40-60	4	9200	311023	501409	TY10FB20	
163	260	40-60	4	9200	311025	501409	TY10FB19	
163	310	40-60	4	9200	311030	501409	TY10FB21	
163	60	40-60	6	9200	311005	501409	TY10FB22	
163	100	40-60	6	9200	311009	501409	TY10FB23	
163	130	40-60	6	9200	311012	501409	TY10FB24	
163	150	40-60	6	9200	311014	501409	TY10FB25	
163	160	40-60	6	9200	311015	501409	TY10FB27	
163	170	40-60	6	9200	311016	501409	TY10FB92	
163	180	40-60	6	9200	311017	501409	TY10FB26	
163	230	40-60	6	9200	311022	501409	TY10FB28	
163	240	40-60	6	9200	311023	501409	TY10FB30	
163	260	40-60	6	9200	311025	501409	TY10FB29	
163	310	40-60	6	9200	311030	501409	TY10FB31	
203	100	40-60	6	7400	311009	501409	TY10FB44	
203	150	40-60	6	7400	311014	501409	TY10FB45	
203	230	40-60	6	7400	311022	501409	TY10FB48	
203	260	40-60	6	7400	311025	501409	TY10FB49	
203	310	40-60	6	7400	311030	501409	TY10FB42	
203	330	40-60	6	7400	311032	501409	TY10FB43	
163	60	40-60	8	9200	311005	501409	TY10FB32	
163	100	40-60	8	9200	311009	501409	TY10FB33	
163	130	40-60	8	9200	311012	501409	TY10FB34	
163	150	40-60	8	9200	311014	501409	TY10FB35	
163	160	40-60	8	9200	311015	501409	TY10FB37	
163	180	40-60	8	9200	311017	501409	TY10FB36	
163	230	40-60	8	9200	311022	501409	TY10FB38	
163	260	40-60	8	9200	311025	501409	TY10FB39	
163	310	40-60	8	9200	311030	501409	TY10FB04	
203	100	40-60	8	7400	311009	501409	TY10FB54	
203	150	40-60	8	7400	311014	501409	TY10FB55	
203	230	40-60	8	7400	311022	501409	TY10FB58	
203	260	40-60	8	7400	311025	501409	TY10FB59	
203	310	40-60	8	7400	311030	501409	TY10FB61	
203	330	40-60	8	7400	311032	501409	TY10FB52	
203	100	40-60	10	7400	311009	501409	TY10FB63	
203	150	40-60	10	7400	311014	501409	TY10FB65	
203	160	40-60	10	7400	311015	501409	TY10FB67	
203	230	40-60	10	7400	311022	501409	TY10FB68	
203	260	40-60	10	7400	311025	501409	TY10FB69	
203	310	40-60	10	7400	311030	501409	TY10FB71	
203	330	40-60	10	7400	311032	501409	TY10FB62	
203	100	40-60	12	7400	311009	501409	TY10FB73	
203	150	40-60	12	7400	311014	501409	TY10FB75	
203	230	40-60	12	7400	311022	501409	TY10FB78	
203	260	40-60	12	7400	311025	501409	TY10FB79	
203	310	40-60	12	7400	311030	501409	TY10FB81	
203	330	40-60	12	7400	311032	501409	TY10FB72	

Corpo utensile con coltelli in HS.
Altre dimensioni e relativi prezzi
su richiesta.

Cutter including HS knives. Other
dimensions and price on request.

Fräser inklusive HS-Messer.
Andere Abmessungen und Preise
auf Anfrage.

TY11FB
MEC | HS | HW

TESTA PORTACOLTELLI A SERRAGGIO IDRAULICO HYDRO PLANING HEAD HYDRO-HOBELMESSERKOPF



Testa portacoltelli a serraggio idraulico costruita in acciaio ad alta resistenza e formata da due bussole per il serraggio idraulico dell'utensile sull'albero della macchina. L'utensile può essere costruito con 4,6,8,12,16 taglienti con un angolo di taglio compreso tra 23° e 27° e viene equipaggiato con coltelli pialla in HS o in HW di dimensioni 30x3 mm.

High tensile steel planer head with hydraulic centering and clamping used in planing and moulding machines with multiple spindles, execution from $Z = 4$ up to $Z = 16$ (in relation to diameter), rake angles between 23° and 27°, tool fitted with resharpenable 30 x 3 mm standard HS- or HW-knives, high concentricity, suitable for jointing, suitable for mechanical feed.

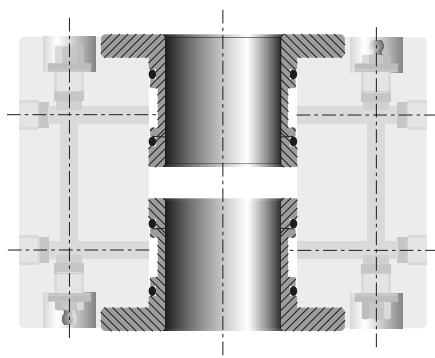
Anwendung

Werkzeug mit hydraulischer Zentrierspannung zum Vor- und Feinhobeln von Hartholz und Weichholz in mehrspindligen Hobel- und Kehlautomaten bei hohen Vorschüben bis 160 m/min. Spanabnahme beim Vorhobeln bis 5 mm, Feinhobeln bis 0,9 mm. Einsatz von nachschärfbaren 30 x 3 mm Standard HS- und HW-Hobelmessern.

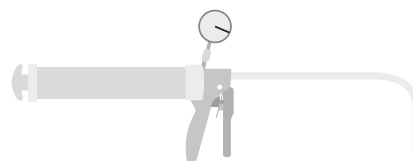
Technische Daten

Werkzeugkörper aus hochfestem Stahl, $Z = 4$ bis $Z = 16$ (abhängig von WKZ-Durchmesser) und Spanwinkeln von 23° bis 27°, Spannung der integrierten Hydrobüchse mittels Hoch-leistungs-Fettpresse, Messer im Tragkörper nachschleifbar, geeignet für Maschinen mit Jointeinrichtung, hohe Rundlaufgenauigkeit, nur für mechanische Vorschübe geeignet.

Boccola hydro con ingrassatori ASSIALI
AXIAL alignment of grease nipples
AXIALE Anordnung der Schmiernippel





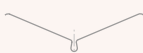


Pressione di serraggio massima:
Maximum bush clamping pressure:
Maximaler Pressdruck der Spannbüchse:
400 Bar



Istruzioni per l'uso: vedi pag. IND-19 Industrial Line
Handling: see pg. IND-19 Industrial Line
Handhabung: siehe S. IND-19 Industrial Line



Corpo in lega leggera a richiesta
Body in light alloy available on request
Körper aus Leichtmetall auf Anfrage

Ricambi Spare Parts Ersatzteile						
	Art. Nr.	501403	501409	501810	501811	501602
TY10FB	Dim.	M8 x 16	M10 x 20	Ingrassatore/Nipple/Schmiernippel	Valvola/Valve/Entlastungsventil	36 x 95
TY11FB	Pcs	10	10	2	2	2
	€					

TY11FB

MEC | HS | HW

TESTA PORTACOLTELLI A SERRAGGIO IDRAULICO HYDRO PLANING HEAD HYDRO-HOBELMESSERKOPF

Ø D [mm]	B [mm]	Ø d [mm]	Z	RPM min-max	Art. Nr. 	Art. Nr. 	Art. Nr.	€
163	60	40-60	4	9200	311005	501409	TY11FB12	
163	100	40-60	4	9200	311009	501409	TY11FB13	
163	130	40-60	4	9200	311012	501409	TY11FB14	
163	150	40-60	4	9200	311014	501409	TY11FB15	
163	160	40-60	4	9200	311015	501409	TY11FB17	
163	170	40-60	4	9200	311016	501409	TY11FB91	
163	180	40-60	4	9200	311017	501409	TY11FB16	
163	230	40-60	4	9200	311022	501409	TY11FB18	
163	240	40-60	4	9200	311023	501409	TY11FB20	
163	260	40-60	4	9200	311025	501409	TY11FB19	
163	310	40-60	4	9200	311030	501409	TY11FB21	
163	60	40-60	6	9200	311005	501409	TY11FB22	
163	100	40-60	6	9200	311009	501409	TY11FB23	
163	130	40-60	6	9200	311012	501409	TY11FB24	
163	150	40-60	6	9200	311014	501409	TY11FB25	
163	160	40-60	6	9200	311015	501409	TY11FB27	
163	170	40-60	6	9200	311016	501409	TY11FB92	
163	180	40-60	6	9200	311017	501409	TY11FB26	
163	230	40-60	6	9200	311022	501409	TY11FB28	
163	240	40-60	6	9200	311023	501409	TY11FB30	
163	260	40-60	6	9200	311025	501409	TY11FB29	
163	310	40-60	6	9200	311030	501409	TY11FB31	
203	100	40-60	6	7400	311009	501409	TY11FB44	
203	150	40-60	6	7400	311014	501409	TY11FB45	
203	230	40-60	6	7400	311022	501409	TY11FB48	
203	260	40-60	6	7400	311025	501409	TY11FB49	
203	310	40-60	6	7400	311030	501409	TY11FB42	
203	330	40-60	6	7400	311032	501409	TY11FB43	
163	60	40-60	8	9200	311005	501409	TY11FB32	
163	100	40-60	8	9200	311009	501409	TY11FB33	
163	130	40-60	8	9200	311012	501409	TY11FB34	
163	150	40-60	8	9200	311014	501409	TY11FB35	
163	160	40-60	8	9200	311015	501409	TY11FB37	
163	180	40-60	8	9200	311017	501409	TY11FB36	
163	230	40-60	8	9200	311022	501409	TY11FB38	
163	260	40-60	8	9200	311025	501409	TY11FB39	
163	310	40-60	8	9200	311030	501409	TY11FB41	
203	100	40-60	8	7400	311009	501409	TY11FB54	
203	150	40-60	8	7400	311014	501409	TY11FB55	
203	230	40-60	8	7400	311022	501409	TY11FB58	
203	260	40-60	8	7400	311025	501409	TY11FB59	
203	310	40-60	8	7400	311030	501409	TY11FB61	
203	330	40-60	8	7400	311032	501409	TY11FB52	
203	100	40-60	10	7400	311009	501409	TY11FB63	
203	150	40-60	10	7400	311014	501409	TY11FB65	
203	230	40-60	10	7400	311022	501409	TY11FB68	
203	260	40-60	10	7400	311025	501409	TY11FB69	
203	310	40-60	10	7400	311030	501409	TY11FB71	
203	330	40-60	10	7400	311032	501409	TY11FB62	
203	100	40-60	12	7400	311009	501409	TY11FB73	
203	150	40-60	12	7400	311014	501409	TY11FB75	
203	230	40-60	12	7400	311022	501409	TY11FB78	
203	260	40-60	12	7400	311025	501409	TY11FB79	
203	310	40-60	12	7400	311030	501409	TY11FB81	
203	330	40-60	12	7400	311032	501409	TY11FB72	
203	100	40-60	14	7400	311009	501409	TY11FB93	
203	150	40-60	14	7400	311014	501409	TY11FB94	
203	230	40-60	14	7400	311022	501409	TY11FB95	
203	260	40-60	14	7400	311025	501409	TY11FB97	
203	310	40-60	14	7400	311030	501409	TY11FB98	
203	330	40-60	14	7400	311032	501409	TY11FB99	
203	100	40-60	16	7400	311109	501409	TY11FB82	
203	150	40-60	16	7400	311114	501409	TY11FB85	
203	230	40-60	16	7400	311122	501409	TY11FB88	
203	260	40-60	16	7400	311125	501409	TY11FB89	
203	310	40-60	16	7400	311130	501409	TY11FB90	
203	330	40-60	16	7400	311132	501409	TY11FB87	

Corpo utensile con coltelli in HS.
Altre dimensioni e relativi prezzi
su richiesta.

Cutter including HS knives. Other
dimensions and price on request.

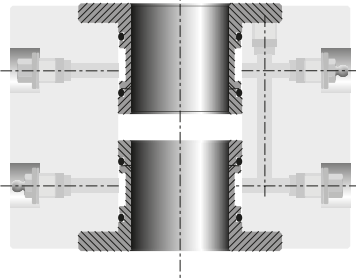
Fräser inklusive HS-Messer.
Andere Abmessungen und Preise
auf Anfrage.

TY30FB

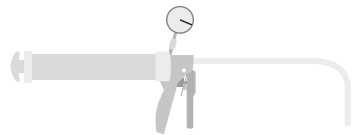
MEC | HS



Boccola hydro con ingrassatori RADIALI
RADIAL alignment of grease nipples
RADIALE Anordnung der Schmiernippel

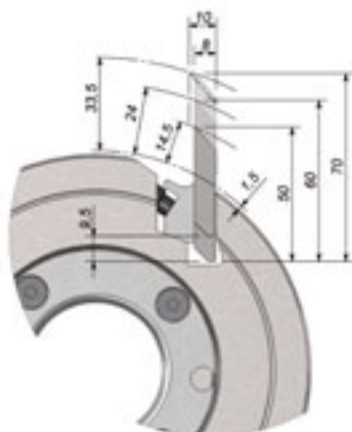


Pressione di serraggio massima:
Maximum bush clamping pressure:
Maximaler Pressdruck der Spannbüchse:
400 Bar



Istruzioni per l'uso: vedi pag. IND-19 Industrial Line
Handling: see pg. IND-19 Industrial Line
Handhabung: siehe S. IND-19 Industrial Line

Corpo in lega leggera a richiesta
Body in light alloy available on request
Körper aus Leichtmetall auf Anfrage



TESTA PORTACOLTELLI PROFILATI A SERRAGGIO IDRAULICO HYDRO PROFILED CUTTER HEAD HYDRO-PROFILMESSERKOPF

Testa portacoltelli costruita in acciaio ad alta resistenza con un dispositivo per il serraggio idraulico dell'utensile sull'albero della macchina. L'utensile viene equipaggiato con coltelli in HS da 8 mm di spessore da profilare (vedi articolo CT050S). Utensile destinato alla produzione di profili sagomati con ottima finitura ed elevate velocità di avanzamento.

High tensile steel cutter head with hydraulic centering and clamping used in planing and moulding machines with multiple spindles, execution from $Z = 4$ up to $Z = 12$ (in relation to required profile depth and tool diameter), rake angles between 23° and 27° for universal profiling of solid wood and board materials with high feed speeds up to 120 m/min, tool fitted with 40 - 70 mm broad and 8 - 10 mm thick HS-serrated back knives, suitable for mechanical feed only.

Anwendung

Werkzeug mit hydraulischer Zentrierspannung zum universellen Profilieren von Vollholz und Holzwerkstoffen in mehrspindligen Hobel- und Kehlautomaten bei hohen Vorschüben bis 120 m/min. Einsatz von 40 - 70 mm (abhängig von Profiltiefe und WKZ-Durchmesser bzw. Zähnezahl) breiten rückenverzahnten HS-Messern mit 8 mm oder 10 mm Messerdicke.

Technische Daten

Werkzeugkörper aus hochfestem Stahl, $Z = 4$ bis $Z = 12$ (abhängig von WKZ-Durchmesser) und Spanwinkeln von 23° bis 27° , Spannung der integrierten Hydrobüchse mittels Hochleistungs-Fettpresse, lediglich für mechanische Vorschübe geeignet.

Ø D [mm]	B [mm]	Ø d [mm]	Z	RPM min-max	Art. Nr.	Art. Nr.	Art. Nr.	€
137	60	40-45	4	10000	311005	501409	TY30FB16	
137	100	40-45	4	10000	311009	501409	TY30FB01	
137	150	40-45	4	10000	311014	501409	TY30FB02	
152	60	40-60	4	9100	311005	501409	TY30FB17	
152	100	40-60	4	9100	311009	501409	TY30FB18	
152	130	40-60	4	9100	311012	501409	TY30FB47	
152	150	40-60	4	9100	311014	501409	TY30FB19	
152	180	40-60	4	9100	311017	501409	TY30FB48	
152	230	40-60	4	9100	311022	501409	TY30FB20	
152	310	40-60	4	9100	311030	501409	TY30FB49	
152	60	40-60	6	9100	311005	501409	TY30FB21	
152	100	40-60	6	9100	311009	501409	TY30FB03	
152	130	40-60	6	9100	311012	501409	TY30FB04	
152	150	40-60	6	9100	311014	501409	TY30FB05	
152	180	40-60	6	9100	311017	501409	TY30FB06	
152	230	40-60	6	9100	311022	501409	TY30FB07	
152	260	40-60	6	9100	311025	501409	TY30FB08	
152	310	40-60	6	9100	311030	501409	TY30FB09	
163	60	40-60	8	8500	311005	501409	TY30FB22	
163	100	40-60	8	8500	311009	501409	TY30FB10	
163	130	40-60	8	8500	311012	501409	TY30FB11	
163	150	40-60	8	8500	311014	501409	TY30FB12	
163	180	40-60	8	8500	311017	501409	TY30FB45	
163	230	40-60	8	8500	311022	501409	TY30FB13	
163	260	40-60	8	8500	311025	501409	TY30FB14	
163	310	40-60	8	8500	311030	501409	TY30FB15	
190	60	40-60	10	7300	311005	501409	TY30FB30	
190	100	40-60	10	7300	311009	501409	TY30FB31	
190	130	40-60	10	7300	311012	501409	TY30FB32	
190	150	40-60	10	7300	311014	501409	TY30FB33	
190	180	40-60	10	7300	311017	501409	TY30FB46	
190	230	40-60	10	7300	311022	501409	TY30FB34	
190	260	40-60	10	7300	311025	501409	TY30FB35	
190	310	40-60	10	7300	311030	501409	TY30FB36	
215	60	40-60	12	6400	311005	501409	TY30FB37	
215	100	40-60	12	6400	311009	501409	TY30FB38	
215	130	40-60	12	6400	311012	501409	TY30FB39	
215	150	40-60	12	6400	311014	501409	TY30FB40	
215	180	40-60	12	6400	311017	501409	TY30FB43	
215	230	40-60	12	6400	311022	501409	TY30FB41	
215	260	40-60	12	6400	311025	501409	TY30FB42	
215	310	40-60	12	6400	311030	501409	TY30FB44	

Corpo utensili esclusi i coltelli. Altre dimensioni e relativi prezzi su richiesta.

Cutter excluding profiled knives. Other dimensions and price on request.

Fräser ohne Profilmesser. Andere Abmessungen und Preise auf Anfrage.

TY31FB

MEC | HS



TESTA PORTACOLTELLI PROFILATI A SERRAGGIO IDRAULICO HYDRO PROFILED CUTTER HEAD HYDRO-PROFILMESSERKOPF

Testa portacoltelli costruita in acciaio ad alta resistenza con un dispositivo per il serraggio idraulico dell'utensile sull'albero della macchina. L'utensile viene equipaggiato con coltelli in HS da 8 mm di spessore da profilare (vedi articolo CT050S). L'utensile è destinato alla produzione di profili sagomati con ottima finitura ed elevate velocità di avanzamento.

High tensile steel cutter head with hydraulic centering and clamping used in planing and moulding machines with multiple spindles, execution from $Z = 4$ up to $Z = 12$ (in relation to required profile depth and tool diameter), rake angles between 23° and 27° for universal profiling of solid wood and board materials with high feed speeds up to 120 m/min, tool fitted with 40 - 70 mm broad and 8 - 10 mm thick HS-serrated back knives, suitable for mechanical feed only.

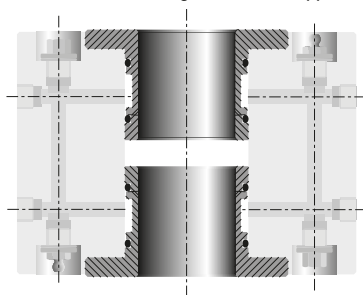
Anwendung

Werkzeug mit hydraulischer Zentrierspannung zum universellen Profilieren von Vollholz und Holzwerkstoffen in mehrspindligen Hobel- und Kehlautomaten bei hohen Vorschüben bis 120 m/min. Einsatz von 40 - 70 mm (abhängig von Profiltiefe und WKZ-Durchmesser bzw. Zähnezahl) breiten rückenverzahnten HS-Messern mit 8 mm oder 10 mm Messerdicke.

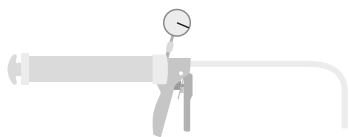
Technische Daten

Werkzeugkörper aus hochfestem Stahl, $Z = 4$ bis $Z = 12$ (abhängig von WKZ-Durchmesser) und Spanwinkeln von 23° bis 27° , Spannung der integrierten Hydrobüchse mittels Hochleistungs-Fettpresse, lediglich für mechanische Vorschübe geeignet.

Boccola hydro con ingrassatori ASSIALI
AXIAL alignment of grease nipples
AXIALE Anordnung der Schmiernippel



Pressione di serraggio massima:
Maximum bush clamping pressure:
Maximaler Pressdruck der Spannbüchse:
400 Bar



Istruzioni per l'uso: vedi pag. IND-19 Industrial Line
Handling: see pg. IND-19 Industrial Line
Handhabung: siehe S. IND-19 Industrial Line

Corpo in lega leggera a richiesta
Body in light alloy available on request
Körper aus Leichtmetall auf Anfrage

Ø D [mm]	B [mm]	Ø d [mm]	Z	RPM min-max	Art. Nr.	Art. Nr.	Art. Nr.	€
152	60	40-60	4	9100	311005	501409	TY31FB01	
152	100	40-60	4	9100	311009	501409	TY31FB02	
152	130	40-60	4	9100	311012	501409	TY31FB03	
152	150	40-60	4	9100	311014	501409	TY31FB04	
152	180	40-60	4	9100	311017	501409	TY31FB05	
152	230	40-60	4	9100	311022	501409	TY31FB06	
152	310	40-60	4	9100	311030	501409	TY31FB07	
152	60	40-60	6	9100	311005	501409	TY31FB11	
152	100	40-60	6	9100	311009	501409	TY31FB12	
152	130	40-60	6	9100	311012	501409	TY31FB13	
152	150	40-60	6	9100	311014	501409	TY31FB14	
152	180	40-60	6	9100	311017	501409	TY31FB15	
152	230	40-60	6	9100	311022	501409	TY31FB16	
152	260	40-60	6	9100	311025	501409	TY31FB17	
152	310	40-60	6	9100	311030	501409	TY31FB18	
163	60	40-60	8	8500	311005	501409	TY31FB31	
163	100	40-60	8	8500	311009	501409	TY31FB32	
163	130	40-60	8	8500	311012	501409	TY31FB33	
163	150	40-60	8	8500	311014	501409	TY31FB34	
163	180	40-60	8	8500	311017	501409	TY31FB35	
163	230	40-60	8	8500	311022	501409	TY31FB36	
163	260	40-60	8	8500	311025	501409	TY31FB37	
163	310	40-60	8	8500	311030	501409	TY31FB38	
190	60	40-60	10	7300	311005	501409	TY31FB40	
190	100	40-60	10	7300	311009	501409	TY31FB41	
190	130	40-60	10	7300	311012	501409	TY31FB42	
190	150	40-60	10	7300	311014	501409	TY31FB43	
190	180	40-60	10	7300	311017	501409	TY31FB53	
190	230	40-60	10	7300	311022	501409	TY31FB44	
190	260	40-60	10	7300	311025	501409	TY31FB45	
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215	60	40-60	12	6400	311005	501409	TY31FB47	
215	100	40-60	12	6400	311009	501409	TY31FB48	
215	130	40-60	12	6400	311012	501409	TY31FB49	
215	150	40-60	12	6400	311014	501409	TY31FB50	
215	180	40-60	12	6400	311017	501409	TY31FB54	
215	230	40-60	12	6400	311022	501409	TY31FB51	
215	260	40-60	12	6400	311025	501409	TY31FB52	
215	310	40-60	12	6400	311030	501409	TY31FB55	

Corpo utensile con coltelli in HS. Altre dimensioni e relativi prezzi su richiesta.

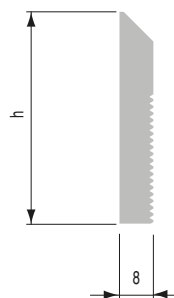
Cutter including HS knives. Other dimensions and price on request.




Fräser inklusive HS-Messer. Andere Abmessungen und Preise auf Anfrage.

TY30FB | TY31FB

MEC | HS

TESTA PORTACOLTELLI PROFILATI A SERRAGGIO IDRAULICO
HYDRO PROFILED CUTTER HEAD
HYDRO-PROFILMESSERKOPF

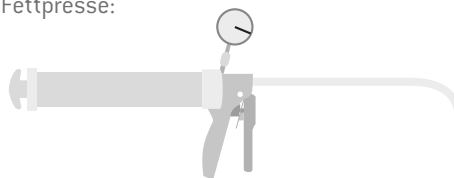


Ricambi Spare Parts Ersatzteile				
	Art. Nr.	501409	501810	501811
TY30FB	Dim.	M10 x 20	Ingrassatore/Nipple/Schmiernippel	Valvola/Valve/Entlastungsventil
TY31FB	Pcs	10	2	2
	€			

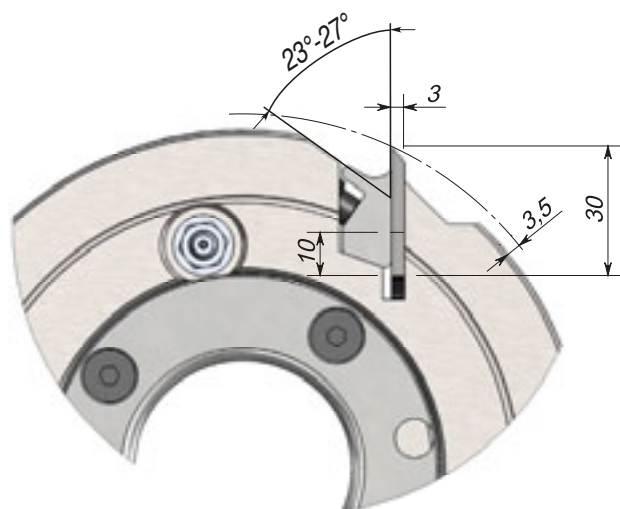
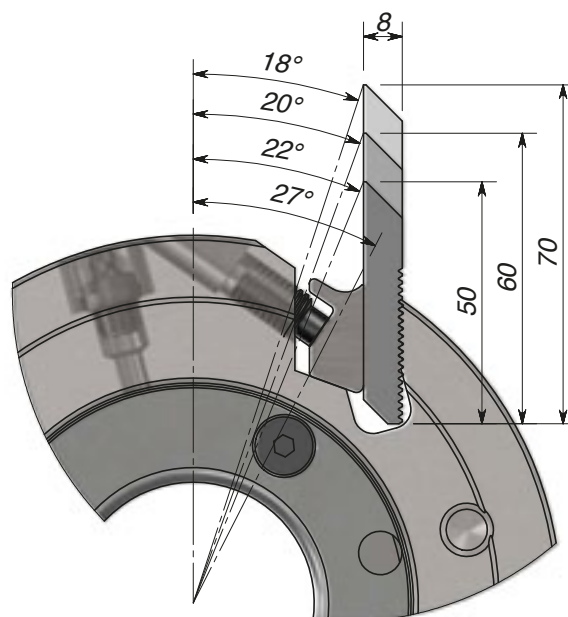
* con coltelli grezzi
* with blank knife
* mit unprofilierem Messer

Pompa / Grease pump / Hochleistungs-Fettpresse:

Art. Nr.	€
HYP1	

**TY10FB | TY11FB**
TY30FB | TY31FB

STARK HYDRO
ANGOLI DI TAGLIO / RAKE ANGLES / SPANWILKEN

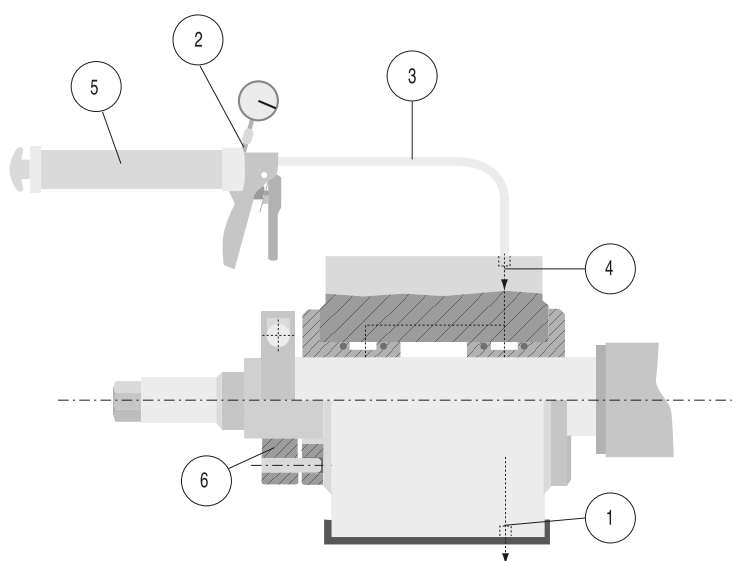
TY10FB | TY11FB**TY30FB | TY31FB**

TY10FB | TY11FB TY30FB | TY31FB

MEC | HS

STARK HYDRO : ISTRUZIONI PER L'USO HANDLING

STARK HYDRO: HANDHABUNG



SERRAGGIO DELL'UTENSILE

- A** Assicurarsi che le valvole di scarico dell'utensile (1) e della pompa (2) siano chiuse.
- B** Inserire il tubo flessibile (3) nell'ingrassatore (4).
- C** Azionare la pompa (5), fino alla pressione di 400 bar.
- D** Scaricare il tubo allentando la valvola di scarico della pompa (2).
- E** Staccare il tubo (3) dell'ingrassatore.
- F** Controllare che l'utensile risulti ben fissato.
- G** Montare l'anello di sicurezza (6).

DISSERRAGGIO DELL'UTENSILE

- A** Allentare le valvole di scarico dell'utensile (1) e lasciare defluire il grasso.
- B** Richiudere le valvole e sfilare l'utensile dalla macchina.

CUTTERHEAD CLAMPING

- A** Make sure that the grease-release nipple (1) of tool and pressure relief screw of pump (2) are tight.
- B** Place flexible clamping hose (3) on grease nipple (4) and push in.
- C** Pump grease (5) with level until pressure gauge indicates 400 bar.
- D** Loosen relief screw (2) of pump until pressure has dropped.
- E** Detach hose (3)
- F** Check that tool is well clamped.
- G** Mount safety-ring (6)

CUTTERHEAD UNCLAMPING

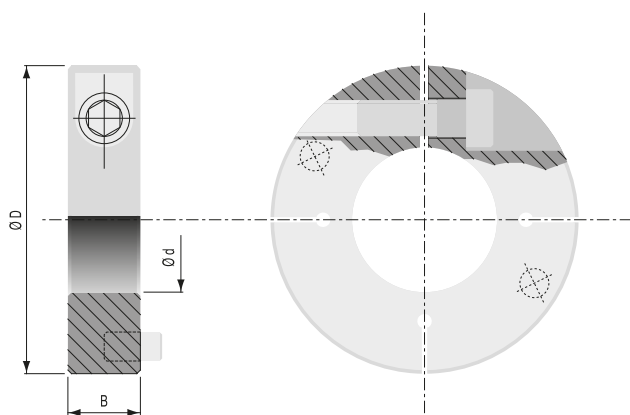
- A** Untighten grease-release nipple (1) of tool and release grease.
- B** Tighten grease-release nipple and ease cutterhead off the spindle.

AUFSPANNUNG DES WERKZEUGS

- A** Sicherstellen, dass die Auslassventile/ Nippel (1) des Werkzeugs und der Pumpe (2) geschlossen sind.
- B** Anbringen des Pumpenschlauchs (3) auf das Einlassventil/Nippel (4) des Werkzeugs.
- C** Pumpe (5) bis auf 400 bar Druck bringen.
- D** Entleerung des Pumpenschlauchs (3) durch Öffnen des Auslassventils (2) der Pumpe.
- E** Entfernen des Pumpenschlauchs (3).
- F** Überprüfen, dass das Werkzeug befestigt ist.
- G** Sicherheits-Spannung (6) befestigen.

LÖSEN DES WERKZEUGS

- A** Öffnen des Auslassventils/Nippels (1) des Werkzeugs und Fett auslaufen lassen.
- B** Schließen des Auslassventils/Nippels des Werkzeugs und Werkzeug von der Maschinenwelle entnehmen.



Con le teste portacoltelli Hydro Stark viene fornito (a richiesta) un anello di sicurezza che assicura l'utensile serrato idraulicamente contro gli spostamenti assiali e radiali sull'albero. Sono disponibili 3 versioni in relazione alla dimensione del foro dell'utensile.

All Hydro cutter heads can be equipped with a safety ring which secures the tool against axial and radial movement on the machine spindle. (force fit)

Auf Anfrage können alle Hydro-Messerköpfe auch mit einem Sicherheits-Spannung geliefert werden, welcher das Werkzeug (kraftschlüssig) gegen axiale und radiale Bewegung auf der Maschinenspindel sichert.

Anello di sicurezza / Safety ring / Sicherheits-Spannung

Ø D [mm]	B [mm]	Ø d [mm]	Art. Nr.	€
75	20	35	10110001	
85	20	40	10110002	
95	20	50	10110003	

TH29FM

MEC | HW

TESTE PIALLA MODULARI
ASSEMBLY SYSTEM PLANING CUTTER
HOBELKOPF-AUFBAUSYSTEM


Teste componibili con coltellini in HW reversibili per piallatura e utilizzabili sia su alberi orizzontali sia su alberi verticali. L'altezza di taglio di ogni singola testa è di 30 mm o 50 mm. L'accoppiamento avviene in maniera automatica per mezzo di un trascinamento ricavato sull'utensile.

Planing cutters in steel execution, 30 mm or 50 mm fitted with TC-standard reversible knives, can be assembled individually to the required cutting width in planing and moulding machines, interlocking recess to avoid torsion, suitable for mechanical feed.

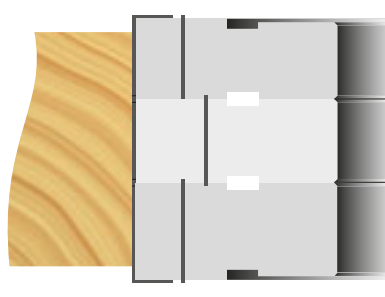
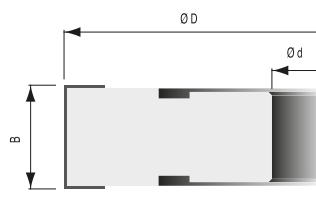
Anwendung





Vor-Hobelkopf-Aufbausystem bestehend aus 30 mm oder 50 mm Segmenten zum freien Kombinieren auf unterschiedlichste Schnittbreiten unter Verwendung von Standard-Hartmetall-Wendemessern.

Technische Daten

Grundkörper aus Stahl, Schnittbreiten durch Aufbausystem frei wählbar, verdrehgesichert durch Formschluss, 30 mm bzw. 50 mm Standard HW-Wendemesser, für mechanischen Vorschub geeignet.

Ø D [mm]	B [mm]	Ø d [mm]	Z	RPM min-max	Art. Nr.	€
125	30	40 (-50)	4	11500	TH29FM01	
125	30	40 (-50)	4	11500	TH29FM02	



Ricambi / Spare Parts / Ersatzteile					
TH29FM01	Art. Nr.	600005	350007	502402	400115
	Dim.	30 x 12 x 1,5	26	M7 x 21	5 mm
	Pcs	10	2	10	1
	€				
TH29FM02	Art. Nr.	600006	350009	502402	400115
	Dim.	50 x 12 x 1,5	46	M7 x 21	5 mm
	Pcs	10	2	10	1
	€				

TH74FA | TH74FM

MEC | HW

TESTA ELICOIDALE A PRE-PIALLARE HELICAL CUTTER SPIRALFÜGEFRÄSER



Testa elicoidale per medie finiture con corpo in acciaio o lega leggera equipaggiata di coltelli 14x14x2 in HW con quattro lati taglienti particolarmente adatta per grosse asportazioni. Le teste possono essere fornite di rasanti su uno o sui due lati. Il prezzo verrà aumentato in base al numero di rasanti montati. Possono essere costruite teste speciali fino ad un diametro massimo di 300 mm e un numero di 4-6-8-10 eliche.

Helical planing cutter in light alloy or steel execution, with standard TC knives 14 x 14 x 2 mm suitable for high feed rates and great removals, medium surface finishing in solid wood, available on demand with spurs for rebating, maximum diameter of 300 mm, maximum length of 680 mm with up to 10 helices on request.

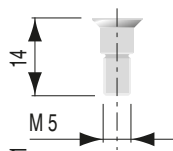
Anwendung

Spiralfügefräser zum Bearbeiten von Massivholz mit mittlerem Finish der Werkstück-Oberfläche. Geeignet für hohe Vorschübe und extreme Spanabnahme. Auf Wunsch Ausführung mit Vorschneidern zum Fälzen erhältlich.

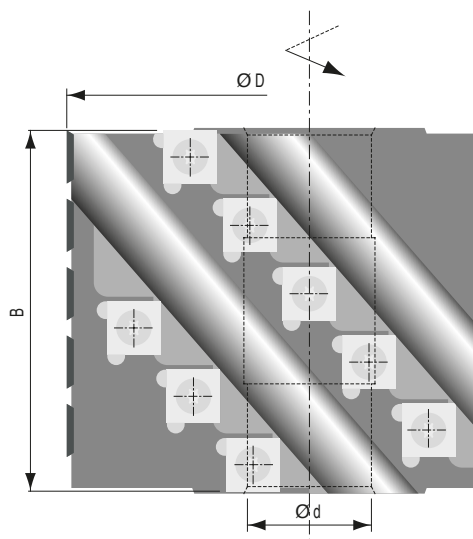
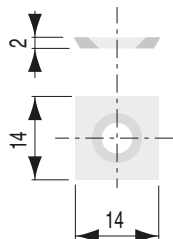
Technische Daten

Werkzeugkörper aus hochfestem Leichtmetall [FA] oder Stahl [FM], Schneiden 14 x 14 x 2 mm mit 4 Schneidfasen, Ausführung für manuelle Vorschübe [MAN] auf Anfrage. Werkzeugdurchmesser bis 300 mm, Länge bis 680 mm und 2 - 10 Spiralen möglich.

Vite / Screw / Schraube
Art. Nr. 500003
Pcs 10
€



Coltello / Knife / Messer
Art. Nr. 600201
Pcs 10
€



Serraggio Hydro a richiesta
Execution with Hydro clamping
on request
Hydro Spannung auf Anfrage

Ø D [mm]	B [mm]	Ø d [mm]	Nr. Eliche Helices Spiralen	Z	RPM min-max	Art. Nr.	Lega leggera Light alloy Aluminium		Acciaio Steel Stahl	
							€	Art. Nr.	€	Art. Nr.
70	90	25	4	14	19000	TH74FA01			TH74FM01	
80	90	30 (-35)	4	14	16700	TH74FA05			TH74FM05	
100	100	30 (-40)	4	16	13300	TH74FA10			TH74FM10	
125	100	40 (-60)	4	16	10600	TH74FA15			TH74FM15	
125	100	40 (-60)	6	24	10600	TH74FA25			TH74FM25	
125	130	40 (-60)	4	20	10600	TH74FA16			TH74FM16	
125	130	40 (-60)	6	30	10600	TH74FA26			TH74FM26	
125	230	40 (-60)	4	36	10600	TH74FA18			TH74FM18	
125	230	40 (-60)	6	54	10600	TH74FA28			TH74FM28	
140	100	40 (-60)	6	24	9500	TH74FA35			TH74FM35	
140	100	40 (-60)	8	32	9500	TH74FA45			TH74FM45	
140	130	40 (-60)	6	30	9500	TH74FA36			TH74FM36	
140	130	40 (-60)	8	40	9500	TH74FA46			TH74FM46	
140	230	40 (-60)	6	54	9500	TH74FA38			TH74FM38	
140	230	40 (-60)	8	72	9500	TH74FA48			TH74FM48	
140	100	40 (-60)	8	32	9500	TH74FA45			TH74FM45	
140	130	40 (-60)	8	40	9500	TH74FA46			TH74FM46	
140	180	40 (-60)	8	56	9500	TH74FA47			TH74FM47	
140	230	40 (-60)	8	72	9500	TH74FA48			TH74FM48	

TH72FA | TH72FM

MEC | HW



TESTA ELICOIDALE A PIALLARE HELICAL PLANING CUTTER HEAD FEINHOBEL-SPIRALFÜGEFRÄSER

Testa pialla elicoidale con corpo in acciaio o lega leggera equipaggiata di coltelli in HW 15x15x2,5 con quattro lati taglianti. L'angolo assiale permette di lavorare con elevato avanzamento. Particolarmente adatta per ottenere buone finiture. Le teste possono essere equipaggiate di rasanti su uno o due lati. Il prezzo varierà in base al numero di rasanti montati. Possono essere costruite teste speciali fino a un diametro massimo di 300 mm e un numero di 4-6-8-10 eliche.

Helical planing cutter in light alloy or steel execution, axial angle alignment of the knives 15 x 15 x 2,5 mm for reduced cutting pressure, suitable for high feed rates, for excellent surface finishing in solid wood, available on demand with spurs for rebating, maximum diameter of 300 mm, maximum length of 680 mm with up to 10 helices on request.

Anwendung

Spiralfügefräser zum Hobeln von Massivholz mit gutem Finish auf der Werkstück-Oberfläche. Geeignet für hohe Vorschübe. Auf Wunsch Ausführung mit Vorschneidern zum Fälzen erhältlich.

Technische Daten

Werkzeugkörper aus hochfestem Leichtmetall [FA] oder Stahl [FM], ballig geschliffene Schneiden 15 x 15 x 2,5 mm mit 4 Schneidfasen, großer Achswinkel für reduzierten Schnittdruck, Ausführung für manuelle Vorschübe [MAN] auf Anfrage. Werkzeughdurchmesser bis 300 mm, Länge bis 680 mm und 2 - 10 Spiralen möglich.



Adatto per macchine CNC
Suitable for CNC machines
Ausführung für CNC

Vite / Screw / Schraube

Art. Nr. 500003

Pcs 10

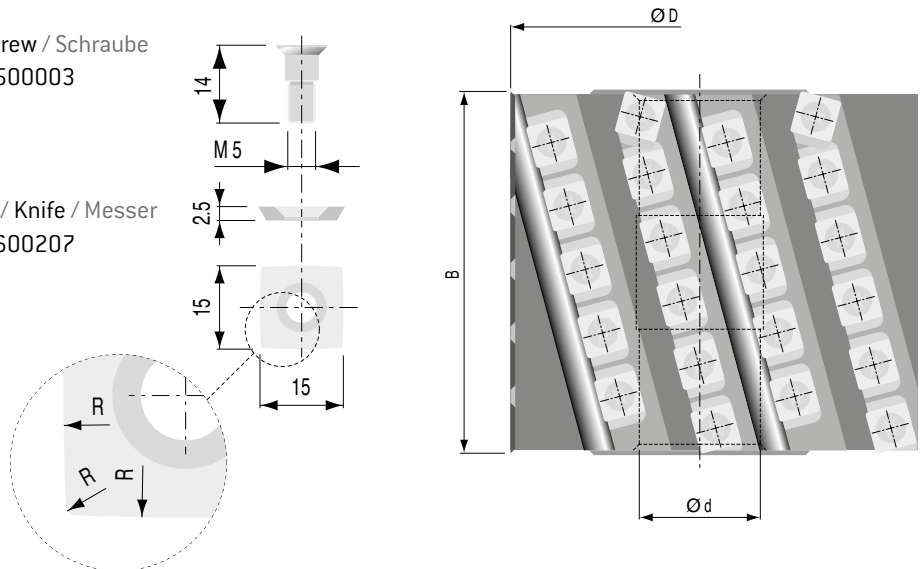
€

Coltello / Knife / Messer

Art. Nr. 600207

Pcs 10

€



Serraggio Hydro a richiesta
Execution with Hydro clamping
on request
Hydro Spannung auf Anfrage

Ø D [mm]	B [mm]	Ø d [mm]	Nr. Elices Helices Spiralen	Z	RPM min-max	Lega leggera Light alloy Aluminium		Acciaio Steel Stahl	
						Art. Nr.	€	Art. Nr.	€
70	80	25	4	14	19000	TH72FA51		TH72FM51	
80	80	30 (-35)	4	14	16700	TH72FA55		TH72FM55	
100	100	30 (-40)	4	18	13300	TH72FA60		TH72FM60	
125	100	40 (-60)	4	18	10600	TH72FA65		TH72FM65	
125	130	40 (-60)	4	22	10600	TH72FA66		TH72FM66	
125	180	40 (-60)	4	32	10600	TH72FA67		TH72FM67	
125	230	40 (-60)	4	40	10600	TH72FA68		TH72FM68	
125	100	40 (-60)	6	27	10600	TH72FA75		TH72FM75	
125	130	40 (-60)	6	33	10600	TH72FA76		TH72FM76	
125	180	40 (-60)	6	48	10600	TH72FA77		TH72FM77	
125	230	40 (-60)	6	60	10600	TH72FA78		TH72FM78	
140	100	40 (-60)	6	27	9500	TH72FA85		TH72FM85	
140	130	40 (-60)	6	33	9500	TH72FA86		TH72FM86	
140	180	40 (-60)	6	48	9500	TH72FA87		TH72FM87	
140	230	40 (-60)	6	60	9500	TH72FA88		TH72FM88	
140	100	40 (-60)	8	36	9500	TH72FA95		TH72FM95	
140	130	40 (-60)	8	44	9500	TH72FA96		TH72FM96	
140	180	40 (-60)	8	64	9500	TH72FA97		TH72FM97	
140	230	40 (-60)	8	80	9500	TH72FA98		TH72FM98	

TG05FC
MEC | HS | HW

TESTA PORTACOLTELLI PER GIUNZIONI TIPO "FINGER JOINT" FINGER JOINTING CUTTER MINIZINKENFRÄSER



Testa portacoltelli in acciaio ad alta resistenza a 4, 6 o 8 taglienti per eseguire giunzioni tipo "finger joint". Si tratta di un utensile componibile che permette di utilizzare più teste a seconda dello spessore del legno da lavorare. I coltelli sono intercambiabili e a profilo simmetrico. Le dimensioni delle giunzioni ottenibili sono: 4 mm, 10/10 mm, 10/11mm, 15/15 mm, 15/16,5 mm, 20/20 mm e 20/22 mm. I coltelli sono prodotti in HS trattati con un particolare rivestimento superficiale PVD che ne aumenta la durata fino a un 100% in più e in HW (solo per le dimensioni 10/10 mm e 10/11 mm). Le dimensioni dei coltelli 10/11 mm, 15/16,5 mm e 20/22 mm sono adatte per lavorazioni su macchine che utilizzano la lama ad intestare e su impianti specifici. I profili 15-15 e 20-20 sono adatti per macchine definite "compatte". L'utensile è adatto per eseguire giunzioni per utilizzi differenti, dalla produzione di profili lamellari in legno per serramenti ai semilavorati per arredamento. Con i profili più profondi (20/20 mm e 20/22 mm) si ottengono giunzioni per strutture portanti in legno lamellare (Norme DIN 68140 e DIN 1052), particolarmente adatte per grandi luci quali impianti sportivi, capannoni industriali, aree esp. ositive, ponti ecc. In fase d'ordine specificare il tipo di macchina sulla quale gli utensili saranno montati.

High precision modular cutter system for longitudinal glue jointing (DIN 68140), optional with 4, 6 or 8 PVD-coated HS-knives for highly stressed structural components in engineered timber construction (DIN 1052), window tooling and laminar profiling. Cutters with steel body, locked against rotation, suitable for mechanical feed only.

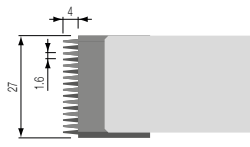
Anwendung

Hochpräzises, modulares Fräsersystem zum Einsatz auf Keilzinkenanlagen, Zinkenprofile für Längsverbindungen (DIN 68140) in hochbeanspruchten Bauteilen im Ingenieur-Holzbau (DIN 1052), sowie Fensterbau und in der Fußboden- und Leistenfabrikation.

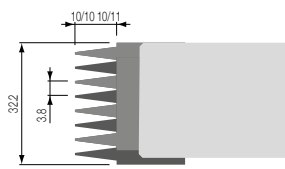
Technische Daten

Tragkörper aus Stahl mit wahlweise 4, 6 oder 8 auswechselbaren PVD-beschichteten HS- oder HW-Schneiden, Zinkenfräsersatz mit Verdrehsicherung, verlängerte Zinkenprofile für Maschinen mit Ablängvorrichtung erhältlich, für mechanischen Vorschub geeignet.

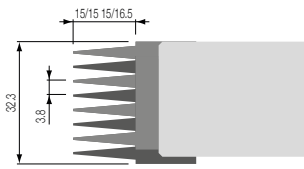
Corpo utensili esclusi coltelli / Cutter excluding knives / Fräskopf ohne Messer



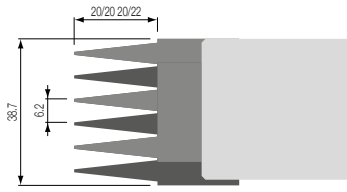
Ø D [mm]	B [mm]	Ø d [mm]	Z	RPM min-max	Art. Nr.	€
138 (160)	25,6	40 (-50)	4	8000	TG05FC01	
226 (250)	25,6	40 (-60)	6	5500	TG05FC02	






Ø D [mm]	B [mm]	Ø d [mm]	Z	RPM min-max	Art. Nr.	€
129 (160)	30,4	40 (-50)	4	8500	TG05FC03	
129 (160)	30,4	40 (-50)	6	8500	TG05FC13	
216 (250)	30,4	40 (-60)	6	5500	TG05FC04	
216 (250)	30,4	40 (-60)	8	5500	TG05FC14	



Ø D [mm]	B [mm]	Ø d [mm]	Z	RPM min-max	Art. Nr.	€
149 (170)	30,4	40 (-50)	4	8000	TG05FC05	
149 (170)	30,4	40 (-50)	6	8000	TG05FC15	
235 (260)	30,4	40 (-60)	6	5200	TG05FC06	
235 (260)	30,4	40 (-60)	8	5200	TG05FC16	

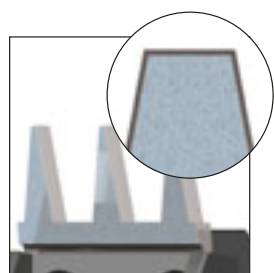


Ø D [mm]	B [mm]	Ø d [mm]	Z	RPM min-max	Art. Nr.	€
152 (180)	37,2	40 (-50)	4	7500	TG05FC07	
232 (260)	37,2	40 (-60)	6	5200	TG05FC08	

Ricambi / Spare Parts / Ersatzteile				
TG05FC	Art. Nr.	vedi/siehel/see CGMZO...	501404	400003
	Dim.		M8 x 20	4 mm
	Pcs		10	1
	€			

CGMZO
HS | HW

COLTELLI PER "FINGER JOINT" MINIZINKENMESSER FINGER JOINT KNIVES



TG05FC

Coltelli in HS rivestiti PVD / HS-knives with PVD coating / HS-Messer mit PVD-Beschichtung

L [mm]	Passo / Pitch / Teilung [mm]	Dim. [mm]	Art. Nr.	€
4	1,6	25,4 x 33 x 14	CGMZOS31	
10 / 10	3,8	28,4 x 38,5 x 14	CGMZOS62	
10 / 11	3,8	28,4 x 38,5 x 14	CGMZOS63	
15 / 15	3,8	28,4 x 38,5 x 14	CGMZOS64	
15 / 16,5	3,8	28,4 x 38,5 x 14	CGMZOS65	
20 / 20	6,2	32,5 x 48,5 x 14	CGMZOS66	
20 / 22	6,2	32,5 x 48,5 x 14	CGMZOS67	

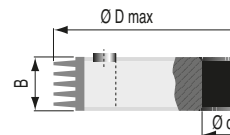
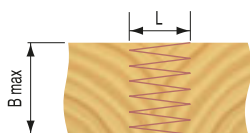
Coltelli in HW / TC-knives / HW-Messer

L [mm]	Passo / Pitch / Teilung [mm]	Dim. [mm]	Art. Nr.	€
10 / 10	3,8	28,4 x 38,5 x 14	CGMZOM62	
10 / 11	3,8	28,4 x 38,5 x 14	CGMZOM63	

TG05FC
MEC | HS | HW

TESTA PORTACOLTELLI PER GIUNZIONI TIPO "FINGER JOINT" FINGER JOINTING CUTTER MINIZINKENFRÄSER

Tabella per determinare il numero di teste da utilizzare in relazione allo spessore legno lavorato.
Choosing the correct cutter system.
Auswahl des geeigneten Fräsersystems.



L [mm]	B max [mm]	Frese / Cutters / Fräser nr.	Ø D [mm]	B [mm]
4/4 Passo Pitch Teilung 1,6 mm	25,2	1	160 (250)	27
	50,8	2	160 (250)	52,6
	76,4	3	160 (250)	78,2
	102	4	160 (250)	103,8
	127,6	5	160 (250)	129,4
	153,2	6	160 (250)	155
10/10 10/11 Passo Pitch Teilung 3,8 mm	29,8	1	160 (250)	32,2
	60,2	2	160 (250)	62,6
	90,6	3	160 (250)	93
	121	4	160 (250)	123,4
	151,4	5	160 (250)	153,8
	181,8	6	160 (250)	184,2
	212,2	7	160 (250)	214,6
15/15 15/16,5 Passo Pitch Teilung 3,8 mm	29,8	1	170 (260)	32,2
	60,2	2	170 (260)	62,6
	90,6	3	170 (260)	93
	121	4	170 (260)	123,4
	151,4	5	170 (260)	153,8
	181,8	6	170 (260)	184,2
	212,2	7	170 (260)	214,6
	242,6	8	170 (260)	245
	273	9	170 (260)	275,4
	303,4	10	170 (260)	305,8
20/20 20/22 Passo Pitch Teilung 6,2 mm	36,3	1	180 (260)	38,7
	73,5	2	180 (260)	75,9
	110,7	3	180 (260)	113,1
	147,9	4	180 (260)	150,3
	185,1	5	180 (260)	187,5
	222,3	6	180 (260)	224,7
	259,5	7	180 (260)	261,9
	296,7	8	180 (260)	299,1
	333,9	9	180 (260)	336,3

Per lavorazioni su macchine dotate di utensile ad intestare, in base al legno da lavorare e al dispositivo di pressatura, le giunzioni 4,5/5 mm, 10/11 mm, 15/16,5 mm e 20/22 mm, permettono di ottenere giunti a dita nel rispetto delle norme vigenti.

The knives with dimension 4,5/5 mm, 10/11 mm, 15/16,5 mm and 20/22 mm are usable on machines with cutt-off hogging set.

Beim Einsatz auf Maschinen mit Ablängvorrichtung werden Messer mit Zinkenlänge 4,5/5 mm, 10/11 mm, 15/16,5 mm und 20/22 mm eingesetzt.

1ª fase: intestatura con gruppo truciolatore e regolazione della lunghezza del dente.

1st operation: butting with hogging unit and finger length setting.

1. Arbeitsgang: Ablängen mit Zerspaner.



2ª fase: esecuzione giunzione

2nd operation: jointing operation.

2. Arbeitsgang: Profilieren.



"JOINTEX"
TG06FC

MEC | HS



TESTA PORTACOLTELLI PER GIUNZIONI TIPO "FINGER JOINT" FINGER JOINTING CUTTER MINIZINKENFRÄSER

Sistema modulare ad alte performances con serraggio dei coltelli brevettato per giunzioni longitudinali (DIN 68140), a 4-16 coltelli opzionali in HS sinterizzato rivestiti PVD. Specifico per elementi ad alta sollecitazione strutturale nell'ingegneria del legno per costruzione (DIN 1052), serramenti e profili lamellari. Frese con corpo in acciaio con sistema di sicurezza anti-rotazione, serraggio posteriore ai coltelli per una sostituzione sicura e rapida dei coltelli, adatto solo per macchine automatiche.

High performance modular cutter system with patented knife clamping for longitudinal glue jointing (DIN 68140), optional with 4 - 16 PVD-coated powder HS-knives for highly stressed structural components in engineered timber construction (DIN 1052), window tooling and laminar profiling. Cutters with steel body, locked against rotation, knife backside clamping for fast and easy knife change, suitable for mechanical feed only.

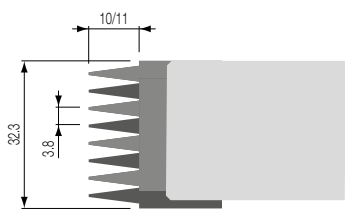
Anwendung

Hochpräzises, modulares Fräsersystem mit patentierter Messerspannung zum Einsatz auf Keilzinkenanlagen, Zinkenprofile für Längsverbindungen (DIN 68140) in hochbeanspruchten Bauteilen im Ingenieur-Holzbau (DIN 1052), sowie Fensterbau und in der Fußboden- und Leistenfabrikation.

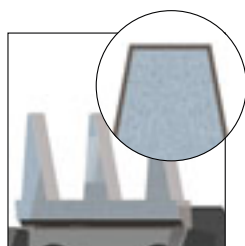
Technische Daten

Tragkörper aus Stahl mit wahlweise 4 - 16 auswechselbaren PVD-beschichteten, formgepressten HS-Schneiden, wesentlich höhere Standwege und dadurch weniger Messerwechsel dank neuartigem Schneidwerkstoff, Zinkenfräsersatz mit Verdrehsicherung, Spannung der Messer lediglich rückseitig durch Schrauben für schnellen und komfortablen Messerwechsel, für mechanischen Vorschub geeignet.

Corpo utensili esclusi coltelli / Cutter excluding knives / Fräskopf ohne Messer



Ø D [mm]	B [mm]	Ø d [mm]	Z	RPM min-max	Art. Nr.	€
129 (160)	30,4	40 (- 50)	4	8500	TG06FC03	
129 (160)	30,4	40 (- 50)	6	8500	TG06FC13	
218 (250)	30,4	40 (- 60)	6	5500	TG06FC04	
218 (250)	30,4	40 (- 60)	8	5500	TG06FC14	
218 (250)	30,4	40 (- 60)	10	5500	TG06FC18	
218 (250)	30,4	40 (- 60)	12	5500	TG06FC28	
218 (250)	30,4	40 (- 60)	14	5500	TG06FC44	
218 (250)	30,4	40 (- 60)	16	5500	TG06FC54	






Coltelli in HS sinterizzato con rivestimento PVD

Powder HS-knives with PVD-coating

Formgepresste HS-Messer mit PVD-Beschichtung

L [mm]	Passo / Pitch / Teilung [mm]	Dim. [mm]	Art. Nr.	€
10 / 11	3,8	28,5 x 40 x 14,1	CGMZ072	

Ricambi / Spare Parts / Ersatzteile

			
TG06FC	Art. Nr.	vedi/siehel/see CGMZ0...	502901
	Dim.		M8 x 25
	Pcs		10
	€		1

"JOINTEX" TG06FC

MEC | HS

TESTA PORTACOLTELLI PER GIUNZIONI TIPO "FINGER JOINT"
FINGER JOINTING CUTTER
MINIZINKENFRÄSER

SPECIFICHE TECNICHE TECHNICAL FEATURES TECHNISCHE EIGENSCHAFTEN

MANUTENZIONE / MAINTENANCE / SERVICE

Il sistema di bloccaggio dalla parte posteriore del coltello garantisce una maggiore pulizia delle viti con conseguente semplicità di sostituzione dei coltelli.

Knife backside-clamping protects screws from wood dust with relative advantages during knives replacement.

Messerspannung am Messerrücken und somit stets saubere Schraubenköpfe für schnellen und problemlosen Messerwechsel.

PERFORMANCE

PERFORMANCE

LEISTUNG

Coltelli in HSS sinterizzato con nuovo rivestimento PVD.

Knives made of powder HSS with new PVD coating.

Formgepresste HSS Messer mit neuartiger PVD Beschichtung.

PESO RIDOTTO / LIGHT WEIGHT /

GEWICHTSREDUKTION

La forma particolarmente scaricata, garantisce una notevole riduzione del peso dell'utensile rendendolo paragonabile al saldobrasato.

Considerable weight reduction thanks to wide recesses in tool bodies that makes it comparable to brazed tools.

Geringeres Werkzeuggewicht durch die offene Fräserform und die großen Spanräume.

DESIGN

Ampio scarico frontale dell'utensile per ottimale evacuazione del truciolo in lavorazioni con alti avanzamenti.

Special recesses in tooling geometry for efficient chip removal, excellent during high feed-rates machining.

Große Spanräume für hervorragenden Spanauswurf auch bei hohen Vorschüben.

TRASCINAMENTO

INTERLOCKING

VERDREHSICHERUNG

Garantito da un particolare accoppiamento degli utensili.

Granted by special coupling system of the tools.

Durch ein besonderes Verbindungssystem sind alle Werkzeuge gegen Verdrehung gesichert.

AUTOPOSIZIONAMENTO DEL COLTELLO BREVETTATO

KNIVES POSITIONING PRECISION

HOCHPRÄZISE MESSERSPANNUNG

Massima precisione di accoppiamento tra utensile e coltello.

Granted by the special PATENTED knife geometry.

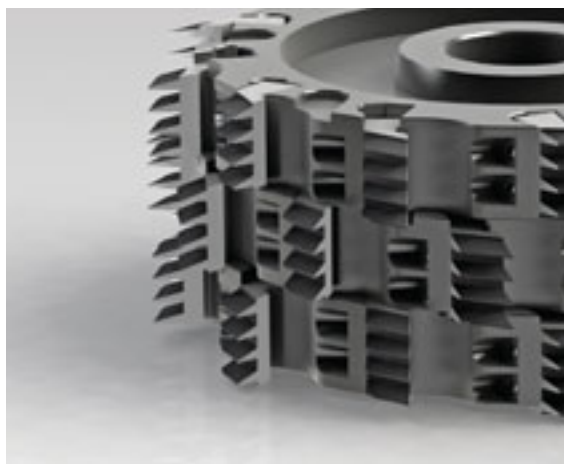
Patentierter Messerpositionierung.

ELEVATA PRODUTTIVITÀ / HIGH PRODUCTIVITY / HOCHLEISTUNG

Esecuzione fino a 12 denti (Z=6 + 6 sul Ø 250) per altissime prestazioni con avanzamenti oltre 6 cicli/min.

Up to 12 teeth (Z=6 + 6 on Ø 250) for extremely high performances with feed rates over 6 cycles/min.

Ausführung bis 12 Zähne (Z=6 + 6 auf Ø 250) für Hochgeschwindigkeit mit Vorschüben über 6 Zyklen/Min.



TG25FM

MEC | HS | HW

TESTE MODULARI PER GIUNZIONI CON INSERTO INTERCAMBIABILE MODULAR FINGER JOINTING CUTTER SYSTEM MODULARES ZINKENFRÄSER-SYSTEM



Teste in acciaio ad alta resistenza con inserti in HW per eseguire giunzioni tipo "finger joint" verticali e orizzontali profilo 10/11. L'utensile risulta molto versatile e garantisce un elevato rendimento sia nella lavorazione di legni teneri sia di quelli duri/esotici. Facile sostituzione e posizionamento dei coltelli, possibilità di riaffilatura (3,5 mm max), elevato rendimento sugli impianti industriali con basso consumo di energia e adatto unicamente all'utilizzo MEC.

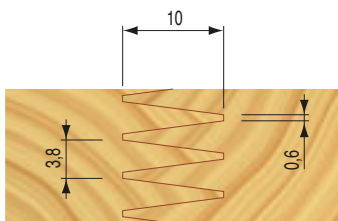
Steel cutters mounted on coupling bush with Tungsten Carbide inserts for high-end horizontal and vertical profile 10/11 "finger"-type joints, usable on industrial finger joint lines, easy replacement and positioning of the TC-inserts, re-sharpening zone 3,5 mm, suitable for MEC feed only.

Anwendung

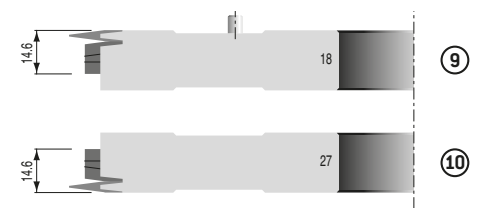
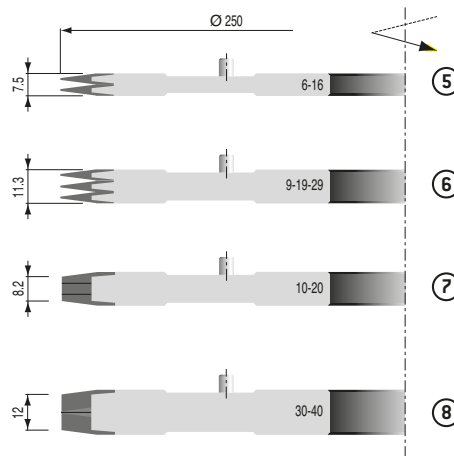
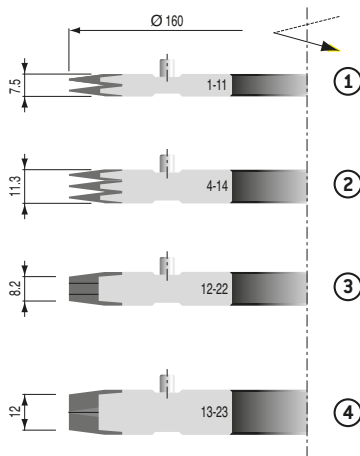
Modulares Fräsersystem zum Einsatz auf Keilzinkenanlagen, für Zinkenverbindungen in Weich- und Hartholz, speziell für Fensterkanteln geeignet.

Technische Daten

Tragkörper aus Stahl, auf Spannbüchse montiert mit Messereinsätzen aus Hartmetall (HW), 4, 6 oder 8 Schneiden für höchste Produktivität und hohe Standwege auf Keilzinkenanlagen, 3,5 mm Nachschleifzone, komfortabler Messerwechsel und präzise Messerpositionierung, je nach Anlage mit Werkzeugdurchmesser 160 mm oder 250 mm lieferbar.



Ø D [mm]	B [mm]	Ø d [mm]	Z	Nr.	RPM min-max	Art. Nr.	€
①	160	7,6	50 (- 70)	2+2	1	9000	TG25FM01
	160	7,6	50 (- 70)	3+3	11	9000	TG25FM11
②	160	11,4	50 (- 70)	2+2+2	4	9000	TG25FM04
	160	11,4	50 (- 70)	3+3+3	14	9000	TG25FM14
③	160	11,4	50 (- 70)	2+2	12	9000	TG25FM12
	160	11,4	50 (- 70)	3+3	22	9000	TG25FM22
④	160	15,2	50 (- 70)	2+2+2	13	9000	TG25FM13
	160	15,2	50 (- 70)	3+3+3	23	9000	TG25FM23
⑤	250	7,6	50 (- 70)	3+3	6	5500	TG25FM06
	250	7,6	50 (- 70)	4+4	16	5500	TG25FM16
	250	7,6	50 (- 70)	6+6	36	5500	TG25FM36
⑥	250	11,4	50 (- 70)	3+3+3	9	5500	TG25FM09
	250	11,4	50 (- 70)	4+4+4	19	5500	TG25FM19
	250	11,4	50 (- 70)	5+5+5	29	5500	TG25FM29
	250	11,4	50 (- 70)	6+6+6	39	5500	TG25FM39
⑦	250	11,4	50 (- 70)	3+3	10	5500	TG25FM10
	250	11,4	50 (- 70)	4+4	20	5500	TG25FM20
	250	11,4	50 (- 70)	6+6	50	5500	TG25FM50
⑧	250	15,2	50 (- 70)	3+3+3	30	5500	TG25FM30
	250	15,2	50 (- 70)	4+4+4	40	5500	TG25FM40
⑨	250	22	50 (- 70)	3+3+3	18	5500	TG25FM18
⑩	250	22	50 (- 70)	3+3+3	27	5500	TG25FM27



TG25FM

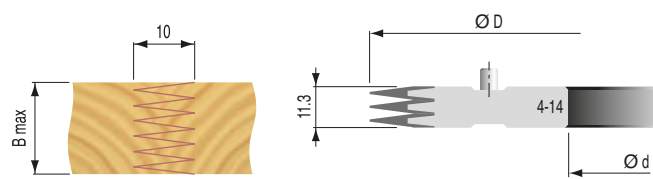
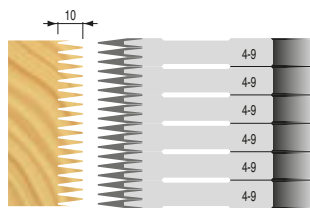
MEC | HW

TESTE MODULARI PER GIUNZIONI CON INSERTO INTERCAMBIABILE

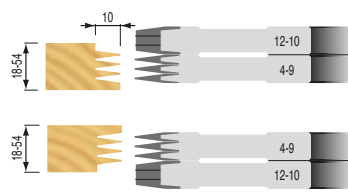
MODULAR FINGER JOINTING CUTTER SYSTEM

MODULARES ZINKENFRÄSER-SYSTEM

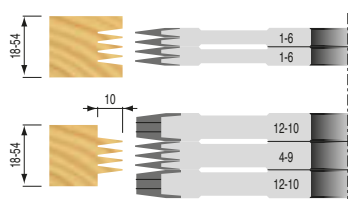
Giunto verticale / Vertical joint / Vertikale Zinkung



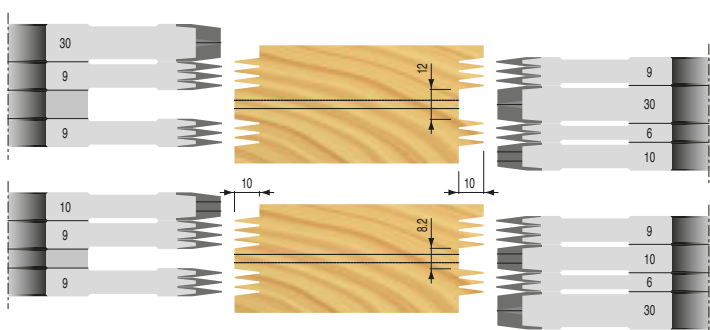
Giunto orizzontale / Horizontal joint / Horizontale Zinkung



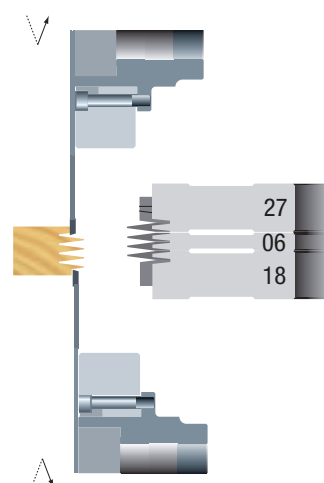
Giunto orizzontale per macchine "doppie"
Horizontal joints on double-end machines
Horizontale Zinkung mit unterschiedlichen Stegen



Giunto orizzontale "re-saw"
Horizontale Zinkung
"Re-saw" horizontal joint



Horizontale Zinkung mit mittigem Steg
Jointage horizontal avec les bords externes centrés
Giunto orizzontale con piani laterali centrati



B max [mm]	Frese / Cutters / Fräser nr.	B [mm]
10,8	1	11,3
22,2	2	22,7
33,6	3	34,1
45	4	45,5
56,4	5	56,9
67,8	6	68,3
79,2	7	79,7
90,6	8	91,1
102	9	102,5
113,4	10	113,9
124,8	11	125,3
136,2	12	136,7
147,6	13	148,1
159	14	159,5
170,4	15	170,9
181,8	16	182,3
193,2	17	193,7
204,6	18	205,1

Ricambi / Spare Parts / Ersatzteile

TG06FC	Art. Nr.	600731 (dx)	600732 (sx)	500215	600734	600735	500216	400425
	Dim.	38 x 13 x 3,7	38 x 13 x 3,7	M5 x 7	38 x 13 x 7,5	38 x 13 x 7,5	M5 x 13	T25
	Pcs			10			10	1
	€							

TAL2FM

MEC | HW

TRUCIOLATORE IN LEGA LEGGERA**HOGGING UNITS****SEGMENT-ZERSPANER**

Il corpo in lega leggera è corredato da 4 oppure 6 «settori» con taglienti in HW riaffilabili come una sega circolare e sostituibili. L'accoppiamento di più elementi per spessori di taglio multipli di 30 mm può avvenire mediante specifico assemblaggio da richiedere in sede di ordinazione. I tipi «A» e «B» hanno il mozzo interno e i tipi «C» e «D» il mozzo a filo con lo spessore del corpo.

Light alloy body equipped with 4 or 6 TCT cutting segments (resharpenable), assembly system with cutting widths of multiples of 30 mm, used for hogging solid timber, panels and edge banding, suitable for mechanical feed.


Anwendung

Zerspaner für die Längs- und Querspannung von Vollhölzern und Holz sowie Verbundwerkstoffen, zum Einsatz in Mehrblattkreissägen, Doppelend-Profilern und in der Kantenbearbeitung.

Technische Daten

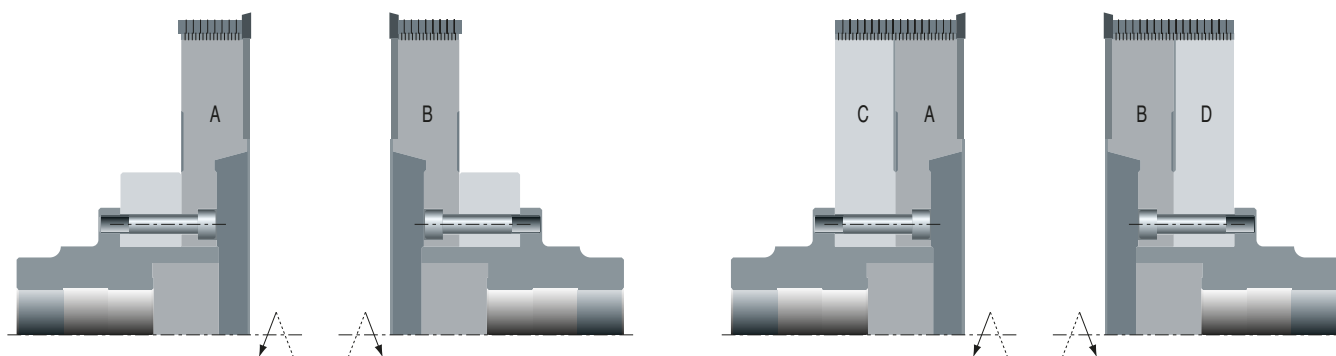
Alu-Tragkörper mit 4 bzw. 6 austauschbaren Hartmetall-Segmenten (nachschrärfbar), Aufbausystem mit Verbreiterung des Zerspaners um jeweils 30 mm, für mechanische Vorschübe geeignet.

Corpo truciolatore / Hogging unit body / Zerspanerkörper

Ø D [mm]	B [mm]	Ø d [mm]	Z	Type		RPM min-max	Rotation	Art. Nr.	€
250	30	60/80	32	A	4	6000	SX	TAL2FM01	
250	30	60/80	32	B	4	6000	DX	TAL2FM02	
300	30	60/80	42	A	6	5000	SX	TAL2FM03	
300	30	60/80	42	B	6	5000	DX	TAL2FM04	
350	30	60/80	48	A	6	4000	SX	TAL2FM05	
350	30	60/80	48	B	6	4000	DX	TAL2FM06	








Elementi per accoppiamento / Coupling elements / Erweiterungen

250	30	60/80	32	C	4	6000	SX	TAL2FM11	
250	30	60/80	32	D	4	6000	DX	TAL2FM12	
300	30	60/80	42	C	6	5000	SX	TAL2FM13	
300	30	60/80	42	D	6	5000	DX	TAL2FM14	
350	30	60/80	48	C	6	4000	SX	TAL2FM15	
350	30	60/80	48	D	6	4000	DX	TAL2FM16	



Lama circolare per truciolatore / Saw blade for hogging unit / Kreissäge für Zerspaner

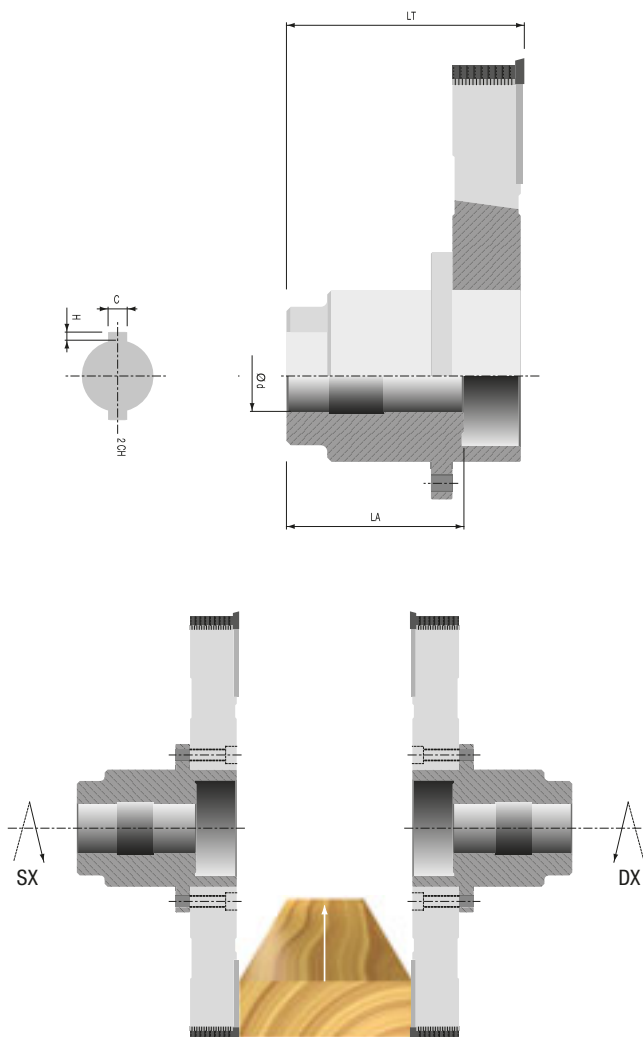
Ø D [mm]	B [mm]	Ø d [mm]	Z	Rotation	Art. Nr.	€
255	4,2	155	40	DX	STR1FM20	
255	4,2	155	60	DX	STR1FM22	
300	4,2	155	48	DX	STR1FM24	
300	4,2	155	72	DX	STR1FM26	
350	4,2	200	84	DX	STR1FM30	
255	4,2	155	40	SX	STR1FM21	
255	4,2	155	60	SX	STR1FM23	
300	4,2	155	48	SX	STR1FM25	
300	4,2	155	72	SX	STR1FM27	
350	4,2	200	84	SX	STR1FM31	

Ricambi / Spare Parts / Ersatzteile								
TAL2FM	Art. Nr.	500605	500701	601107	601108	601109	400114	400115
	Dim.	M6 x 16	M8 x 20	Z = 8 / Ø 245	Z = 7 / Ø 295	Z = 8 / Ø 345	4 mm	5 mm
	Pcs	10	10				1	1
	€							

In fase di ordine è importante specificare il tipo di macchina sulla quale viene montato il truciolatore, e possibilmente tutte le dimensioni indicate, compresa la rotazione.

When placing an order please state all relevant technical requirements like machine type, rotation, dimension etc.

Bei Bestellung sind Angaben über Maschinentyp, technische Besonderheiten und Drehrichtung zwingend erforderlich.



TH34FM

MEC | HW

GRUPPO TESTE CON COLTELLINI PER RAGGIARE E SMUSSARE
ROUNDING CUTTER SET
FÜGE- UND ABRUNDGARNITUR


Gruppo teste con coltellini composto da 3 elementi. L'elemento A e l'elemento C sono sagomati e consentono di effettuare smussi a 45° e/o raggi [R=2, 3, 4, 5, 6 mm].

Gli elementi centrali B e D, costruiti con angolo di taglio assiale, spianano la parte diritta del pannello da lavorare. In fase di ordine indicare il tipo di coltello desiderato.

Cutter set consisting of 3 cutters with steel body and Tungsten Carbide knives for jointing and rounding/bevelling in moulding machines, axial angle alignment of the knives for reduced cutting pressure and excellent cutting results, suitable for mechanical feed.

Anwendung

Hochleistungs-Werkzeug zum zeitgleichen Fügen und Abrunden/Fasen der Kanten in Kehlautomaten und Vierseitern.

Technische Daten

Dreiteiliger Werkzeugsatz mit Tragkörpern aus Stahl und HW-Wechselmessern für hohe Standwege, Achswinkel der Fügescneiden für reduzierten Schnittdruck und exzellente Schnittleistung. In Profilmesser A und C können sowohl Radius- wie auch Fasemesser eingesetzt werden, für mechanische Vorschübe geeignet.

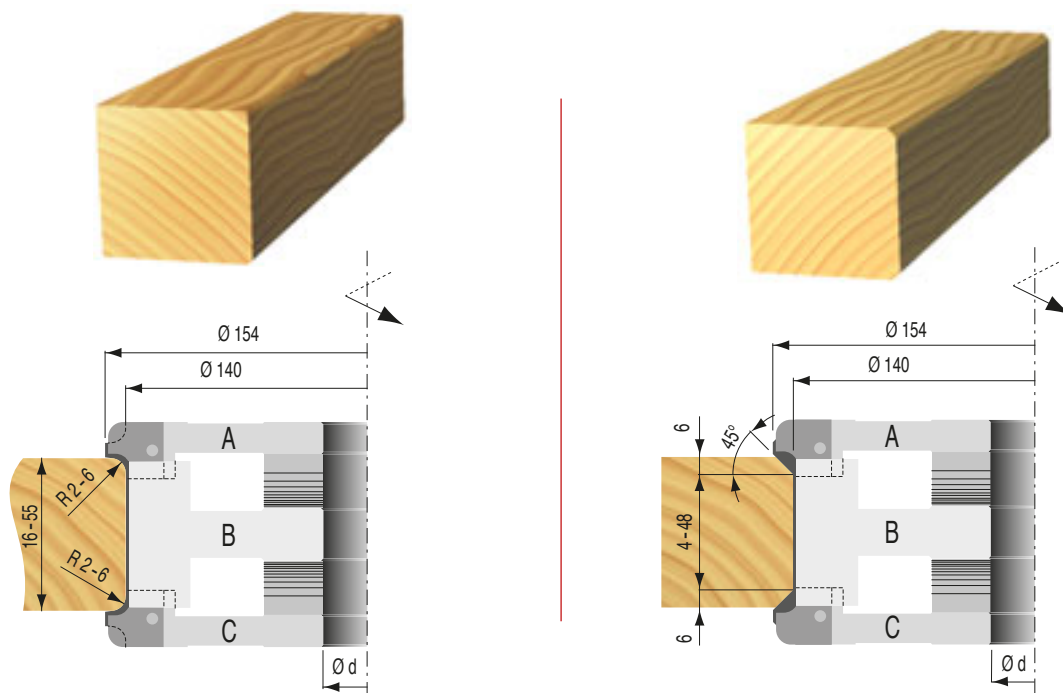
Set	Ø D [mm]	B [mm]	Ø d [mm]	Z	RPM min-max	Art. Nr.	€
TH34FM10	154	20	40 (30-50)	3	9500	Ⓐ TH34FM01	
	140	50	40 (30-50)	3	9500	Ⓑ TH34FM02	
	154	20	40 (30-50)	3	9500	Ⓒ TH34FM03	

Ø D [mm]	B [mm]	Ø d [mm]	Z	Type	RPM min-max	Art. Nr.	€
154	20	40 (30-50)	3	A	9500	TH34FM01	
140	50	40 (30-50)	3	B	9500	TH34FM02	
154	20	40 (30-50)	3	C	9500	TH34FM03	
140	60	40 (30-50)	3	D	9500	TH34FM04	

Prezzo incluso coltelli. In fase d'ordine specificare il profilo richiesto.

Price including knives. When ordering please specify the profile required.

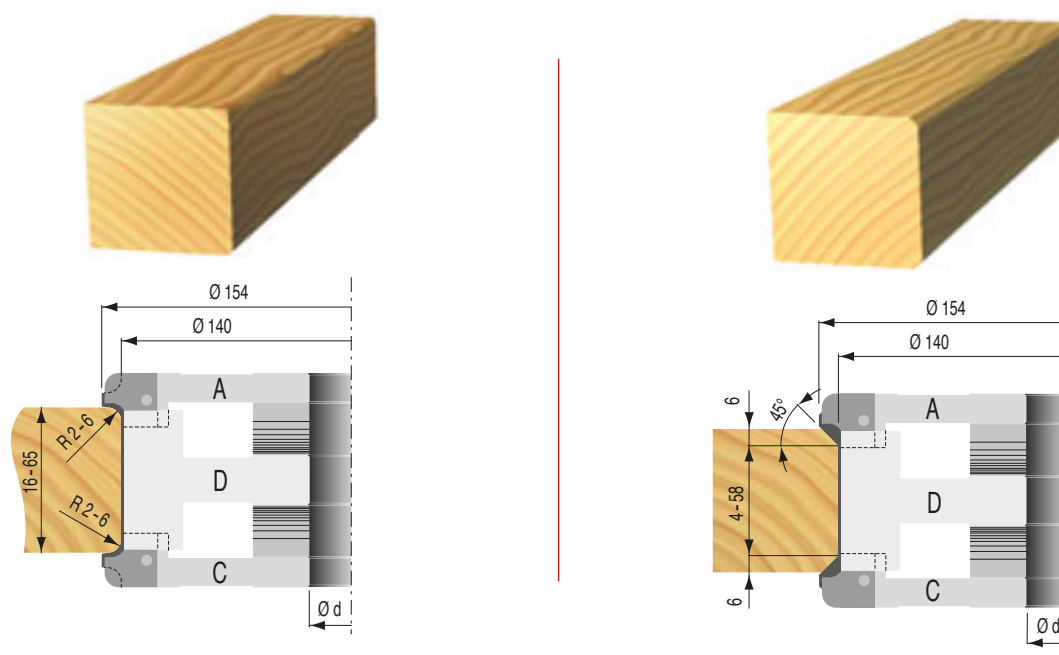
Profilmesser im Lieferumfang enthalten. Bitte das benötigte Profil bei Bestellung angeben.

TH34FM10

TH34FM

MEC | HW

GRUPPO TESTE CON COLTELLINI PER RAGGIARE E SMUSSARE
 ROUNDING CUTTER SET
 FÜGE- UND ABRUNDGARNITUR



Coltelli profilati / Profiled knives / Profilmesser

Type	Dim.	R [mm]	Art. Nr.	Nr.	€
	20 x 20,5 x 2	2	602017	2	
	20 x 20,5 x 2	3	602019	2	
	20 x 20,5 x 2	4	602021	2	
	20 x 20,5 x 2	5	602023	2	
	20 x 20,5 x 2	6	602025	2	
	20 x 20,5 x 2	a = 45°	602026	2	

Ricambi / Spare Parts / Ersatzteile				
TH34FM01	Art. Nr.	Vedi coltelli profilati / see profiled knives / siehe Profilmesser	350055	502402
	Dim.	20 x 20,5 x 2	16 mm	M7 x 21
	Pcs			
	€			
TH34FM03	Art. Nr.	Vedi coltelli profilati / see profiled knives / siehe Profilmesser	350053	502402
	Dim.	20 x 20,5 x 2	16 mm	M7 x 21
	Pcs			
	€			
TH34FM02	Art. Nr.	600006	350009	502402
	Dim.	50 x 12 x 1,5	46 mm	M7 x 21
	Pcs			
	€			
TH34FM04	Art. Nr.	600007	350010	502402
	Dim.	60 x 12 x 1,5	54 mm	M7 x 21
	Pcs			
	€			

TH20FM

MEC | HW

**GRUPPI TESTE CON COLTELLINI PER PARCHETTI E PERLINE
TONGUE AND GROOVE CUTTER SET
NUT- UND FEDERFRÄSERGARNITUR**

Gruppi di teste con coltellini, intercambiabili tra loro per la realizzazione di parchetti e perline su macchine scorniciatrici. Gli utensili sono regolabili mediante anelli distanziali che permettono di ottenere gli spessori e i profili desiderati. I gruppi sono corredati da bussole di accoppiamento per l'assemblaggio delle singole teste.

Set of steel cutters mounted on assembly bush for producing up to 17 different variations of tongue and groove profiles on moulding machines, suitable for mechanical feed.

Anwendung

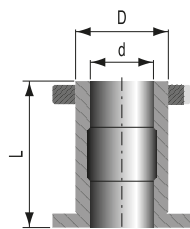
Fräsersatz zur Herstellung von Nut- und Federprofilen auf mehrspindeligen Kehlautomaten.

Technische Daten









Fräskörper aus Stahl auf Büchse montiert mit Profil- und Wendemessern aus Hartmetall, 24 untereinander austauschbare Einzelfräser für die Herstellung von bis zu 17 unterschiedlichen Profilvariationen, für mechanische Vorschübe geeignet.

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	I	S	Nr.	RPM min-max	Art. Nr.	€
140	15	50	4	2			1	10000	TH20FM01	
140	15	50	4	2			2	10000	TH20FM02	
127	12	50	2			2	3	10000	TH20FM03	
155	20	50	4		2		4	10000	TH20FM25	
155	20	50	4		2		5	10000	TH20FM26	
139	15	50	4	2			6	10000	TH20FM06	
175	15	50	4	2			7	8000	TH20FM07	
155	20	50	4		2		8	9000	TH20FM27	
160	15	50	4	2			9	9000	TH20FM09	
155	20	50	4		2		10	9000	TH20FM28	
168	20	50	4		2		11	9500	TH20FM11	
149	15	50	4	2			12	9500	TH20FM12	
168	20	50	4		2		13	8500	TH20FM13	
168	20	50	4		2		14	8500	TH20FM14	
154	12	50	2				15	9000	TH20FM15	
154	12	50	2				16	9000	TH20FM16	
122	12	50	2			2	17	10000	TH20FM17	
160	20	50	4		2		18	10000	TH20FM18	
160	20	50	4		2		19	10000	TH20FM19	
160	20	50	4		2		20	9000	TH20FM20	
160	20	50	4		2		21	9000	TH20FM21	
175	20	50	4	2			22	8000	TH20FM22	
160	20	50	4		2		23	9000	TH20FM23	
195	20	50	4				24	7000	TH20FM24	

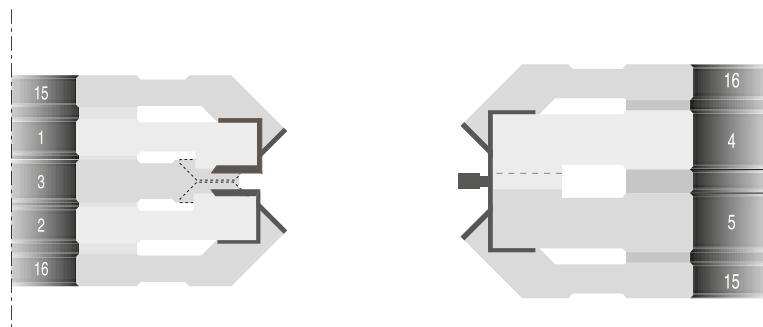
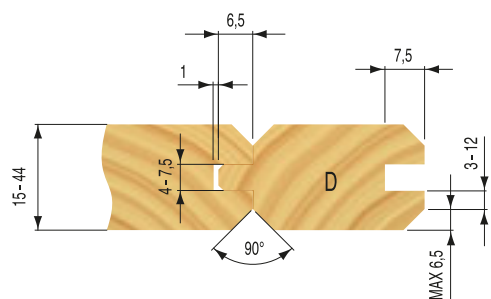
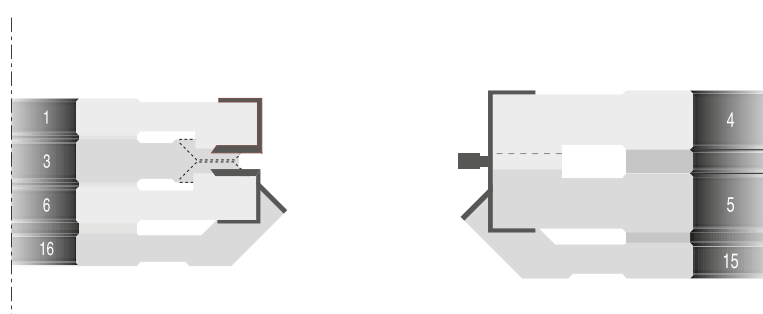
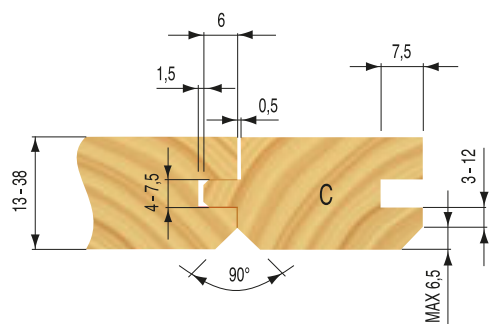
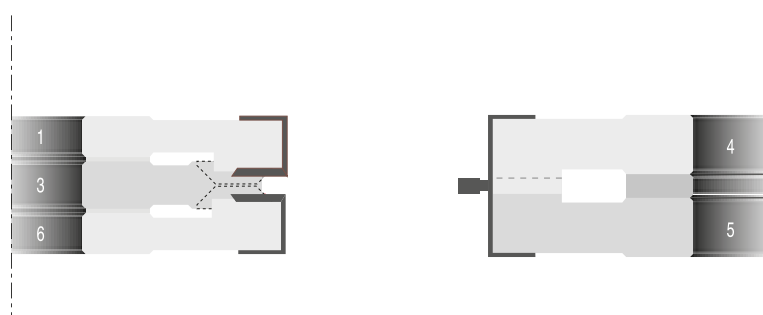
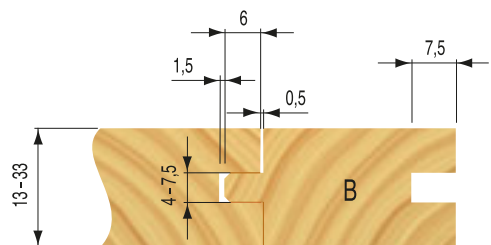
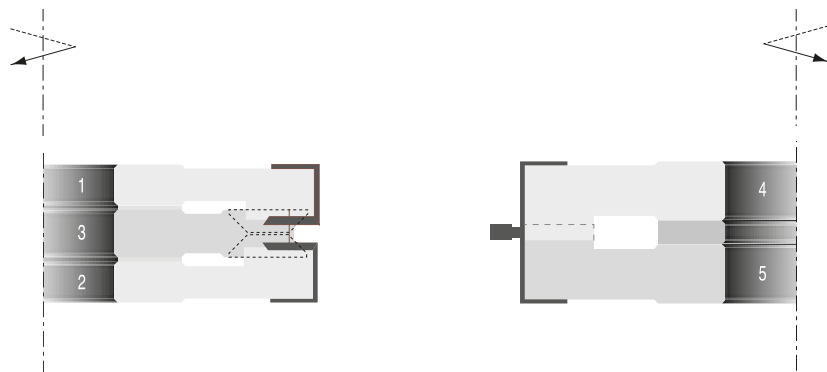
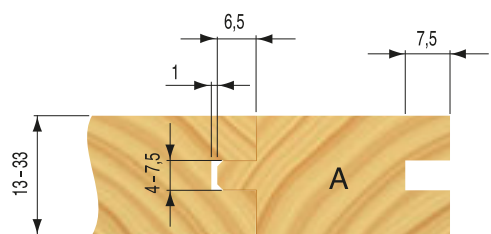
Bussole di accoppiamento / Assembly bushes / Spannbüchsen



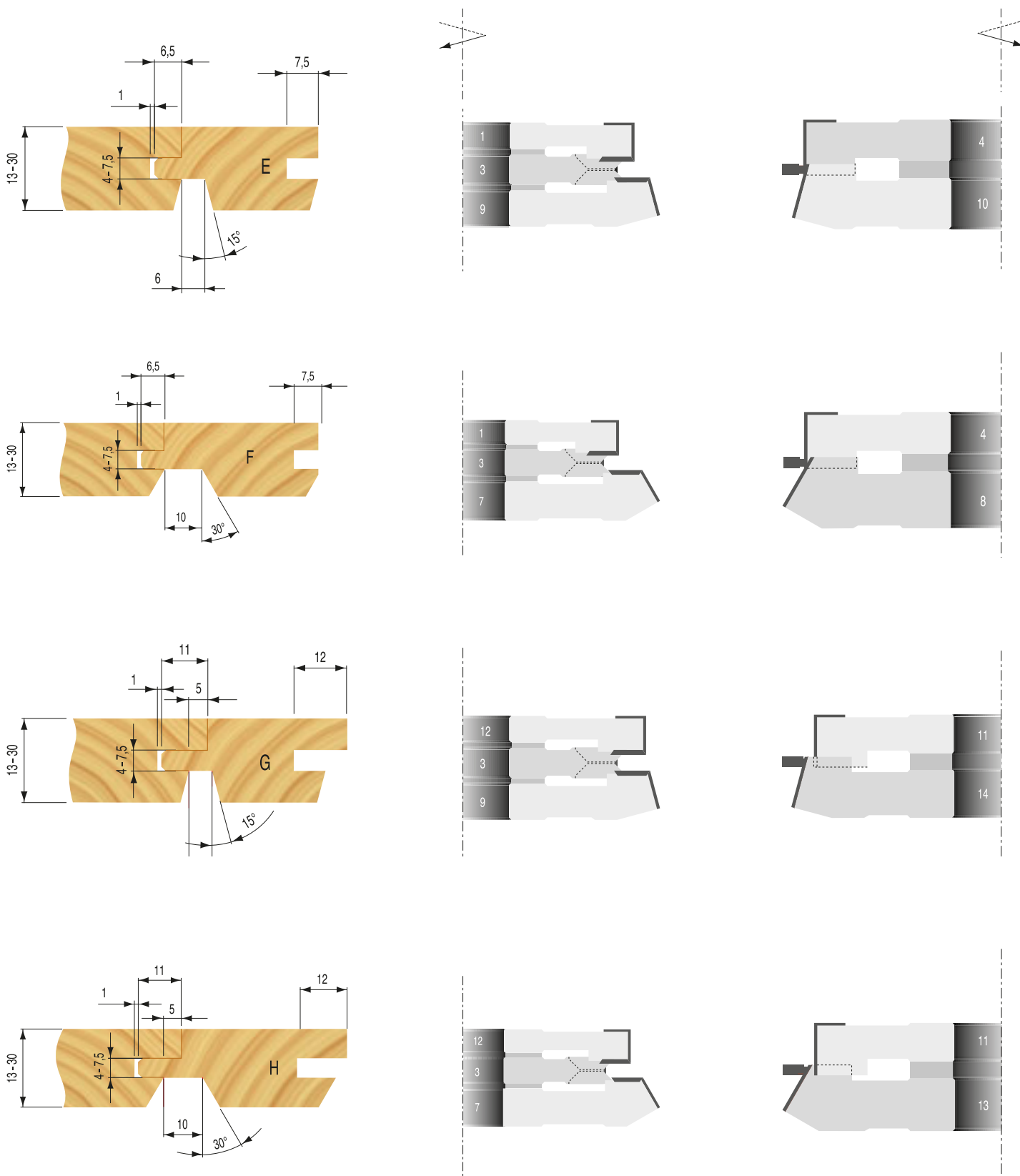
		D x L x d [mm]	Art. Nr.	€
dx		50 x 105 x 30	1002040030	
		50 x 105 x 35	1002050035	
		50 x 105 x 40	1002060040	
sx		50 x 105 x 30	1002140030	
		50 x 105 x 35	1002150035	
		50 x 105 x 40	1002160040	

Ricambi / Spare Parts / Ersatzteile									
TH20FM01 TH20FM02 TH20FM06	Art. Nr.	600003	350004	502404	600201	500002			
	Dim.	15 x 12 x 1,5	11 mm	M7 x 19	14 x 14 x 2	M5 x 7			
	Pcs								
	€								
TH20FM07 TH20FM09 TH20FM12	Art. Nr.	600003	350004	502402	600201	500002		500201	600601/02
	Dim.	15 x 12 x 1,5	11 mm	M7 x 21	14 x 14 x 2	M5 x 7		M6 x 21	27 x 6 x 14
	Pcs								
	€								
TH20FM03 TH20FM17	Art. Nr.	600002	350023	502403				500205	
	Dim.	12 x 12 x 1,5	9 mm	M5 x 18				M6 x 15	
	Pcs								
	€								
TH20FM18	Art. Nr.	600004	350005	502402			600704	500205	
	Dim.	20 x 12 x 1,5	16 mm	M7 x 21			48 x 4 x 16	M6 x 15	
	Pcs								
	€								
TH20FM19	Art. Nr.	600004	350005	502402			600703	500205	
	Dim.	20 x 12 x 1,5	16 mm	M7 x 21			48 x 4 x 16	M6 x 15	
	Pcs								
	€								
TH20FM13 TH20FM14 TH20FM20 TH20FM21	Art. Nr.	600004	350005	502404			600703	500205	
	Dim.	20 x 12 x 1,5	16 mm	M7 x 19			48 x 4 x 16	M6 x 15	
	Pcs								
	€								
TH20FM11	Art. Nr.	600004	350005	502402			600710		
	Dim.	20 x 12 x 1,5	16 mm	M7 x 21			60 x 4 x 16		
	Pcs								
	€								
TH20FM15 TH20FM16	Art. Nr.	600002	350023	502403					
	Dim.	12 x 12 x 1,5	9 mm	M5 x 18					
	Pcs								
	€								
TH20FM22	Art. Nr.	601461	350024	502402	600201	500002			
	Dim.	19,8 x 22 x 2	17,6 mm	M7 x 21	14 x 14 x 2	M5 x 7			
	Pcs								
	€								
TH20FM23	Art. Nr.	601462	350005	502404			600703	500205	
	Dim.	19,8 x 22 x 2	16 mm	M7 x 19			48 x 4 x 16	M6 x 15	
	Pcs								
	€								
TH20FM24	Art. Nr.	601463	350082	502402					
	Dim.	19,8 x 34 x 2	16,5 mm	M7 x 21					
	Pcs								
	€								
TH20FM25 TH20FM26	Art. Nr.	600004	350005	502402			600766	500205	
	Dim.	20 x 12 x 1,5	16 mm	M7 x 21			37 x 4 x 16	M6 x 15	
	Pcs								
	€								
TH20FM27	Art. Nr.	600004	350005	502404	600201	500002	600766	500205	
	Dim.	20 x 12 x 1,5	16 mm	M7 x 19	14 x 14 x 2	M5 x 7	37 x 4 x 16	M6 x 15	
	Pcs								
	€								
TH20FM28	Art. Nr.	600004	350005	502404			600766	500205	
	Dim.	20 x 12 x 1,5	16 mm	M7 x 19			37 x 4 x 16	M6 x 15	
	Pcs								
	€								

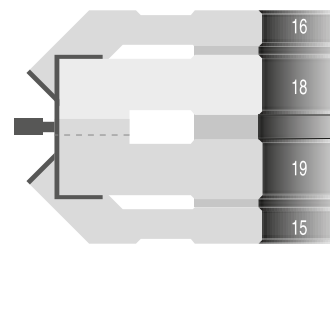
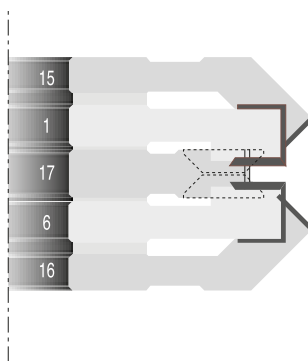
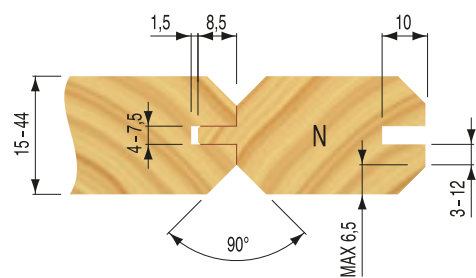
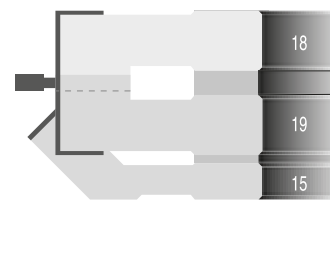
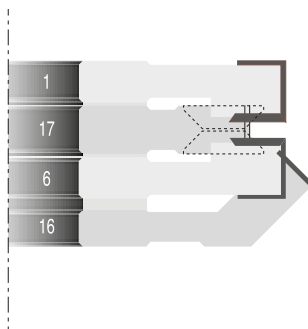
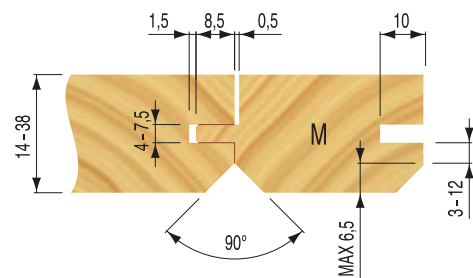
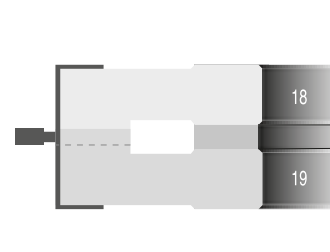
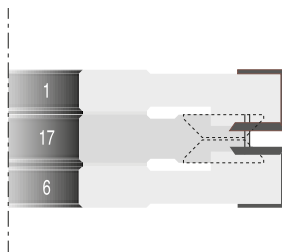
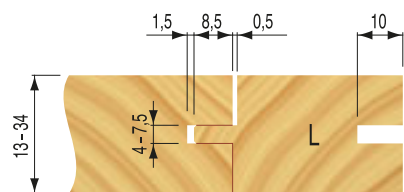
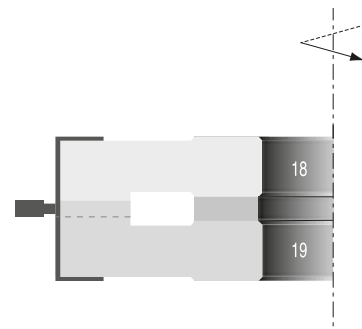
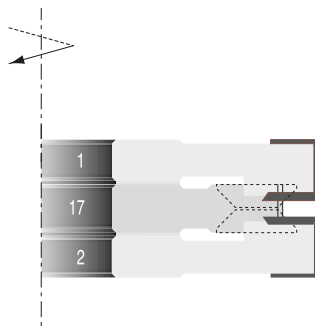
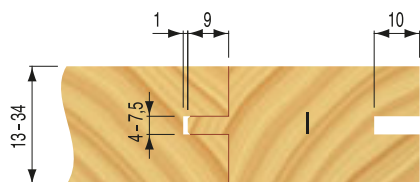
Profili – ridotta profondità di incastro / Profiles - short tongue / Profilbeispiele - kurze Feder



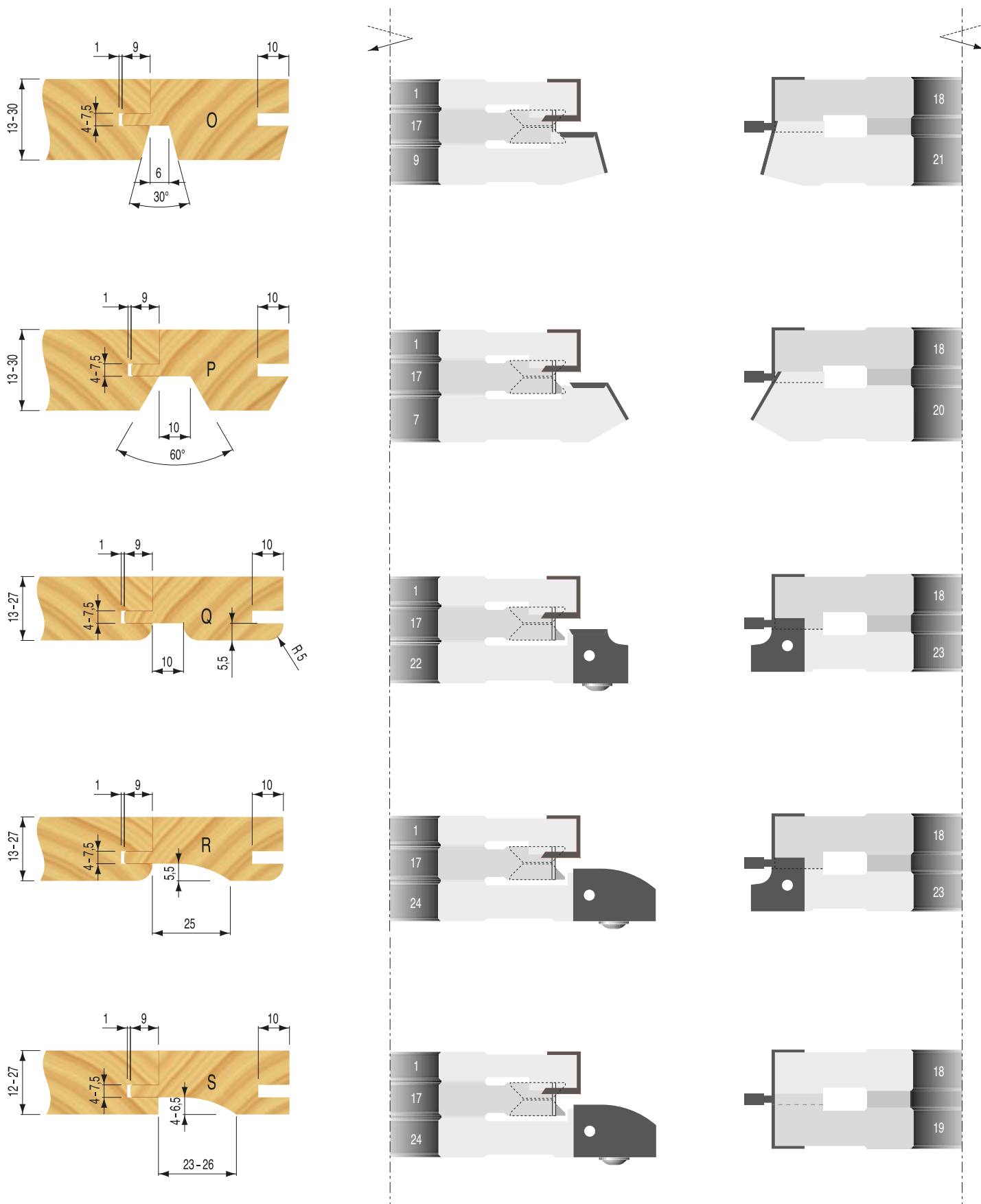
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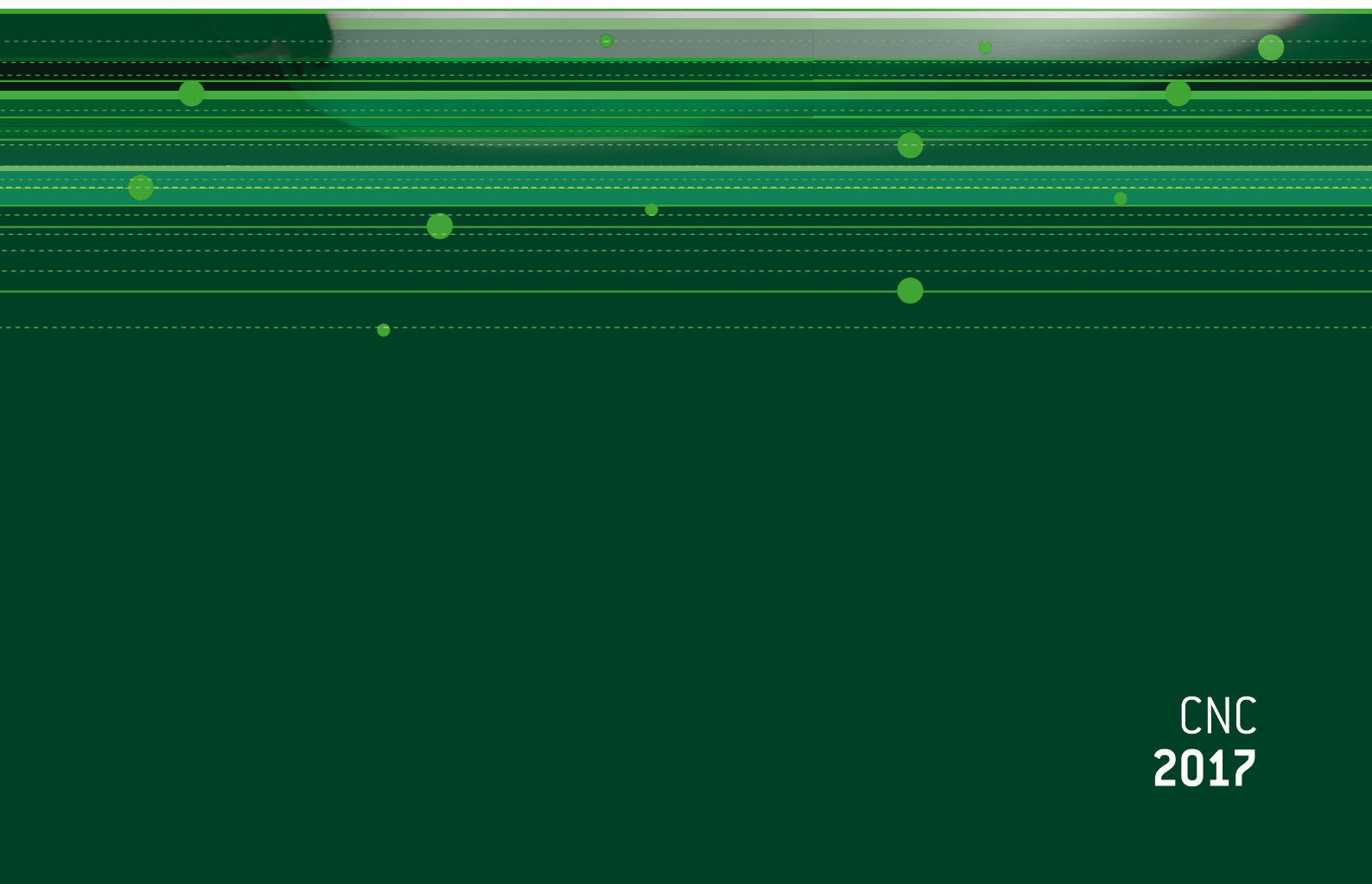
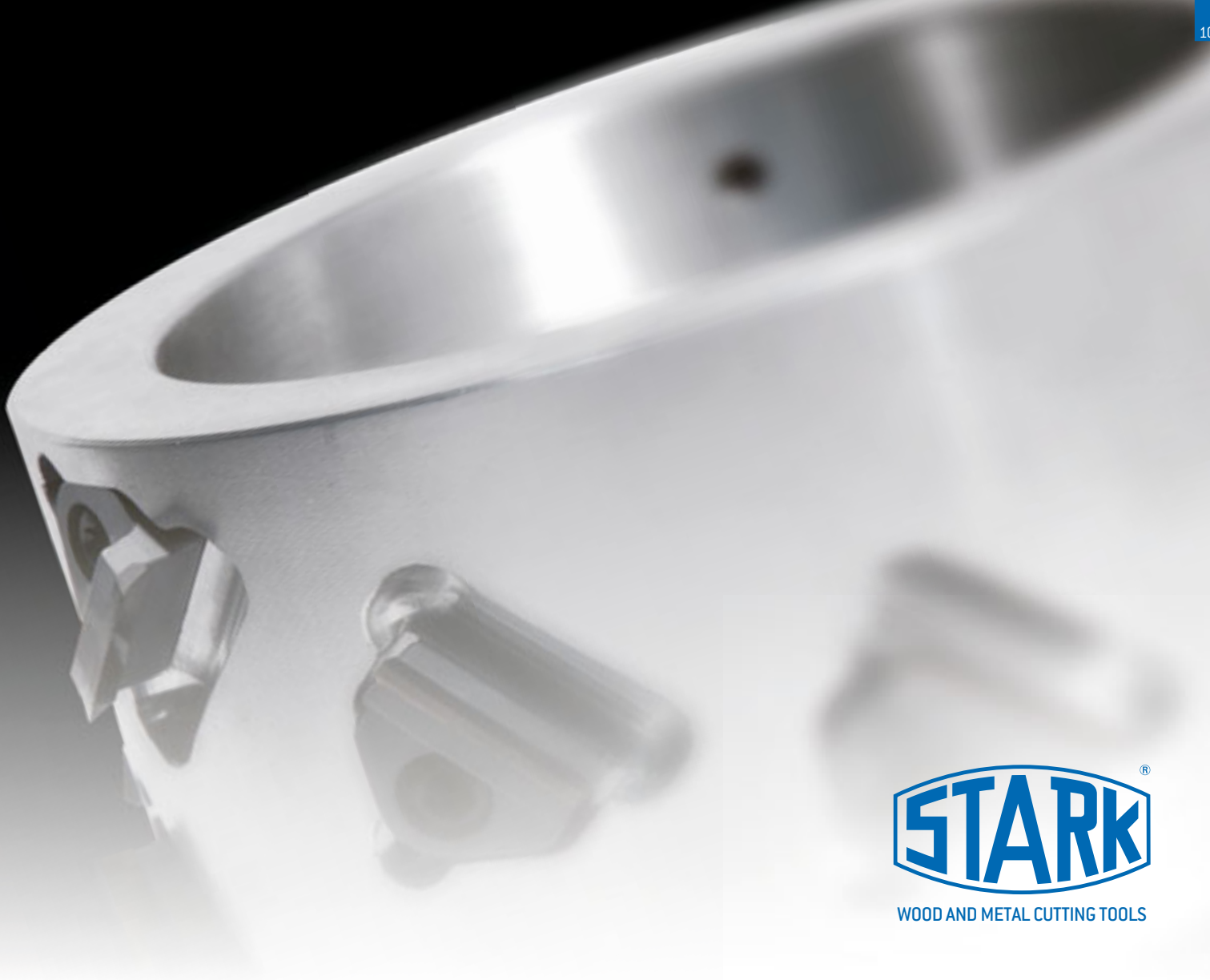


Profili – elevata profondità di incastro / Profiles - long tongue / Profilbeispiele - lange Feder



Profili – elevata profondità di incastro / Profiles - long tongue / Profilbeispiele - lange Feder





CNC
2017



CNC 2017

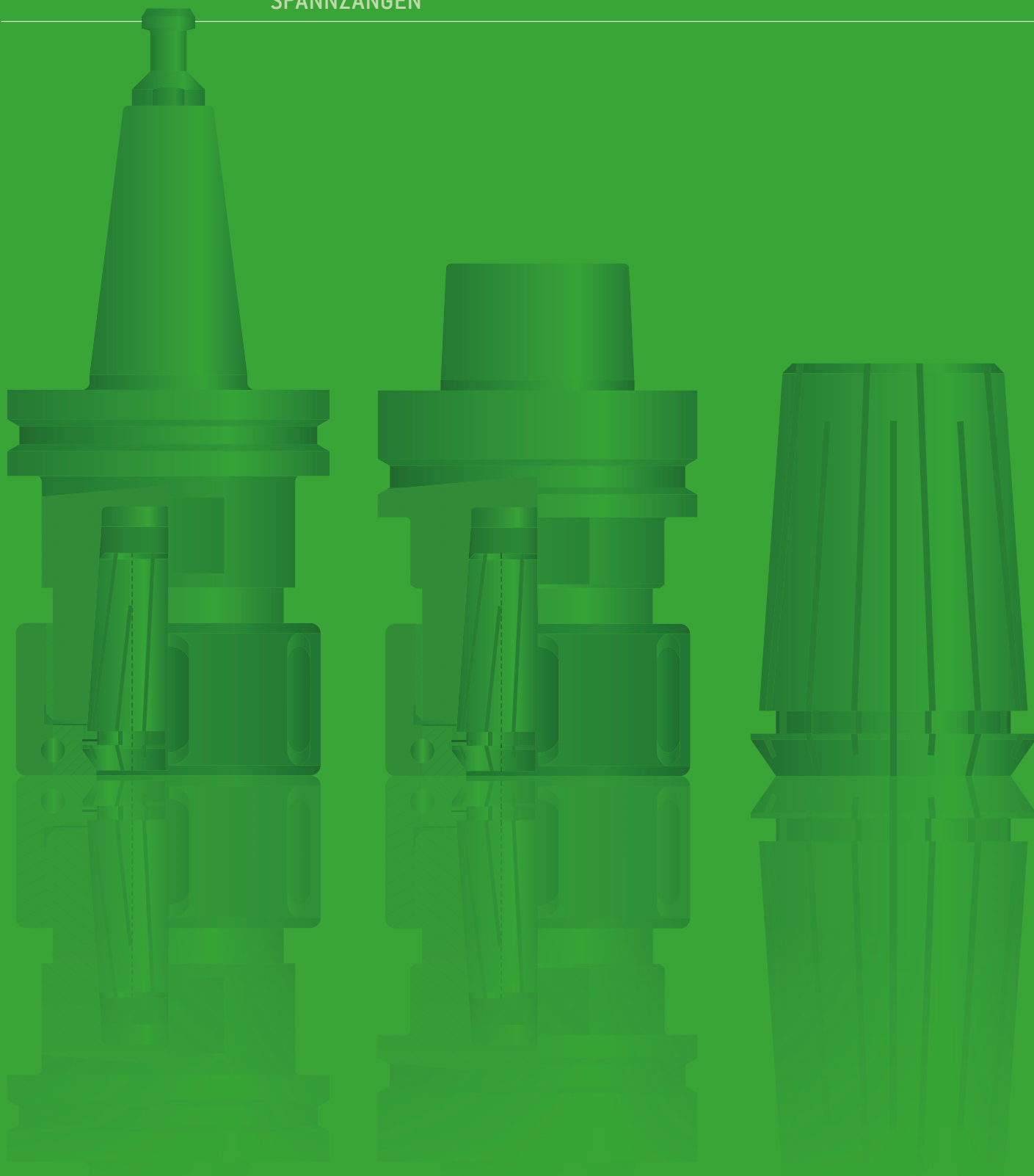
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MANDRINI PORTAPINZE
PINZE DI PRECISIONE
MANDRINI PORTAFRESE

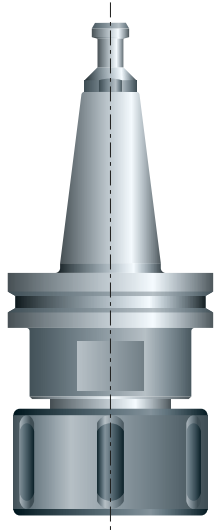
PRECISION CHUCKS
SPRING COLLETS
TOOLING HOLDER CHUCKS

FRÄSDORNE
SPANNFUTTER
SPANNZANGEN

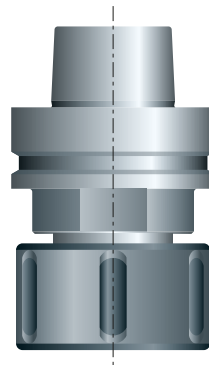


TIPI DI MANDRINI
TYPE OF CHUCKS
SCHNITTSTELLENÜBERSICHT

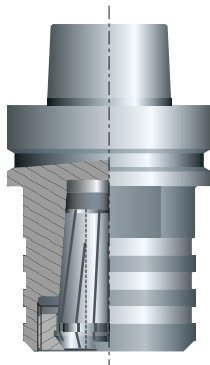
ISO 30



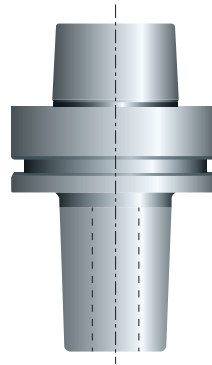
HSK 63F



HSK63 F
HIGH ROTATION
SPEED

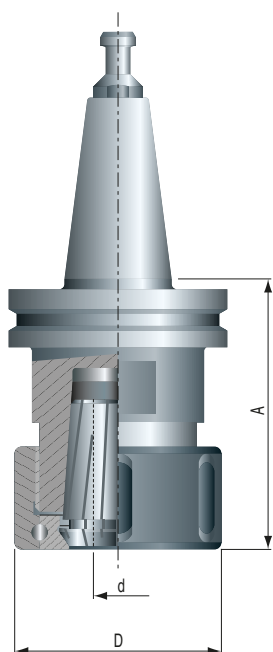


HSK 63F
SHRINK FIT



MANDRINI PORTAPINZA CON CONO ISO 30 GHIERA DI BLOCCAGGIO CON CUSCINETTO PRECISION CHUCKS ISO 30 WITH BALL-BEARING COLLET NUT SPANNZANGENFUTTER ISO 30 MIT KUGELGELAGERTER SPANNMUTTER

MN54



* Per / For / Für: Biesse

Esecuzione cono DIN 69871 per pinze a norme DIN 6388 A,B,E e DIN 6499 (senza incastri e incavi).
Corpo e ghiera perfettamente equilibrati.

La ghiera con cuscinetto permette una maggior forza di bloccaggio con rotazione destra o sinistra.

Steep taper design according to DIN 69871 without grooves or notches and suitable for spring collets manufactured according to DIN 6388 A,B,E and DIN 6499. Tool body and collet nut perfectly balanced.
Ball bearing collet nut for an increased clamping pressure and improved concentricity.
Suitable for both right and left hand rotation.

Steilkegelausführung nach DIN 69871, ohne Nuten und Kerben für Spannzangen nach DIN 6388 A,B,E und DIN 6499.
Technische Daten: Gehärtet und geschliffen, fein gewuchtet.

Die kugelgelagerte Spannmutter sorgt für hohe Spannkraft und schont die doppeltgeschlitzten Spannzangen, sowie den Innenkonus des Futter.

Auch für Linkslauf lieferbar.

Ø D [mm]	A [mm]	Ø d [mm]	Type	Art. Nr.	€
50	68	3-20	ER32	MN5411	
63	68	3-26	ER40	MN5413	
60	68	2-26	OZ25	MN5415	
50	50	3-20	ER32	MN5417*	
63	60	3-26	ER40	MN5419*	

Il mandrino viene fornito completo di tirante (specificare la macchina). Per le pinze elastiche vedi pag. 9.

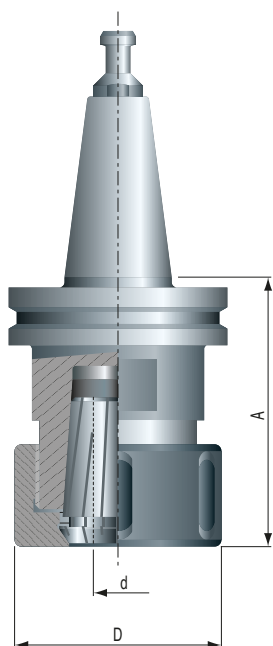
The chuck includes the ball-bearing collet nut and the terminal pin which are listed on page 9.

For spring collets, please turn to page 9.

Lieferumfang: Ohne Spannzange, ohne Schlüssel, mit kugelgelagerter Spannmutter und Anzugsbolzen je nach Maschinentype. Spannzangen siehe Seite 9.

MANDRINI PORTAPINZA CON CONO ISO 30 GHIERA DI BLOCCAGGIO SENZA CUSCINETTO PRECISION CHUCKS ISO 30 WITH COLLET NUT WITHOUT BALL-BEARING SPANNZANGENFUTTER ISO 30 OHNE KUGELGELAGERTE SPANNMUTTER

MN51



* Per / For / Für: Biesse

Esecuzione cono DIN 69871 per pinze a norme DIN 6388 A,B,E e DIN 6499 (senza incastri e incavi).
Corpo e ghiera perfettamente equilibrati.

Steep taper design according to DIN 69871 without grooves or notches and suitable for spring collets manufactured according to DIN 6388 A,B,E and DIN 6499.

Tool body and collet nut perfectly balanced.

Steilkegelausführung nach DIN 69871, ohne Nuten und Kerben für Spannzangen nach DIN 6388 A,B,E und DIN 6499.

Technische Daten: Gehärtet und geschliffen, fein gewuchtet.

Auch für Linkslauf lieferbar.

Ø D [mm]	A [mm]	Ø d [mm]	Type	Art. Nr.	€
50	68	3-20	ER32	MN5111	
63	68	3-26	ER40	MN5113	
50	50	3-20	ER32	MN5115*	
63	60	3-26	ER40	MN5117*	

Il mandrino viene fornito completo di tirante (specificare la macchina). Per le pinze elastiche vedi pag. 9.

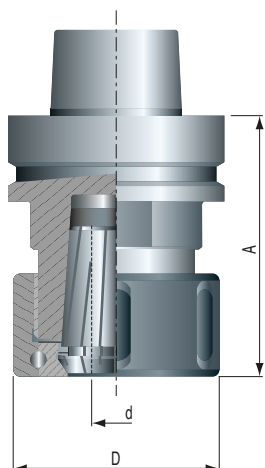
The chuck includes the collet nut and the terminal pin which are listed on page 9.

For spring collets, please turn to page 9.

Lieferumfang: Ohne Spannzange, ohne Schlüssel, mit Spannmutter und Anzugsbolzen je nach Maschinentype. Spannzangen siehe Seite 9.

MANDRINI PORTAPINZA CON CONO HSK 63F GHIERA DI BLOCCAGGIO CON CUSCINETTO PRECISION CHUCKS HSK 63F WITH BALL-BEARING COLLET NUT SPANNZANGENFUTTER HSK 63F MIT KUGELGELAGERTER SPANNMUTTER

MN53



Esecuzione cono V DIN 69893-6 Form F per pinze a norme DIN 6388 A,B,E e DIN 6499.

Corpo e ghiera perfettamente equilibrati.

La ghiera con cuscinetto permette una maggior forza di bloccaggio con rotazione destra o sinistra.

Hollow taper shank according to V DIN 69893-6 Form F and suitable for spring collets manufactured according to DIN 6388 A,B,E and DIN 6499. Tool body and collet nut perfectly balanced.

Ball bearing collet nut for an increased clamping pressure and improved concentricity.

Suitable for both right and left hand rotation.

Mit Hohlkegelschaft nach Norm V DIN 69893-6 Form F, passend für Spannanzgen nach DIN 6388 A,B,E und DIN 6499.

Technische Daten: Gehärtet und geschliffen, fein gewuchtet.

Die kugelgelagerte Spannmutter sorgt für hohe Spannkraft und schont die doppeltgeschlitzten Spannanzgen, sowie den Innenkonus des Futter.

Auch für Linkslauf lieferbar.

Ø D [mm]	A [mm]	Ø d [mm]	Type	Art. Nr.	€
50	75	3-20	ER32	MN5321	
63	78	3-26	ER40	MN5323	
60	78	2-26	OZ25	MN5325	

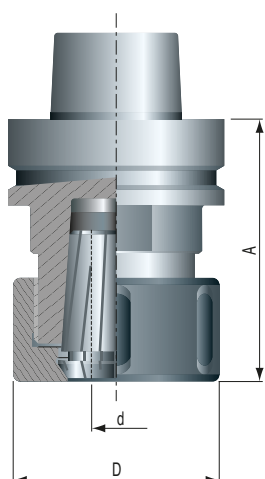
Il mandrino viene fornito completo di ghiera. Per le pinze elastiche vedi pag. 9.

The chuck includes the ball-bearing collet nut. For spring collets, please turn to page 9.

Lieferumfang: Ohne Spannanzge, ohne Schlüssel, mit kugelgelagerter Spannmutter. Spannanzgen siehe Seiten 9.

MANDRINI PORTAPINZA CON CONO HSK 63F GHIERA DI BLOCCAGGIO SENZA CUSCINETTO PRECISION CHUCKS HSK 63F WITH COLLET NUT WITHOUT BALL-BEARING SPANNZANGENFUTTER HSK 63F OHNE KUGELGELAGERTE SPANNMUTTER

MN53



Esecuzione cono V DIN 69893-6 Form F per pinze a norme DIN 6388 A,B,E e DIN 6499.

Corpo e ghiera perfettamente equilibrati.

Hollow taper shank according to V DIN 69893-6 Form F and suitable for spring collets manufactured according to DIN 6388 A,B,E and DIN 6499.

Tool body and collet nut perfectly balanced.

Mit Hohlkegelschaft nach Norm V DIN 69893-6 Form F, passend für Spannanzgen nach DIN 6388 A,B,E und DIN 6499.

Technische Daten: Gehärtet und geschliffen, fein gewuchtet.

Linkslauf lieferbar.

Ø D [mm]	A [mm]	Ø d [mm]	Type	Art. Nr.	€
50	75	3-20	ER32	MN5327	
63	78	3-26	ER40	MN5329	

Il mandrino viene fornito completo di ghiera. Per le pinze elastiche vedi pag. 9.

The chuck includes the ball-bearing collet nut. For spring collets, please turn to page 9.

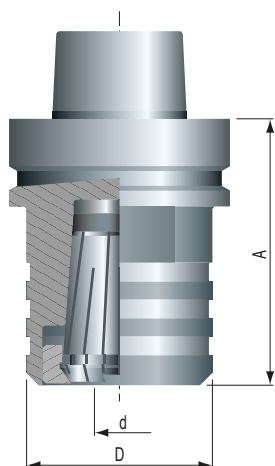
Lieferumfang: Ohne Spannanzge, ohne Schlüssel, mit kugelgelagerter Spannmutter. Spannanzgen siehe Seiten 9.

MN5703

MANDRINI PORTAPINZA PER ALTE VELOCITÀ CON CONO HSK 63F

HIGH ROTATION SPEED CHUCKS HSK 63F

SPANNZANGENFUTTER HSK 63F MIT INNENLIEGENDER SPANNMUTTER



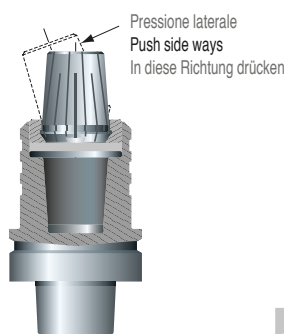
Esecuzione cono V DIN 69893-6 Form F per pinze a norme DIN 6388 A,B,E e DIN 6499.
Corpo e ghiera perfettamente equilibrati.
Utilizzo fino alla velocità di 30.000 g/min. con rotazione destra o sinistra.

Hollow taper shank according to V DIN 69893-6 Form F and suitable for spring collets manufactured according to DIN 6388 A,B,E and DIN 6499.

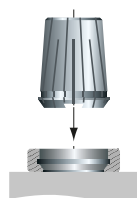
Tool body and collet nut perfectly balanced.

Suitable for both right and left hand rotation up to n. 30.000 rpm.

CNC Spannzangenfutter HSK 63F mit innenliegender Spannmutter für Schaftfräser, Oberfräser und Schaftwerkzeuge, für OZ25/462E Spannzangen nach DIN 6388 (Art. P286). Mit Rundlaufgenauigkeiten von 0,005 mm stehen diese Aufnahmen einem Schrumpffutter in nichts nach. Vorteil: zusätzliche Flexibilität durch Aufnahme von Spannzangen unterschiedlicher Durchmesser. Max. Drehzahl 36000 min⁻¹. Bestens geeignet für 5-Achs Anwendungen, z.B. im Treppenbau.



Sistema per sostituzione pinza
Spring collect changing system
Entfernen der Spannzangen



Sistema di inserimento pinza
Spring collect connecting system
Einsetzen der Spannmutter

Ø D [mm]	A [mm]	Ø d [mm]	Type	Art. Nr.	€
60	76	2-25	OZ25	MN5703	

Il mandrino viene fornito completo di ghiera. Per le pinze elastiche vedi pag. 9.

The chuck includes the ball-bearing collet nut. For spring collets, please turn to page 9.

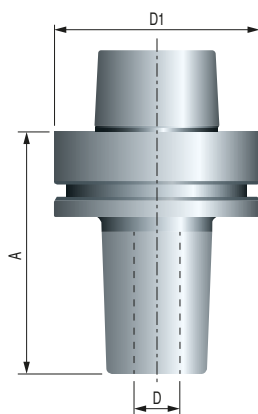
Lieferumfang: Ohne Spannzange, ohne Schlüssel, mit kugellagerter Spannmutter. Spannzangen siehe Seiten 9.

MN66

MANDRINI PORTAPINZA CON CONO HSK-63F PER CALETTAMENTO A CALDO

SHRINK FIT CHUCKS HSK 63F

THERMO-SCHRUMPFSPANNFUTTER HSK 63F



I mandrini portapinza a calettamento sfruttano la dilatazione termica del cono generata dalla stazione di calettamento, per poterci inserire utensili in HW e HS. Il successivo raffreddamento mediante l'apposito modulo, riporta il cono alle dimensioni originarie garantendo così una stretta sicura e stabile.

Portautensili ad alta precisione grazie alla stretta termica. Le elevate stabilità e rigidità li rendono adatti per lavorazioni particolarmente gravose. Alloggiano utensili con gambi cilindrico tolleranza h6.

These high precision tool holders ensure high precision thank to the special tight on the shank tool by thermal clamping. The collet is heated with the special shrink fit unit, causing it to expand. The shank is inserted and the collet is cooled to ambient temperature with the cooling machine.

High precision tool holders with thermal induced shrink fit. Suitable for for HS and HW cutting tools and heavy CNC workings due to their high rigidity and high balance.

Diese hochpräzisen Werkzeugträger sorgen für höchste Präzision, dank der speziellen Dichtung am Schaftwerkzeug durch thermisches Spannen.

Die Spannzange wird mit der speziellen Schrumpfeinheit erwärmt, wodurch sie sich ausdehnt. Der Schaft wird eingefügt und die Spannzange wird mit der Kühlmaschine auf Umgebungstemperatur abgekühlt.

Hochpräzise Thermo-Schrumpfspannfutter, geeignet zur Aufnahme von HS sowie HW-Werkzeugen im Bereich Hochleistungs-CNC-Bearbeitung durch höchste Steifigkeit und Rundlaufgenauigkeit.

Ø D [mm]	A [mm]	Ø d [mm]	Art. Nr.	€
63	76	8	MN6601	
63	76	10	MN6602	
63	76	12	MN6603	
63	76	1/2" (12,7 mm)	MN6604	
63	76	16	MN6605	
63	76	3/4" (19,05 mm)	MN6606	
63	76	20	MN6607	
63	76	25	MN6608	

400512 CHIAVE DINAMOMETRICA TORQUE WRENCH DREHMOMENTSCHLÜSSEL

Il rapido sistema di sostituzione dell'utensile con meccanismo di blocco del perno garantisce un'operazione rapida e flessibile. Precisione di $\pm 3\%$ dal valore impostato, conforme alla norma DIN EN ISO 6789:2003.

Il movimento torsionometrico udibile e tangibile previene l'eccessivo serraggio dei bulloni.

Dopo l'utilizzo, allentare la molla e impostarla sul valore più basso. Fornito con certificato di taratura.

Tool quick-change system with pin locking mechanism guarantees flexible and swift operation.

Accuracy of $\pm 3\%$ to the set value, in accordance with DIN EN ISO 6789:2003.

Acoustic and tangible torque triggering prevents over-tightening of bolts.

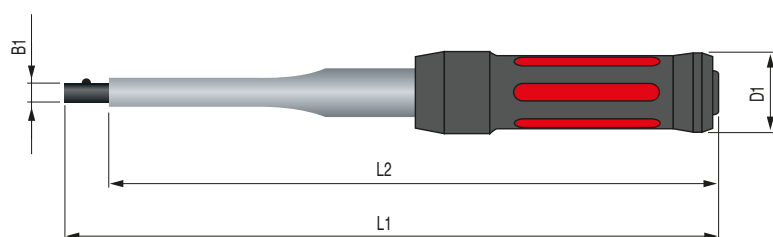
After use, relax spring and set to lowest value. Supplied with calibration certificate.

Werkzeug-Schnellwechselsystem mit Stiftsicherung garantiert flexibles und zügiges Arbeiten.

Genauigkeit von $\pm 3\%$ auf den eingestellten Wert, gemäß DIN EN ISO 6789:2003.

Akustische und fühlbare Wahrnehmung der Drehmomentauslösung verhindert ein Überdrehen der Schrauben.

Nach Gebrauch Feder entlasten und auf den niedrigsten Wert stellen. Mit Kalibrierzertifikat.



Ø profilo Wrench-drive Ø Antrieb [mm]	Gamma di misurazione Measuring range Messbereich		L1 [mm]	L2 [mm]	B1 [mm]	D1 [mm]	Art. Nr.	€
	Nm	lbf. in.						
16	40-200	30-150	423	390	16	37	400512	

CHIAVI PER MANDRINI PORTAPINZE SERVICING KEYS FOR SPRING COLLET CHUCKS SCHLÜSSEL FÜR SPANNMUTTERN



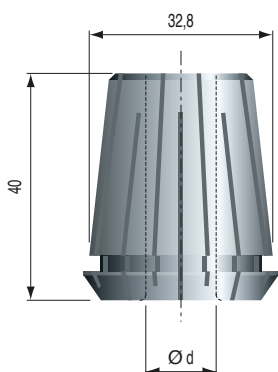
Chiavi per ghiera DIN 6388 Keys for collect nuts DIN 6388 Hakenschlüssel für Spannmuttern DIN 6388	Nm	Art. Nr.	€
D = 45/50	120	400513	
D = 60/62 (ER40 / OZ25)	160	400514	



Chiavi per ghiera ERAZ Keys for collect nuts ERAZ Hakenschlüssel für Spannmuttern ERAZ	Nm	Art. Nr.	€
OZ25	160	400515	

P284

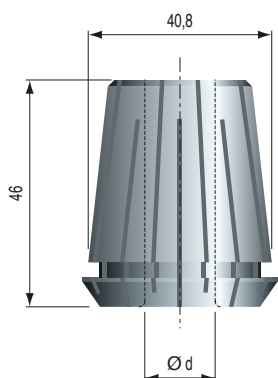
DIN 6499


PINZE DI PRECISIONE ER32
SPRING COLLETS FOR PRECISION CHUCKS ER32
PRÄZISIONS – SPANNZANGEN ER32

Ø D [mm]	Ø d [mm]	Type	Art. Nr.	€
4	(4-3)	470E / ER32	P28404	
6	(6-5)	470E / ER32	P28406	
7	(7-6,35-6)	470E / ER32	P28407	
8	(8-7)	470E / ER32	P28408	
10	(10-9,52-9)	470E / ER32	P28410	
12	(12-11)	470E / ER32	P28412	
13	(13-12,7-12)	470E / ER32	P28413	
14	(14-13)	470E / ER32	P28414	
16	(16-15,88-15)	470E / ER32	P28416	
18	(18-17)	470E / ER32	P28418	
20	(20-19,05-19)	470E / ER32	P28420	

P285

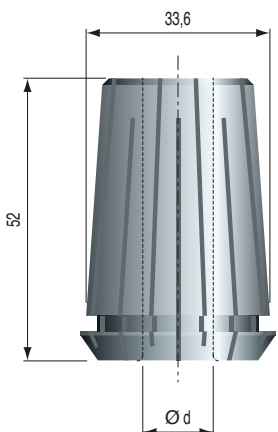
DIN 6499


PINZE DI PRECISIONE ER40
SPRING COLLETS FOR PRECISION CHUCKS ER40
PRÄZISIONS – SPANNZANGEN ER40

Ø D [mm]	Ø d [mm]	Type	Art. Nr.	€
4	(4-3)	472E / ER40	P28504	
6	(6-5)	472E / ER40	P28506	
7	(7-6,35-6)	472E / ER40	P28507	
8	(8-7)	472E / ER40	P28508	
10	(10-9,52-9)	472E / ER40	P28510	
12	(12-11)	472E / ER40	P28512	
13	(13-12,7-12)	472E / ER40	P28513	
14	(14-13)	472E / ER40	P28514	
16	(16-15,88-15)	472E / ER40	P28516	
18	(18-17)	472E / ER40	P28518	
20	(20-19,05-19)	472E / ER40	P28520	
25	(25-24)	472E / ER40	P28525	
26	(26-25,4-25)	472E / ER40	P28526	

P286

DIN 6388


PINZE DI PRECISIONE OZ25
SPRING COLLETS FOR PRECISION CHUCKS OZ25
PRÄZISIONS – SPANNZANGEN OZ25

Ø D [mm]	Ø d [mm]	Type	Art. Nr.	€
3	(3-2)	462E / OZ25	P28603	
4	(4-3)	462E / OZ25	P28604	
6	(6-5)	462E / OZ25	P28606	
7	(7-6,35-6)	462E / OZ25	P28607	
8	(8-7)	462E / OZ25	P28608	
10	(10-9,52-9)	462E / OZ25	P28610	
12	(12-11)	462E / OZ25	P28612	
13	(13-12,7-12)	462E / OZ25	P28613	
14	(14-13)	462E / OZ25	P28614	
16	(16-15,88-15)	462E / OZ25	P28616	
18	(18-17)	462E / OZ25	P28618	
20	(20-19,05-19)	462E / OZ25	P28620	
25	(25-24)	462E / OZ25	P28625	

DBM

DISPOSITIVO BLOCCAGGIO MANDRINI CHUCKS MOUNTING DEVICE MONTAGEVORRICHTUNG



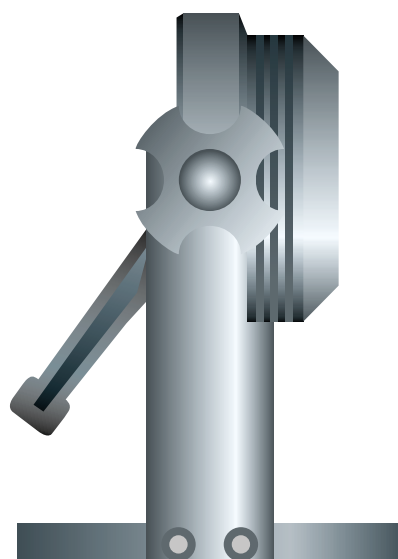
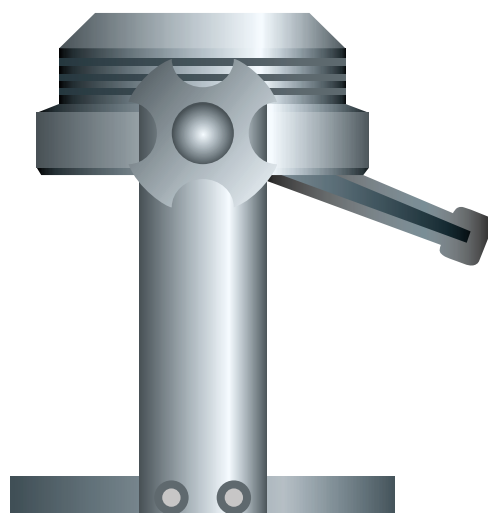
Dispositivo per il bloccaggio di mandrini portafrese e portapinzze.

Device for safe assembling and disassembling of cutterheads mounted on tooling holder chucks.

Vorrichtung für die sichere Montage- und Demontage von Werkzeugen auf Fräsdornen und in Spannfittern.

Ø D [mm]	Type	Art. Nr.	€
50	ISO 30	DBMISO30	
58	ISO 30	DBMISO30*	
63,5	ISO 40	DBMISO40	
63	HSK 63F	DBMHSKF63	

* Per / For / Für: Elte, Esseteam



PUNTE ELICOIDALI IN HW
PUNTE COMPONIBILI
PUNTE PER CERNIERE
PUNTE PER MORTASARE

SOLID HW ROUTERS
DOWEL DRILLS
HINGE BORING BITS
MORTISE DRILLS

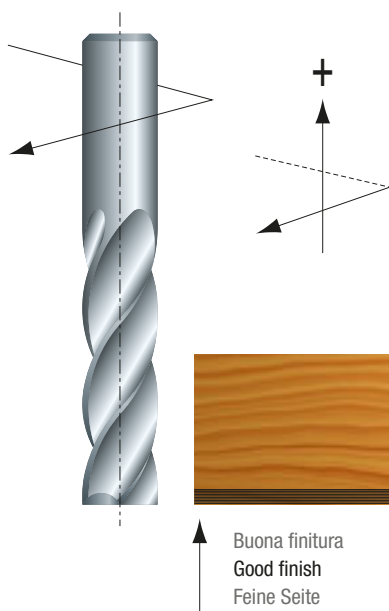
VHW SCHAFTFRÄSER
DÜBELBOHRER
BESCHLAGBOHRER
LANGLOCHBOHRER



ESEMPI DI IMPIEGO ROUTER APPLICATION TECHNISCHE ERLÄUTERUNGEN

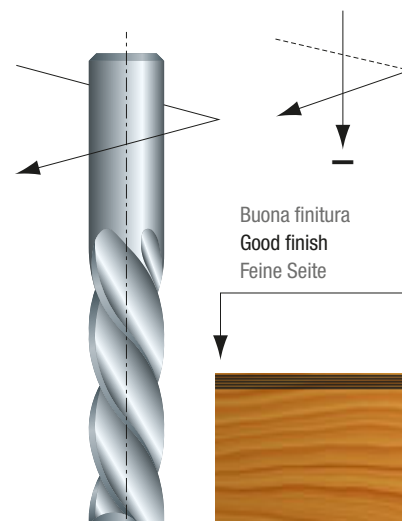
Rotazione destra
Elica destra positiva
Right hand rotation
Right hand spiral
(Positive spiral)
Rechtslauf
Rechtsdrill
(Positive Spirale)

(A)



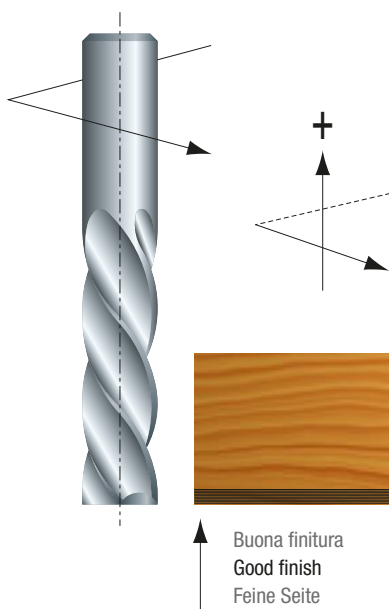
Rotazione destra
Elica sinistra negativa
Right hand rotation
Left hand spiral
(Negative spiral)
Rechtslauf
Linksdrill
(Negative Spirale)

(B)



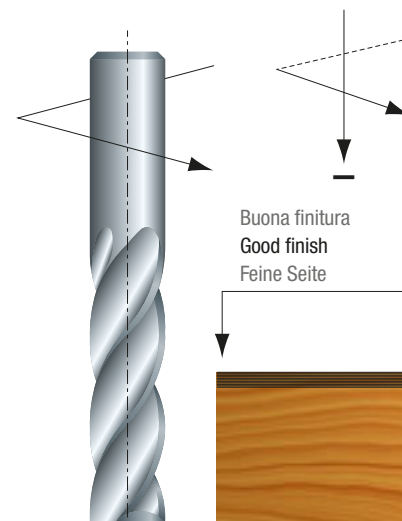
Rotazione sinistra
Elica sinistra positiva
Left hand rotation
Left hand spiral
(Positive spiral)
Linkslauf
Linksdrill
(Positive Spirale)

(C)



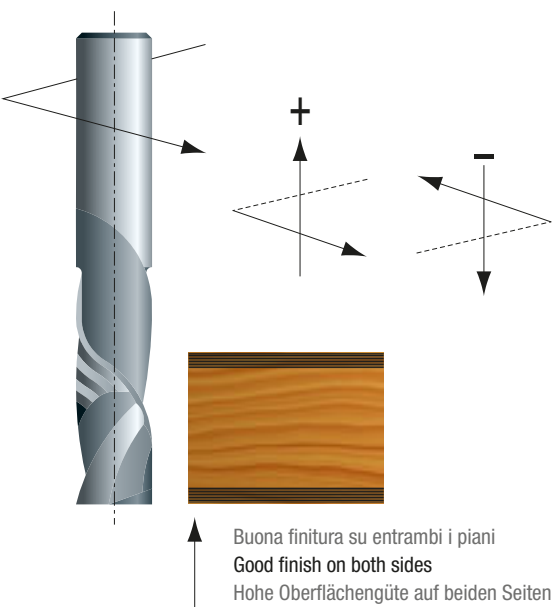
Rotazione sinistra
Elica destra negativa
Left hand rotation
Right hand spiral
(Negative spiral)
Linkslauf
Rechtsdrill
(Negative Spirale)

(D)



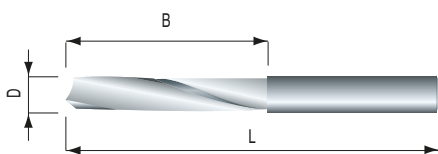
Rotazione destra
Elica destra positiva
Right hand rotation
Right hand spiral
(Positive spiral)
Rechtslauf
Rechtsdrill
(Positive Spirale)

(E)



P174

HW | Z=1


PUNTE ELICOIDALI IN HW INTEGRALE - ELICA DESTRA - ESECUZIONE A
SOLID HW ROUTERS WITH RIGHT HAND SPIRAL - EXECUTION A
VHW SPIRALSCHLICHTFRÄSER MIT RECHTSDRALL - AUSFÜHRUNG A

Ø D [mm]	B [mm]	L [mm]	Rotation DX/RH/RL Art. Nr.	€
3	12	50	P174RM0312	
4	12	50	P174RM0412	
5	17	50	P174RM0517	
6	17	60	P174RM0617	
6	27	60	P174RM0627	
8	22	80	P174RM0822	
8	32	80	P174RM0832	
10	32	80	P174RM1032	
10	42	100	P174RM1042	
12	32	80	P174RM1232	
12	42	100	P174RM1242	

Impiego / Use / Anwendung

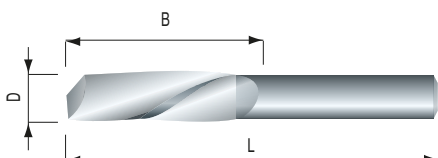
Lavori di foratura e contornatura
 For boring and routing operations
 Zum Bohren und Fräsen

Attenzione / Attention / Achtung

Rotazione destra = espulsione del truciolo verso l'alto (Positiva)
 Rotazione sinistra (C) a richiesta
 Right hand rotation = upward chip ejection (Positive)
 Left hand rotation (C) available on request
 Rechtsdrall = Spanauswurf nach oben (Positive)
 Linkslauf (C) auf Anfrage

P177

HW | Z=1


PUNTE ELICOIDALI IN HW INTEGRALE - ELICA SINISTRA - ESECUZIONE B
SOLID HW ROUTERS WITH LEFT HAND SPIRAL - EXECUTION B
VHW SPIRALSCHLICHTFRÄSER MIT LINKSDRALL - AUSFÜHRUNG B

Ø D [mm]	B [mm]	L [mm]	Rotation DX/RH/RL Art. Nr.	€
3	12	50	P177RM0312	
4	12	50	P177RM0412	
5	17	50	P177RM0517	
6	17	60	P177RM0617	
6	27	60	P177RM0627	
8	22	80	P177RM0822	
8	32	80	P177RM0832	
10	32	80	P177RM1032	
10	42	100	P177RM1042	
12	32	80	P177RM1232	
12	42	100	P177RM1242	
12	52	100	P177RM1252	

Impiego / Use / Anwendung

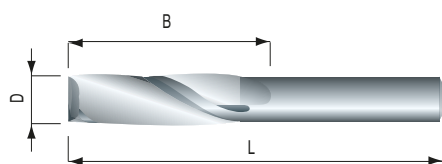
Lavori di foratura e contornatura
 For boring and routing operations
 Zum Bohren und Fräsen

Attenzione / Attention / Achtung

Rotazione destra = espulsione del truciolo verso il basso (Negativa)
 Rotazione sinistra (D) a richiesta
 Right hand rotation = downward chip ejection (Negative)
 Left hand rotation (D) available on request
 Rechtsdrall = Spanauswurf nach unten (Negative)
 Linkslauf (D) auf Anfrage

P175

HW | Z=2


PUNTE ELICOIDALI IN HW INTEGRALE - ELICA DESTRA - ESECUZIONE A
SOLID HW ROUTERS WITH RIGHT HAND SPIRAL - EXECUTION A
VHW SPIRALSCHLICHTFRÄSER MIT RECHTSDRALL - AUSFÜHRUNG A

Ø D [mm]	B [mm]	L [mm]	Rotazione DX/RH/RL Art. Nr.	€
3	12	50	P175RM0312	
4	12	50	P175RM0412	
5	17	50	P175RM0517	
6	17	60	P175RM0617	
6	27	60	P175RM0627	
8	22	80	P175RM0822	
8	32	80	P175RM0832	
10	32	80	P175RM1032	
10	42	100	P175RM1042	
12	32	80	P175RM1232	
12	42	100	P175RM1242	
12	52	100	P175RM1252	
14	42	100	P175RM1442	
14	52	100	P175RM1452	
16	42	100	P175RM1642	
16	52	100	P175RM1652	
16	72	100	P175RM1672	
18	52	100	P175RM1852	
18	72	120	P175RM1872	
18	102	150	P175RM18102	
20	52	100	P175RM2052	
20	72	120	P175RM2072	
20	102	150	P175RM20102	

Impiego / Use / Anwendung

Lavori di foratura e contornatura
con alto grado di finitura

For boring and routing operations
with high quality finish

Zum Bohren und Fräsen
mit ausgezeichneter Schnittqualität

Attenzione / Attention / Achtung

Rotazione destra = espulsione del truciolo
verso l'alto (Positiva)

Rotazione sinistra (C) a richiesta

Right hand rotation = upward chip
ejection (Positive)

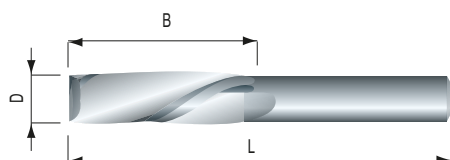
Left hand rotation (C) available on request

Rechtsdrall = Spanauswurf nach oben
(Positive)

Linkslauf (C) auf Anfrage

P178

HW | Z=2


PUNTE ELICOIDALI IN HW INTEGRALE - ELICA SINISTRA - ESECUZIONE B
SOLID HW ROUTERS WITH LEFT HAND SPIRAL - EXECUTION B
VHW SPIRALSCHLICHTFRÄSER MIT LINKSDRALL - AUSFÜHRUNG B

Ø D [mm]	B [mm]	L [mm]	Rotazione DX/RH/RL Art. Nr.	€
3	12	50	P178RM0312	
4	12	50	P178RM0412	
5	17	50	P178RM0517	
6	17	60	P178RM0617	
6	27	60	P178RM0627	
8	22	80	P178RM0822	
8	32	80	P178RM0832	
10	32	80	P178RM1032	
10	42	100	P178RM1042	
12	32	80	P178RM1232	
12	42	100	P178RM1242	
12	52	100	P178RM1252	
14	52	100	P178RM1452	
16	42	100	P178RM1642	
16	52	100	P178RM1652	
18	52	100	P178RM1852	
18	72	120	P178RM1872	
20	52	100	P178RM2052	
20	72	120	P178RM2072	

Impiego / Use / Anwendung

Lavori di foratura e contornatura
con alto grado di finitura

For boring and routing operations
with high quality finish

Zum Bohren und Fräsen
mit ausgezeichneter Schnittqualität

Attenzione / Attention / Achtung

Rotazione destra = espulsione del truciolo
verso il basso (Negativa)

Rotazione sinistra (D) a richiesta

Right hand rotation = downward chip
ejection (Negative)

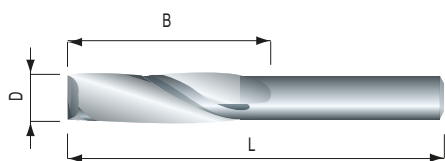
Left hand rotation (D) available on request

Rechtsdrall = Spanauswurf nach unten
(Negative)

Linkslauf (D) auf Anfrage

P176

HW | Z=3

PUNTE ELICOIDALI IN HW INTEGRALE - ELICA DESTRA - ESECUZIONE A
SOLID HW ROUTERS WITH RIGHT HAND SPIRAL - EXECUTION A
VHW SPIRALSCHLICHTFRÄSER MIT RECHTSDRALL - AUSFÜHRUNG A


Ø D [mm]	B [mm]	L [mm]	Rotation DX/RH/RL Art. Nr.	€
8	22	80	P176RM0822	
8	32	80	P176RM0832	
10	32	80	P176RM1032	
10	42	100	P176RM1042	
12	32	80	P176RM1232	
12	42	100	P176RM1242	
14	42	100	P176RM1442	
14	52	100	P176RM1452	
16	42	100	P176RM1642	
16	52	100	P176RM1652	
16	72	120	P176RM1672	
18	52	100	P176RM1852	
18	72	120	P176RM1872	
18	102	150	P176RM18102	
20	52	100	P176RM2052	
20	72	120	P176RM2072	
20	102	150	P176RM20102	
25	102	150	P176RM25102	

Impiego / Use / Anwendung

Lavori di foratura e contornatura
con alto grado di finitura

For boring and routing operations
with high quality finish

Zum Bohren und Fräsen
mit ausgezeichneter Schnittqualität

Attenzione / Attention / Achtung

Rotazione destra = espulsione del truciolo
verso l'alto (Positiva)

Rotazione sinistra (C) a richiesta

Right hand rotation = upward chip
ejection (Positive)

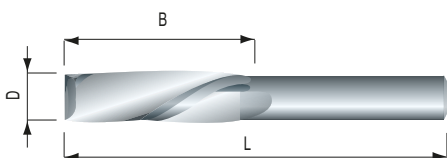
Left hand rotation (C) available on request

Rechtsdrall = Spanauswurf nach oben
(Positive)

Linkslauf (C) auf Anfrage

P179

HW | Z=3

PUNTE ELICOIDALI IN HW INTEGRALE - ELICA SINISTRA - ESECUZIONE B
SOLID HW ROUTERS WITH LEFT HAND SPIRAL - EXECUTION B
VHW SPIRALSCHLICHTFRÄSER MIT LINKSDRALL - AUSFÜHRUNG B


Ø D [mm]	B [mm]	L [mm]	Rotation DX/RH/RL Art. Nr.	€
8	32	80	P179RM0832	
10	32	80	P179RM1032	
10	42	100	P179RM1042	
12	32	80	P179RM1232	
12	52	100	P179RM1252	
14	42	100	P179RM1442	
16	42	100	P179RM1642	
16	52	100	P179RM1652	
16	72	120	P179RM1672	
18	52	100	P179RM1852	
18	72	120	P179RM1872	
20	52	100	P179RM2052	
20	72	120	P179RM2072	

Impiego / Use / Anwendung

Lavori di foratura e contornatura
con alto grado di finitura

For boring and routing operations
with high quality finish

Zum Bohren und Fräsen
mit ausgezeichneter Schnittqualität

Attenzione / Attention / Achtung

Rotazione destra = espulsione del truciolo
verso il basso (Negativa)

Rotazione sinistra (D) a richiesta

Right hand rotation = downward chip
ejection (Negative)

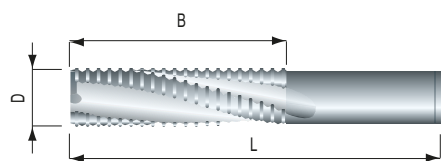
Left hand rotation (D) available on request

Rechtsdrall = Spanauswurf nach unten
(Negative)

Linkslauf (D) auf Anfrage

P276

HW | Z=3


PUNTE ELICOIDALI IN HW INTEGRALE CON ROMPITRUCIOLO - ELICA DESTRA - ESECUZIONE A
SOLID HW ROUTERS WITH CHIPBREAKER AND RIGHT HAND SPIRAL - EXECUTION A
VHW SPIRALSCHRUPPFÄRER MIT RECHTSDRALL - AUSFÜHRUNG A

Ø D [mm]	B [mm]	L [mm]	Rotation DX/RH/RL Art. Nr.	€
8	22	80	P276RM0822	
8	32	80	P276RM0832	
10	32	80	P276RM1032	
10	42	100	P276RM1042	
12	32	80	P276RM1232	
12	42	100	P276RM1242	
12	52	100	P276RM1252	
14	42	100	P276RM1442	
14	52	100	P276RM1452	
16	42	100	P276RM1642	
16	52	100	P276RM1652	
16	72	120	P276RM1672	
18	52	100	P276RM1852	
18	72	120	P276RM1872	
18	102	150	P276RM18102	
20	52	100	P276RM2052	
20	72	120	P276RM2072	
20	102	150	P276RM20102	
25	102	150	P276RM25102	

Impiego / Use / Anwendung

Punta studiata per lavorazioni di sgrossatura

Router developed for roughing operations

Fräser entwickelt für grober Vorzerspanung

Attenzione / Attention / Achtung

Rotazione destra = espulsione del truciolo verso l'alto (Positiva)

Rotazione sinistra (C) a richiesta

Right hand rotation = upward chip ejection (Positive)

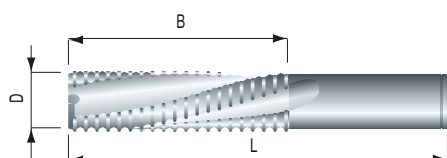
Left hand rotation (C) available on request

Rechtsdrall = Spanauswurf nach oben (Positive)

Linkslauf (C) auf Anfrage

P279

HW | Z=3


PUNTE ELICOIDALI IN HW INTEGRALE CON ROMPITRUCIOLO - ELICA SINISTRA - ESECUZIONE B
SOLID HW ROUTERS WITH CHIPBREAKER AND LEFT HAND SPIRAL - EXECUTION B
VHW SPIRALSCHRUPPFÄRER MIT LINKSDRALL - AUSFÜHRUNG B

Ø D [mm]	B [mm]	L [mm]	Rotation DX/RH/RL Art. Nr.	€
8	22	80	P279RM0822	
8	32	80	P279RM0832	
10	32	80	P279RM1032	
10	42	100	P279RM1042	
12	32	80	P279RM1232	
12	42	100	P279RM1242	
12	52	100	P279RM1252	
14	42	100	P279RM1442	
16	42	100	P279RM1642	
16	52	100	P279RM1652	
16	72	120	P279RM1672	
18	52	100	P279RM1852	
18	72	120	P279RM1872	
20	52	100	P279RM2052	
20	72	120	P279RM2072	
20	102	150	P279RM20102	

Impiego / Use / Anwendung

Punta studiata per lavorazioni di sgrossatura

Router developed for roughing operations

Fräser entwickelt für grober Vorzerspanung

Attenzione / Attention / Achtung

Rotazione destra = espulsione del truciolo verso il basso (Negativa)

Rotazione sinistra (D) a richiesta

Right hand rotation = downward chip ejection (Negative)

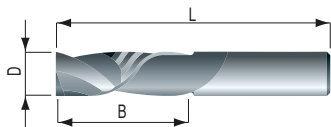
Left hand rotation (D) available on request

Rechtsdrall = Spanauswurf nach unten (Negative)

Linkslauf (D) auf Anfrage

P290

HW | Z=2+2

HW FRESA UP-DOWN INTEGRALE ELICOIDALE
HW SOLID CARBIDE SPIRAL ROUTERS
VHW VOLLHARTMETALLFRÄSER


Ø D [mm]	B [mm]	L [mm]	Rotation DX/RH/RL Art. Nr.	€
8	22	80	P290RM0822	
8	32	80	P290RM0832	
10	32	80	P290RM1032	
10	42	100	P290RM1042	
12	42	100	P290RM1242	
12	52	110	P290RM1252	
14	42	100	P290RM1442	
14	52	110	P290RM1452	
16	42	100	P290RM1642	
16	52	110	P290RM1652	
18	52	115	P290RM1852	
18	72	135	P290RM1872	
20	52	115	P290RM2052	
20	72	135	P290RM2072	

Impiego / Use / Anwendung

Contornatura con buona finitura sui piani superiore ed inferiore

Routing with good finishing on both top and bottom panel sides

Besonders geeignet für gute Oberflächengüte und ausrissfreie Kanten

Attenzione / Attention / Achtung

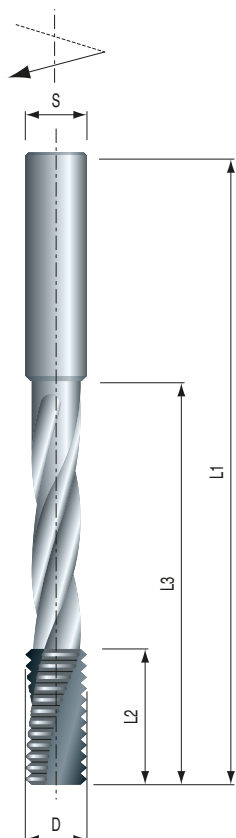
Rotazione destra doppia elica a compressione

Double flute router compression

Spiralschichtfräser mit wechselseitigem Achswinkel

P288

HW | Z=3

PUNTE INTEGRALI CON ROMPITRUCIOLO PER SERRATURE
SOLID CARBIDE ROUTERS WITH CHIPBREAKER FOR DOOR LOCKS
VHW-SCHLOSSKASTENFRÄSER


Ø D [mm]	L2 [mm]	L3 [mm]	L1 [mm]	S [mm]	Z	Art. Nr.	€
16	30	124	170	16	3	P288RM16170	

Impiego / Use / Anwendung

Esecuzione sedi per le serrature delle porte

Router developed for cutting the lock-cases and the face-plates in the doors

Zur Herstellung von Schlosskastenausfräsungen.

Bei stufenweiser Zustellung

Attenzione / Attention / Achtung

Rotazione destra = espulsione del truciolo verso l'alto (Positiva)

Rotazione sinistra (C) a richiesta

Right hand rotation = upward chip ejection (Positive)

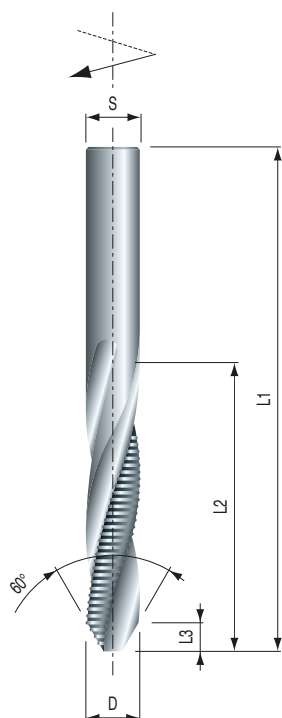
Left hand rotation (C) available on request

Rechtsdrill = Spanauswurf nach oben (Positive)

Linkslauf (C) auf Anfrage

P280

HW | Z=3


PUNTE PER SPIONCINI CON ROMPITRUCIOLO
SOLID CARBIDE ROUTER WITH CHIPBREAKER FOR SPYHOLES
VHW-DRÜCKERLOCH- UND SCHLOSSZYLINDERFRÄSER

Ø D [mm]	L2 [mm]	L3 [mm]	L1 [mm]	S [mm]	Z	Art. Nr.	€
16	90	9	150	16	3	P280RM16150	

Impiego / Use / Anwendung

Realizzazione dei fori per la chiave e la maniglia delle porte

Router developed for plunge-cutting of latchholes and keyholes on door manufacturing

Schrupfräser für Drückerlochbohrungen und Schlosszylinderfräsungen.

Attenzione / Attention / Achtung

Rotazione destra = espulsione del truciolo verso l'alto (Positiva)

Rotazione sinistra (C) a richiesta

Right hand rotation = upward chip ejection (Positive)

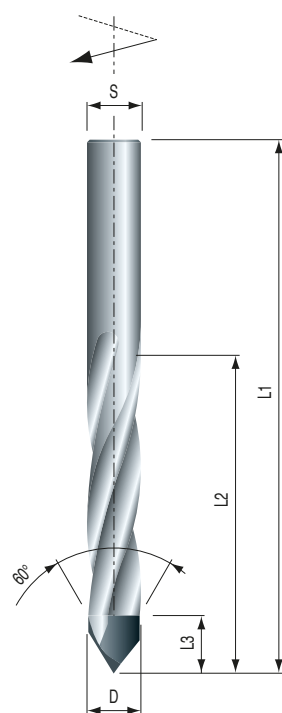
Left hand rotation (C) available on request

Rechtsdrill = Spanauswurf nach oben (Positive)

Linkslauf (C) auf Anfrage

PUNTE PER SPIONCINI
SOLID CARBIDE ROUTER FOR SPYHOLES
VHW SPIONLOCH- UND DURCHGANGSLOCHFRÄSER
P180

HW | Z=3



Ø D [mm]	L2 [mm]	L3 [mm]	L1 [mm]	S [mm]	Z	Art. Nr.	€
16	90	14	150	16	3	P180RM16150	

Impiego / Use / Anwendung

Realizzazione di spioncini

Router developed for spyholes

Bohrfräser für Durchgangs- und

Spionlochbohrungen

Attenzione / Attention / Achtung

Rotazione destra = espulsione del truciolo verso l'alto (Positiva)

Rotazione sinistra (C) a richiesta

Right hand rotation = upward chip ejection (Positive)

Left hand rotation (C) available on request

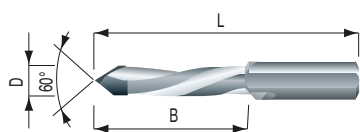
Rechtsdrill = Spanauswurf nach oben (Positive)

Linkslauf (C) auf Anfrage

P151

HW | Z=2

PUNTE COMPONENTI PER FORI PASSANTI
 DOWEL DRILLS FOR THROUGH-OUT DRILLING
 DÜBELBOHRER FÜR DURCHGANGSBOHRUNGEN



Attacco / Chuck / Schaft

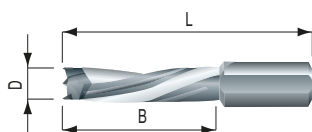
Ø 10x25



Ø D [mm]	B [mm]	L [mm]	Rotation DX/RH/RL Art. Nr.	Rotation SX/LH/LL Art. Nr.	€
4	27	57,5	P151RM0427	P151LM0427	
5	27	57,5	P151RM0527	P151LM0527	
6	27	57,5	P151RM0627	P151LM0627	
7	27	57,5	P151RM0727	P151LM0727	
8	27	57,5	P151RM0827	P151LM0827	
9	27	57,5	P151RM0927	P151LM0927	
10	27	57,5	P151RM1027	P151LM1027	
4	37	70	P151RM0437	P151LM0437	
5	37	70	P151RM0537	P151LM0537	
6	37	70	P151RM0637	P151LM0637	
7	37	70	P151RM0737	P151LM0737	
8	37	70	P151RM0837	P151LM0837	
9	37	70	P151RM0937	P151LM0937	
10	37	70	P151RM1037	P151LM1037	
12	37	70	P151RM1237	P151LM1237	

P152

HW | Z=2



Attacco / Chuck / Schaft

Ø 10x20



PUNTE componibili per fori ciechi a 4 eliche
DOWEL DRILLS FOR BLIND DRILLING WITH 4 SPIRALS
DÜBELBOHRER FÜR SACKLOCHBOHRUNGEN MIT RÜCKENFÜHRUNG

Ø D [mm]	B [mm]	L [mm]	Rotation DX/RH/RL Art. Nr.	Rotation SX/LH/LL Art. Nr.	€
4	30	57,5	P152RM0430	P152LM0430	
5	30	57,5	P152RM0530	P152LM0530	
5,5	30	57,5	P152RM5530	P152LM5530	
6	30	57,5	P152RM0630	P152LM0630	
6,35(1/4")	30	57,5	P152RM63530	P152LM63530	
7	30	57,5	P152RM0730	P152LM0730	
8	30	57,5	P152RM0830	P152LM0830	
9	30	57,5	P152RM0930	P152LM0930	
9,5(3/8")	30	57,5	P152RM9530	P152LM9530	
10	30	57,5	P152RM1030	P152LM1030	
10,5	30	57,5	P152RM10530	P152LM10530	
11	30	57,5	P152RM1130	P152LM1130	
12	30	57,5	P152RM1230	P152LM1230	
12,7(1/2")	30	57,5	P152RM12730	P152LM12730	
13	30	57,5	P152RM1330	P152LM1330	
14	30	57,5	P152RM1430	P152LM1430	
15	30	57,5	P152RM1530	P152LM1530	
16	30	57,5	P152RM1630	P152LM1630	
4	43	70	P152RM0443	P152LM0443	
5	43	70	P152RM0543	P152LM0543	
5,5	43	70	P152RM5543	P152LM5543	
6	43	70	P152RM0643	P152LM0643	
6,35(1/4")	43	70	P152RM63543	P152LM63543	
7	43	70	P152RM0743	P152LM0743	
7,5	43	70	P152RM7543	P152LM7543	
8	43	70	P152RM0843	P152LM0843	
8,2	43	70	P152RM8243	P152LM8243	
9	43	70	P152RM0943	P152LM0943	
9,5(3/8")	43	70	P152RM9543	P152LM9543	
10	43	70	P152RM1043	P152LM1043	
10,5	43	70	P152RM10543	P152LM10543	
11	43	70	P152RM1143	P152LM1143	
12	43	70	P152RM1243	P152LM1243	
12,7(1/2")	43	70	P152RM12743	P152LM12743	
13	43	70	P152RM1343	P152LM1343	
14	43	70	P152RM1443	P152LM1443	
15	43	70	P152RM1543	P152LM1543	

Impiego / Use / Anwendung

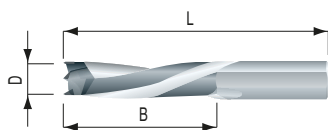
Su foratrici, utilizzabili con art. P161

On boring machines, use with item P161

Auf Bohrmaschinen, zur Verwendung mit Art. P161

P154

HW | Z=2

PUNTE COMPONIBILI PER FORI CIECHI CON 2 ELICHE
DOWEL DRILLS FOR BLIND DRILLING WITH 2 SPIRALS
DÜBELBOHRER FÜR SACKLOCHBOHRUNGEN
**Attacco / Chuck / Schaft**

Ø 10x27 L = 57,5

Ø 10x35 L = 70



Ø D [mm]	B [mm]	L [mm]	Rotation DX/RH/RL Art. Nr.	Rotation SX/LH/LL Art. Nr.	€
4	27	57,5	P154RM0427	P154LM0427	
5	27	57,5	P154RM0527	P154LM0527	
6	27	57,5	P154RM0627	P154LM0627	
6,35(1/4")	27	57,5	P154RM63527	P154LM63527	
7	27	57,5	P154RM0727	P154LM0727	
8	27	57,5	P154RM0827	P154LM0827	
8,2	27	57,5	P152RM8227	P152LM8227	
9	27	57,5	P154RM0927	P154LM0927	
9,5 (3/8")	27	57,5	P154RM9527	P154LM9527	
10	27	57,5	P154RM1027	P154LM1027	
11	27	57,5	P154RM1127	P154LM1127	
12	27	57,5	P154RM1227	P154LM1227	
12,7(1/2")	27	57,5	P154RM12727	P154LM12727	
14	27	57,5	P154RM1427	P154LM1427	
15	27	57,5	P154RM1527	P154LM1527	
4	35	70	P154RM0435	P154LM0435	
5	35	70	P154RM0535	P154LM0535	
6	35	70	P154RM0635	P154LM0635	
6,35(1/4")	35	70	P154RM63535	P154LM63535	
7	35	70	P154RM0735	P154LM0735	
8	35	70	P154RM0835	P154LM0835	
9	35	70	P154RM0935	P154LM0935	
9,5 (3/8")	35	70	P154RM9535	P154LM9535	
10	35	70	P154RM1035	P154LM1035	
11	35	70	P154RM1135	P154LM1135	
12	35	70	P154RM1235	P154LM1235	
12,7(1/2")	35	70	P154RM12735	P154LM12735	
13	35	70	P154RM1335	P154LM1335	
14	35	70	P154RM1435	P154LM1435	
16	35	70	P154RM1635	P154LM1635	

Impiego / Use / Anwendung

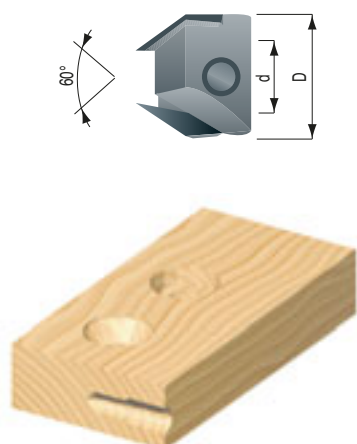
Su foratrici, utilizzabili con art. P162

On boring machines, use with item P162

Auf Bohrmaschinen, zur Verwendung mit Art. P162

P161

HW | Z=2

**SVASATORI COMPONIBILI
SHELL COUNTERSINK
AUFSTECKSENKER**

Ø d [mm]	Ø D [mm]	Rotation DX/RH/RL Art. Nr.	Rotation SX/LH/LL Art. Nr.	€
4	15,5	P161RM04155	P161LM04155	
5	15,5	P161RM05155	P161LM05155	
6	15,5	P161RM06155	P161LM06155	
6,4	15,5	P161RM64155	P161LM64155	
7	18	P161RM0718	P161LM0718	
8	18	P161RM0818	P161LM0818	
9	18	P161RM0918	P161LM0918	
10	20	P161RM1020	P161LM1020	
12	22	P161RM1222	P161LM1222	

Impiego / Use / Anwendung

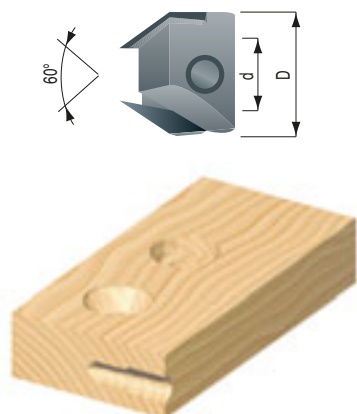
Su foratrici, utilizzabili con art. P152

On boring machines, use with item P152

Auf Bohrmaschinen, zur Verwendung mit Art. P152

P162

HW | Z=2

**SVASATORI COMPONIBILI
SHELL COUNTERSINK
AUFSTECKSENKER**

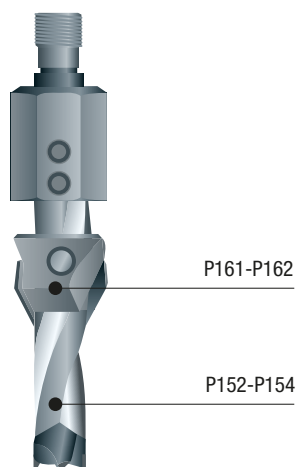
Ø d [mm]	Ø D [mm]	Rotation DX/RH/RL Art. Nr.	Rotation SX/LH/LL Art. Nr.	€
5÷10	20	P162RM0520	P162LM0520	
11÷12	22	P162RM1222	P162LM1222	

Impiego / Use / Anwendung

Su foratrici, utilizzabili con art. P154

On boring machines, use with item P154

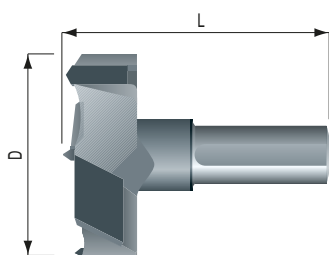
Auf Bohrmaschinen, zur Verwendung mit Art. P154

ESEMPI DI ASSEMBLAGGIO / ASSEMBLY EXAMPLES / MONTAGEBEISPIELEsempio di foro cieco
con svasaturaExamples of blind drilling
with countersink

Beispiel

P163

HW | Z=2+2

**PUNTE PER CERNIERE
HINGE BORING BITS
BESCHLAGBOHRER****Attacco / Chuck / Schaft**

Ø 10x26



Ø D [mm]	L [mm]	Rotation DX/RH/RL Art. Nr.	Rotation SX/LH/LL Art. Nr.	€
15	57,5	P163RM1557	P163LM1557	
16	57,5	P163RM1657	P163LM1657	
17	57,5	P163RM1757	P163LM1757	
18	57,5	P163RM1857	P163LM1857	
20	57,5	P163RM2057	P163LM2057	
22	57,5	P163RM2257	P163LM2257	
24	57,5	P163RM2457	P163LM2457	
25	57,5	P163RM2557	P163LM2557	
26	57,5	P163RM2657	P163LM2657	
28	57,5	P163RM2857	P163LM2857	
30	57,5	P163RM3057	P163LM3057	
32	57,5	P163RM3257	P163LM3257	
34	57,5	P163RM3457	P163LM3457	
35	57,5	P163RM3557	P163LM3557	
36	57,5	P163RM3657	P163LM3657	
38	57,5	P163RM3857	P163LM3857	
40	57,5	P163RM4057	P163LM4057	
15	70	P163RM1570	P163LM1570	
16	70	P163RM1670	P163LM1670	
20	70	P163RM2070	P163LM2070	
25	70	P163RM2570	P163LM2570	
26	70	P163RM2670	P163LM2670	
30	70	P163RM3070	P163LM3070	
35	70	P163RM3570	P163LM3570	

Impiego / Use / Anwendung

Su foratrici, esecuzione di fori
non passanti o sedi per cerniere

On boring machines, for hardware
recessing and pocket hole drilling

Auf Bohrmaschinen, für Sacklochbohrungen
und Beschlagbohrungen

P172

KSS | Z=2



Attacco / Chuck / Schaft

ø 13x50 ø 16x50


PUNTE PER MORTASARE A TAGLIENTI DIRITTI CON ROMPITRUCIOLO
MORTISE DRILLS WITH STRAIGHT TEETH AND CHIPBREAKER
LANGLOCHBOHRER MIT SPANBRECHERNUTEN

Ø D [mm]	L [mm]	S [mm]	Rotation DX/RH/RL Art. Nr.	Rotation SX/LH/LL Art. Nr.	€
6	105	13	P172RS0613	P172LS0613	
7	110	13	P172RS0713	P172LS0713	
8	115	13	P172RS0813	P172LS0813	
9	120	13	P172RS0913	P172LS0913	
10	125	13	P172RS1013	P172LS1013	
11	130	13	P172RS1113	P172LS1113	
12	135	13	P172RS1213	P172LS1213	
13	140	13	P172RS1313	P172LS1313	
14	145	13	P172RS1413	P172LS1413	
15	150	13	P172RS1513	P172LS1513	
16	155	13	P172RS1613	P172LS1613	
6	105	16	P172RS0616	P172LS0616	
7	110	16	P172RS0716	P172LS0716	
8	115	16	P172RS0816	P172LS0816	
9	120	16	P172RS0916	P172LS0916	
10	125	16	P172RS1016	P172LS1016	
11	130	16	P172RS1116	P172LS1116	
12	135	16	P172RS1216	P172LS1216	
13	140	16	P172RS1316	P172LS1316	
14	145	16	P172RS1416	P172LS1416	
15	150	16	P172RS1516	P172LS1516	
16	155	16	P172RS1616	P172LS1616	

Impiego / Use / Anwendung

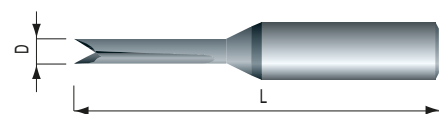
Per asole di precisione su mortasatrici

For making precise slots on mortising machines

Zum Fräsen von Langlöchern, Schlitzten in Weichholz

P173

KSS | Z=2



Attacco / Chuck / Schaft

ø 16x50


PUNTE PER MORTASARE A TAGLIENTI DIRITTI
MORTISE DRILLS WITH STRAIGHT TEETH
PENDELSCHLITZBOHRER

Ø D [mm]	L [mm]	S [mm]	Art. Nr.	€
6	100	16	P173NS1606	
7	100	16	P173NS1607	
8	100	16	P173NS1608	
9	100	16	P173NS1609	
10	110	16	P173NS1610	
12	110	16	P173NS1612	
14	110	16	P173NS1614	
16	110	16	P173NS1616	

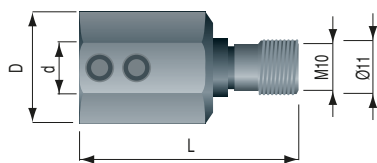
Impiego / Use / Anwendung

Per asole di precisione su macchine automatiche

For making precise slots on automatic machines

Zum Fräsen von ausrißfreien Langlöchern bei pendelnder Arbeitsbewegung

P155

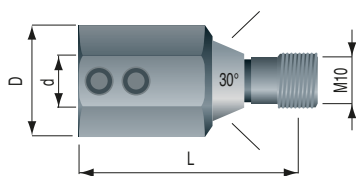
MANDRINI PER PUNTE COMPONIBILI
REDUCING CHUCKS FOR DOWEL DRILLS
BOHRFUTTER FÜR DÜBELBOHRER


Attacco per macchine
 Chuck for machines
 Schaft für Maschinen

MORBIDELLI-BIESSE-WEEKE

Ø d [mm]	Ø D [mm]	L [mm]	Rotation DX/RH/RL Art. Nr.	Rotation SX/LH/LL Art. Nr.	€
8	15,5	41	P155RC0815	P155LC0815	
10	19,5	41	P155RC1019	P155LC1019	

P156

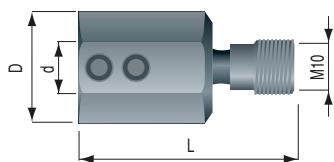
MANDRINI PER PUNTE COMPONIBILI
REDUCING CHUCKS FOR DOWEL DRILLS
BOHRFUTTER FÜR DÜBELBOHRER


Attacco per macchine
 Chuck for machines
 Schaft für Maschinen

VITAP-BUSELLATO-SCHLEICHER

Ø d [mm]	Ø D [mm]	L [mm]	Rotation DX/RH/RL Art. Nr.	Rotation SX/LH/LL Art. Nr.	€
8	15,5	46	P156RC0815	P156LC0815	
10	19,5	46	P156RC1019	P156LC1019	

P157

MANDRINI PER PUNTE COMPONIBILI
REDUCING CHUCKS FOR DOWEL DRILLS
BOHRFUTTER FÜR DÜBELBOHRER


Attacco per macchine
 Chuck for machines
 Schaft für Maschinen

AYEN-HOLZMA-MAYER

Ø d [mm]	Ø D [mm]	L [mm]	Rotation DX/RH/RL Art. Nr.	Rotation SX/LH/LL Art. Nr.	€
8	15,5	40	P157RC0815	P157LC0815	
10	19,5	40	P157RC1019	P157LC1019	

PUNTE A COLTELLINO
DRITTE E SAGOMATE

STRAIGHT
AND PROFILED
KNIFE ROUTERS

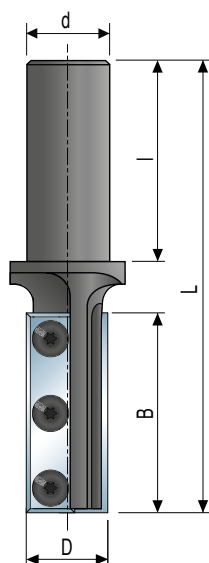
SCHAFTWERKZEUGE



PH71FM

HW | Z=2

PUNTA PER CONTORNARE DISPOSABLE KNIFE SIZING AND REBATING ROUTER WP-SCHAFTFRÄSER

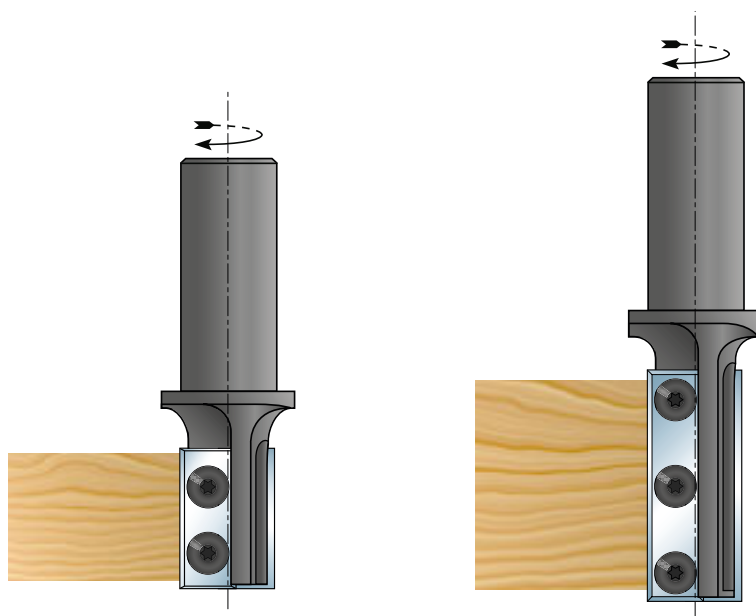


Ø D [mm]	B [mm]	L [mm]	Attacco / Shank / Schaft		Z	Rotation	Art. Nr.	€
			Ø d [mm]	l [mm]				
20	30	95	20/25	50	2	R	PH71FM01	
20	30	95	20/25	50	2	L	PH71FM02	
20	50	115	20/25	50	2	R	PH71FM03	
20	50	115	20/25	50	2	L	PH71FM04	
25	50	115	20/25	50	2	R	PH71FM05	
25	50	115	20/25	50	2	L	PH71FM06	

RICAMBI / SPARE PARTS / ERSATZTEILE

Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH71FM			€
		01/02	03/04	05/06	
Coltello / Knife / Messer	29,5x12x1,5	2	/	/	
Coltello / Knife / Messer	50x12x1,7	/	2	2	
Vite per Coltello / Knife's Screw / Schraube	M3,5x4 Ø9	4	6	6	
Chiave per Coltello / Knife's Key / Torxschlüssel	Torx 15	1	1	1	

ESEMPI DI LAVORAZIONE WORKING EXAMPLE EINSATZBEISPIEL

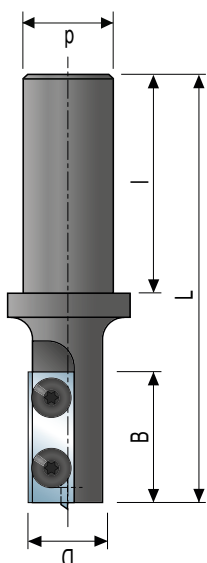


PH72FM

HW | Z=1

HW | Z=1+1

PUNTA PER FORARE E CONTORNARE DISPOSABLE KNIFE SIZING AND PLUNGING ROUTER WP-SCHAFTFRÄSER



Ø D [mm]	B [mm]	L [mm]	Attacco / Shank / Schaft		Z	Rotation	Art. Nr.	€
			Ø d [mm]	l [mm]				
12	30	100	20/25	50	1	R	PH72FM01	
16	30	100	20/25	50	1	R	PH72FM02	
16	50	120	20/25	50	1	R	PH72FM03	
18	30	100	20/25	50	1+1	R	PH72FM04	
18	50	120	20/25	50	1+1	R	PH72FM05	
20	30	100	20/25	50	1+1	R	PH72FM06	
20	50	120	20/25	50	1+1	R	PH72FM07	
12	30	100	20/25	50	1	L	PH72FM08	
16	30	100	20/25	50	1	L	PH72FM09	
16	50	120	20/25	50	1	L	PH72FM10	
18	30	100	20/25	50	1+1	L	PH72FM11	
18	50	120	20/25	50	1+1	L	PH72FM12	
20	30	100	20/25	50	1+1	L	PH72FM13	
20	50	120	20/25	50	1+1	L	PH72FM14	

Coni MK2 o MK3 disponibili a richiesta

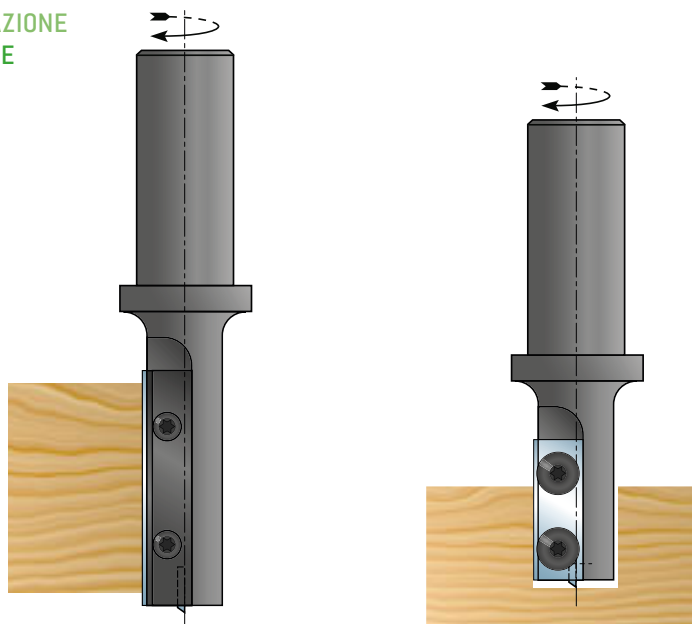
Shanks MK2 or MK3 available on request

Schaft MK2 oder MK3 auf Anfrage

RICAMBI / SPARE PARTS / ERSATZTEILE

Art.	Dimensioni / Dimensions / Abmessungen [mm]	Art. Nr. PH72FM										€
		01/08	02/09	03/10	04/11	05/12	06	07	13	14		
Coltello / Knife / Messer	9,7x9,7x1,5	/	/	/	1	1	/	/	/	/		
Coltello / Knife / Messer	9,7x10,6x1,5 DX	/	/	/	/	/	1	1	/	/		
Coltello / Knife / Messer	9,7x10,6x1,5 SX	/	/	/	/	/	/	/	1	1		
Coltello / Knife / Messer	29,5x9x1,5	1	1	/	/	/	/	/	/	/		
Coltello / Knife / Messer	30x12x1,5	/	/	/	1	/	1	/	1	/		
Coltello / Knife / Messer	49,5x9x1,5	/	/	1	/	/	/	/	/	/		
Coltello / Knife / Messer	50x12x1,5	/	/	/	/	1	/	1	/	1		
Tassello / Wedge / Spannkeil	50x10x2,5	/	/	/	/	1	/	1	/	1		
Vite per Coltello / Knife's Screw / Schraube	M3,5x9 Ø6	/	2	2	1	3	1	3	1	3		
Vite per Coltello / Knife's Screw / Schraube	M3x4	2	/	/	/	/	/	/	/	/		
Vite per Coltello / Knife's Screw / Schraube	M3,5x4 Ø9	/	/	/	2	/	2	/	2	/		
Chiave per Coltello / Knife's Key / Torxschlüssel	Torx 9	1	/	/	/	/	/	/	/	/		
Chiave per Coltello / Knife's Key / Torxschlüssel	Torx 15	/	1	1	1	1	1	1	1	1		

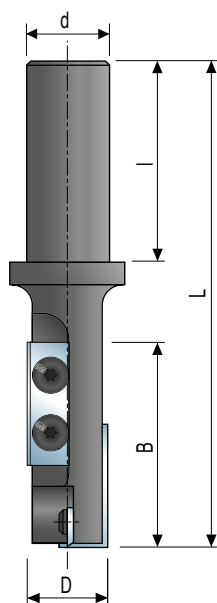
ESEMPI DI LAVORAZIONE WORKING EXAMPLE EINSATZBEISPIEL



PH73FM

HW | Z=2+1

PUNTA PER FORARE E CONTORNARE DISPOSABLE KNIFE SIZING AND PLUNGING ROUTER WP-SCHAFTFRÄSER



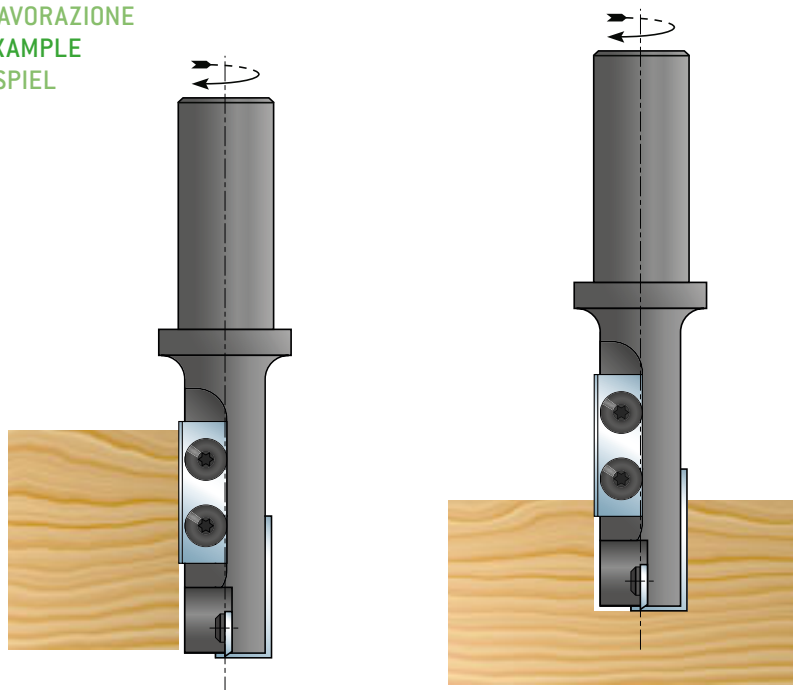
Ø D [mm]	B [mm]	L [mm]	Attacco / Shank / Schaft		Z	Art. Nr.	€
			Ø d [mm]	l [mm]			
18	35	105	20/25	50	2+1	PH73FM01	
20	35	105	20/25	50	2+1	PH73FM02	
20	50	120	20/25	50	2+1	PH73FM03	
20	58	125	20/25	50	2+1	PH73FM04	

Coni MK2 o MK3 disponibili a richiesta
Shanks MK2 or MK3 available on request
Schaft MK2 oder MK3 auf Anfrage

RICAMBI / SPARE PARTS / ERSATZTEILE

Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH73FM				€
		01/05	02/06	03/07	04/08	
Coltello / Knife / Messer	9,7x9,7x1,5	1	/	/	/	
Coltello / Knife / Messer	9,7x10,6x1,5 DX	/	1	1	1	
Coltello / Knife / Messer	20x12x1,5	2	2	/	/	
Coltello / Knife / Messer	30x12x1,5	/	/	2	2	
Vite per Coltello / Knife's Screw / Schraube	M3,5x4 Ø9	2	2	4	4	
Vite per Coltello / Knife's Screw / Schraube	M3,5x6,5 Ø6	1	1	1	1	
Chiave per Coltello / Knife's Key / Torxschlüssel	Torx 15	1	1	1	1	

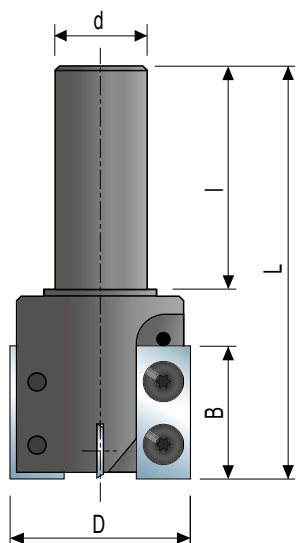
ESEMPI DI LAVORAZIONE WORKING EXAMPLE EINSATZBEISPIEL



PH74FM

HW | Z=2+1

PUNTA PER FORARE E CONTORNARE DISPOSABLE KNIFE SIZING AND PLUNGING ROUTER WP-SCHAFTFRÄSER

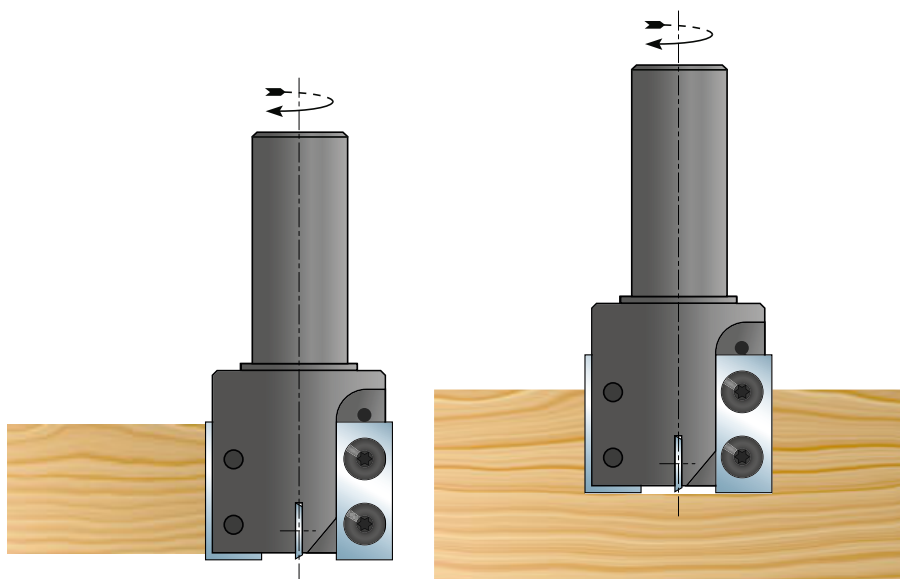


Ø D [mm]	B [mm]	L [mm]	Attacco / Shank / Schaft		Z	Art. Nr.	€
			Ø d [mm]	l [mm]			
30	40	100	20/25	50	2+1	PH74FM01	
40	30	90	20/25	50	2+1	PH74FM02	
40	50	110	20/25	50	2+1	PH74FM03	

RICAMBI / SPARE PARTS / ERSATZTEILE

Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH74FM			€
		01	02	03	
Coltello / Knife / Messer	12x12x1,5	1	/	/	
Coltello / Knife / Messer	15x12x1,5	/	1	1	
Coltello / Knife / Messer	39,5x12x1,5	2	/	/	
Coltello / Knife / Messer	29,5x12x1,5	/	2	/	
Coltello / Knife / Messer	49,5x12x1,5	/	/	2	
Vite per Coltello / Knife's Screw / Schraube	M3,5x7 Ø9	4	4	4	
Vite per Coltello / Knife's Screw / Schraube	M3,5x7 Ø7,5	1	1	1	
Chiave per Coltello / Knife's Key / Torxschlüssel	Torx 15	1	1	1	

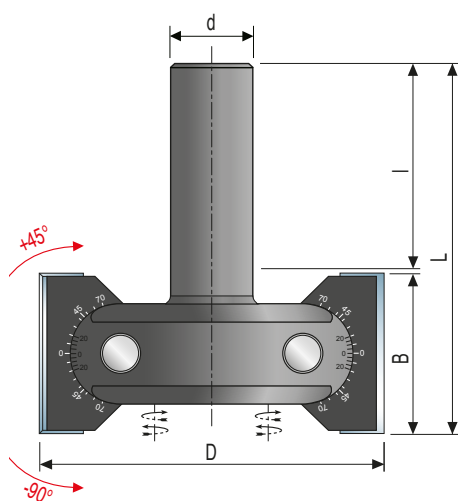
ESEMPI DI LAVORAZIONE WORKING EXAMPLE EINSATZBEISPIEL



PH75FM

HW | Z=2

PUNTA CON COLTELLINI A INCLINAZIONE VARIABILE DISPOSABLE KNIFE ADJUSTABLE BEVEL ROUTER WP-SCHWENKMESSERKOPF, STUFENLOS VERSTELLBAR

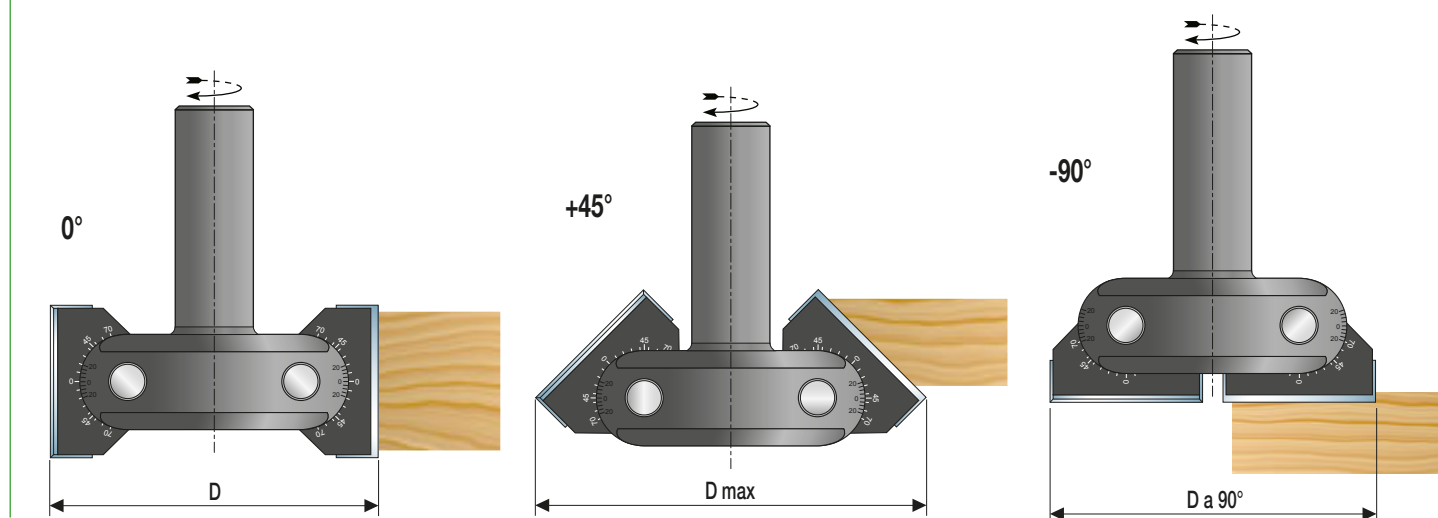


Ø D [mm]	B [mm]	D Max [mm]	D a 90° [mm]	L [mm]	Attacco / Shank / Schaft		Z	Art. Nr.	€
					Ø d [mm]	l [mm]			
85	40	102	88	93	20	50	2	PH75FM01	
85	40	102	88	93	25	50	2	PH75FM02	

RICAMBI / SPARE PARTS / ERSATZTEILE

Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH75FM		€
		01	02	
Coltello / Knife / Messer	40x12x1,5	2	2	
Cuneo / Wedge / Spannkeil	38x12x6	2	2	
Vite per Cuneo / Wedge's Screw / Schraube	M6x8	4	4	
Chiave per Coltello / Knife's Key / Torxschlüssel	Esagonale 3	1	1	
Chiave di Regolaz. / Adjustment Key / Schlüssel	Esagonale 4	1	1	

ESEMPI DI LAVORAZIONE WORKING EXAMPLE EINSATZBEISPIEL

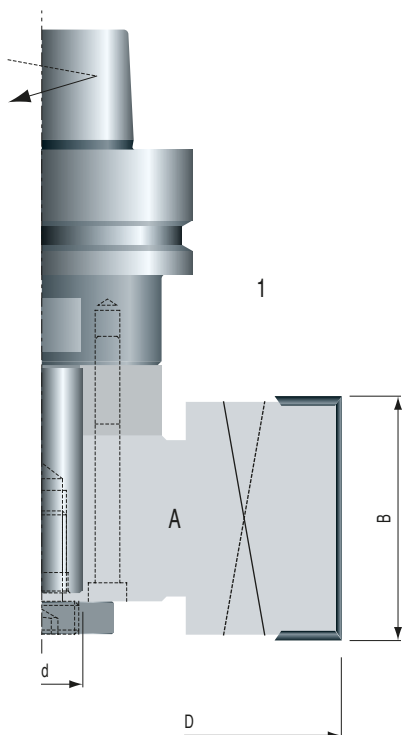


GP29FM10 PH29FA05

HW | Z=4

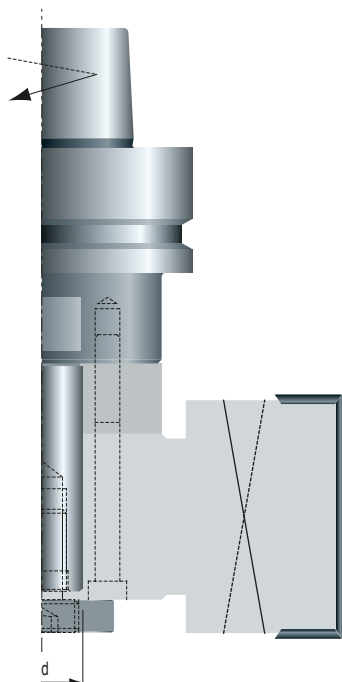
GRUPPO PER BATTUTE E CONTORNATURE DISPOSABLE KNIFE ROUTER SET FOR REBATES WENDEPLATTEN-FALZKOPF

Gruppo completo di mandrino e testa in lega leggera con angolo assiale alternato.
Router set including chuck and a rebating cutterhead in light alloy with alternate shear angle.
Werkzeug auf Schaft verschraubt, mit wechselseitigem Achswinkel.
Werkzeug aus hochfestem Aluminium.



Ø D [mm]	B [mm]	Ø d [mm]	Z	Cono / Chuck / Spannzangenfutter	Art. Nr.	€
125	51	30	4	HSK 63F	GP29FM1004	
Ø D [mm]	B [mm]	Ø d [mm]	Z	V	Art. Nr.	€
125	51	30	4	4	PH29FA05020	

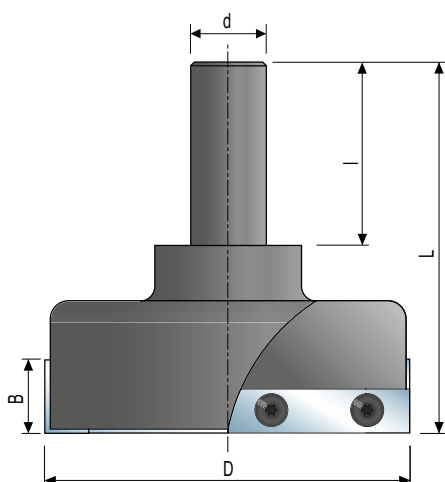
RICAMBI / SPARE PARTS / ERSATZTEILE			
Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH29FA05020	€
Coltello / Knife / Messer	50x12x1,5	4	
Cuneo / Wedge / Spannkeil	46	4	
Vite per cuneo / Knife's Screw / Schraube	M8x16	8	
Rasante / Spur / Vorschneide	14x14x2	4	
Vite per rasante / Spur's screw / Schraube für VS	M5x6,5	4	
Chiave di servizio / Allen Key / Schlüssel	4	1	
Chiave di servizio / Allen Key / Schlüssel	Torx 15	1	



PH76FM

HW | Z=2+2

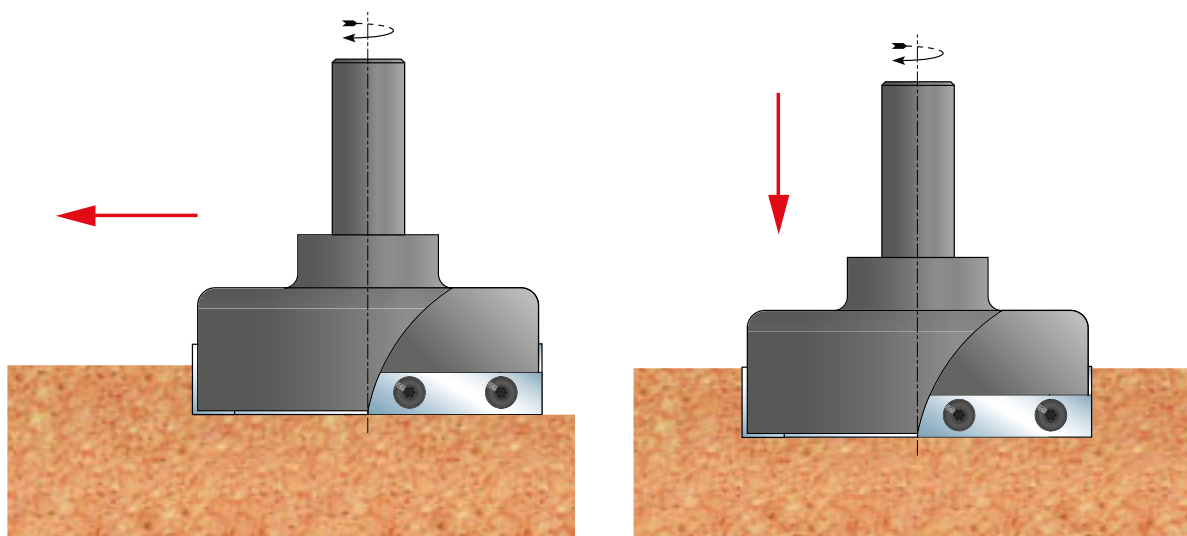
PUNTA PER FORARE E SPIANARE CUTTER FOR DRILLING AND PLANING WP-PLANFRÄSER



$\varnothing D$ [mm]	B [mm]	L [mm]	Attacco / Shank / Schaft		Z	Art. Nr.	€
			$\varnothing d$ [mm]	l [mm]			
80	30	100	20/25	50	2+2	PH76FM01	
100	20	100	20/25	50	2+2	PH76FM02	

RICAMBI / SPARE PARTS / ERSATZTEILE				
Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH76FM		€
		01	02	
Coltello / Knife / Messer	29,5x12x1,5	2	/	
Coltello / Knife / Messer	39,5x12x1,5	2	/	
Coltello / Knife / Messer	19,5x12x1,5	/	2	
Coltello / Knife / Messer	49,5x12x1,5	/	2	
Cuneo / Wedge / Spannkeil	16 x15x8	/	2	
Ogiva / Nut / Mutter	$\varnothing 13 \times 9$	/	2	
Vite per Ogiva / Nut's Screw / Schraube	M8x22	/	2	
Vite per Coltello / Knife's Screw / Schraube	M3,5x7 $\varnothing 9$	8	4	
Chiave per Coltello / Knife's Key / Torxschlüssel	Torx 15	1	1	
Chiave per Ogiva / Nut's Key / Schlüssel	Esagonale 4	/	1	

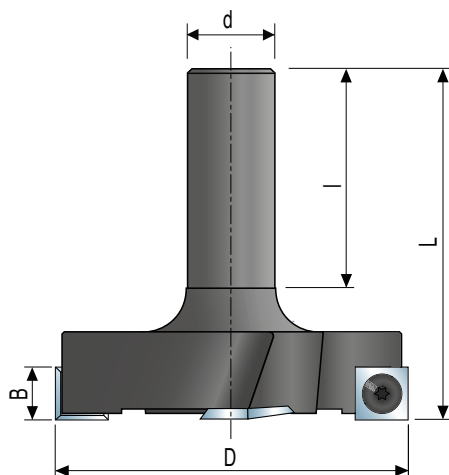
ESEMPI DI LAVORAZIONE WORKING EXAMPLE EINSATZBEISPIEL



PH77FM01

HW | Z=2+2

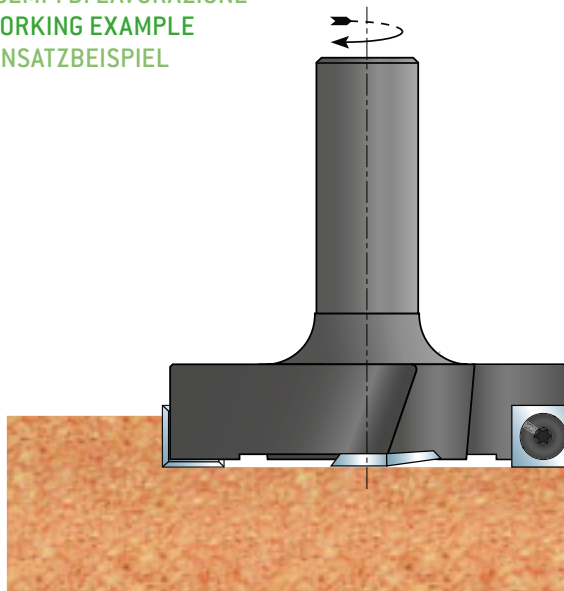
PUNTA PER SPIANARE DISPOSABLE KNIFE PLANING ROUTER WECHSELPLATTEN-PLANFRÄSER



Ø D [mm]	B [mm]	L [mm]	Attacco / Shank / Schaft		Z	Art. Nr.	€
			Ø d [mm]	l [mm]			
80	12	80	20/25	50	2+2	PH77FM01	

RICAMBI / SPARE PARTS / ERSATZTEILE			
Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH77FM	€
		01	
Coltello / Knife / Messer	12x12x1,5	2	
Rasante / Spur / Vorschneider	14x14x2	2	
Vite per Coltello / Knife's Screw / Schraube	M4x8 Ø9	8	
Vite per Rasante / Spur's Screw / Schraube für VS	M5x7 Ø8,8	/	
Chiave per Coltello / Knife's Key / Torxschlüssel	Torx 15	1	

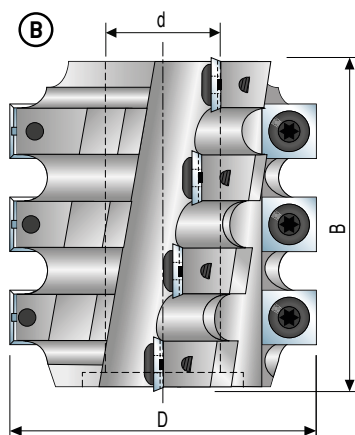
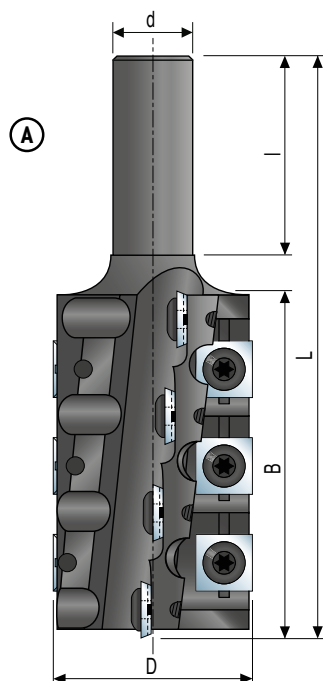
ESEMPI DI LAVORAZIONE WORKING EXAMPLE EINSATZBEISPIEL



PH78FM

HW | Z=2+2

PUNTA PER CONTORNARE E SPIANARE - GRANDI ASPORTAZIONI DISPOSABLE KNIFE ROUTER FOR SIZING AND PLANING - BIG REMOVAL FRÄSER ZUM FÜGEN UND PLANFRÄSEN



Gli attacchi per i corpi in lega leggera sono da ordinare a parte

The toolholders for the bodies in light alloy must be ordered separately

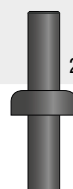
Die Aufnahmen für die Körper aus Leichtmetall sind separat zu bestellen

Type	Ø D [mm]	B [mm]	L [mm]	Attacco / Shank / Schaft		Z	Material	Art. Nr.	€
				Ø d [mm]	l [mm]				
A	50	62	121	20	50	2+2	Acciaio / Steel / Stahl	PH78FM01	
	50	74	133	20	50	2+2	Acciaio / Steel / Stahl	PH78FM02	
	50	86	145	20	50	2+2	Acciaio / Steel / Stahl	PH78FM03	
B	80	62	/	25	/	2+2	* Lega leggera / Light alloy / Leicht Metall	PH78FM04	
	80	74	/	25	/	2+2	* Lega leggera / Light alloy / Leicht Metall	PH78FM05	
	80	86	/	25	/	2+2	* Lega leggera / Light alloy / Leicht Metall	PH78FM06	

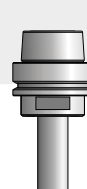
RICAMBI / SPARE PARTS / ERSATZTEILE

Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH78FM						€
		01	02	03	04	05	06	
Coltello / Knife / Messer	14,3x14,3x2,8	10	14	18	10	14	18	
Vite per Coltello / Knife's Screw / Schraube	M5x10,2 Ø10,5	10	14	18	10	14	18	
Chiave per Coltello / Knife's Key / Torxschlüssel	Torx 20	1	1	1	1	1	1	

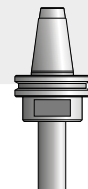
Attacco per tipo B
Shank for type B
Schaft für B



20/25x50

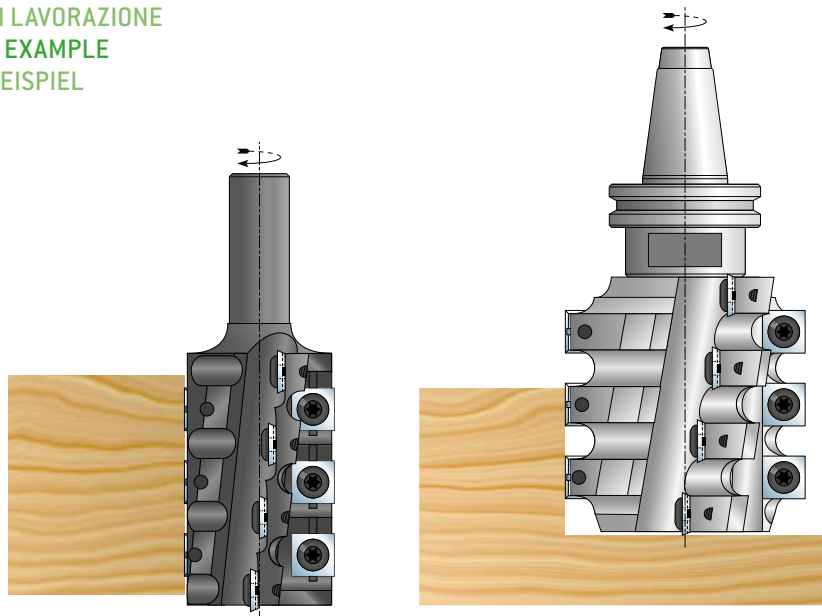


HSK63 F



ISO 30/40

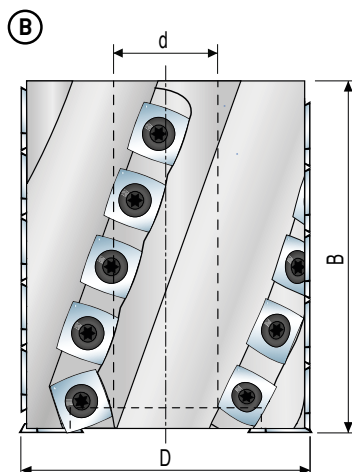
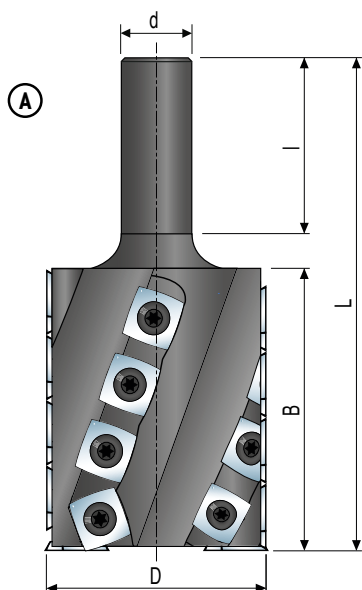
ESEMPI DI LAVORAZIONE WORKING EXAMPLE EINSATZBEISPIEL



PH79FM

HW | Z=2+2

PUNTA PER CONTORNARE E SPIANARE - BUONA FINITURA CUTTER FOR SIZING AND PLANING - GOOD FINISHING SPIRALFÜGEFRÄSER - GROBE ZERSPANUNG

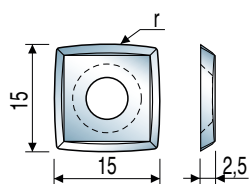


AXIAL

Gli attacchi per i corpi in lega leggera sono da ordinare a parte

The toolholders for the bodies in light alloy must be ordered separately

Die Aufnahmen für die Körper aus Leichtmetall sind separat zu bestellen



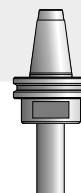
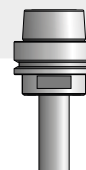
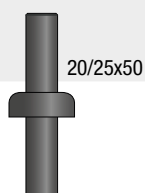
Coltello / Knife / Messer

Type	Ø D [mm]	B [mm]	L [mm]	Attacco Shank Schaft		Z	R	Material	Art. Nr.	€
				Ø d [mm]	l [mm]					
A	50	60	122	20/25	50	2+2	2	Acciaio / Steel / Stahl	PH79FM01	
	50	80	141	20/25	50	2+2	2	Acciaio / Steel / Stahl	PH79FM02	
	50	110	170	20/25	50	2+2	2	Acciaio / Steel / Stahl	PH79FM03	
B	60	60	/	20	/	2+2	2	* Lega leggera / Light alloy / Leicht Metall	PH79FM04	
	60	80	/	20	/	2+2	2	* Lega leggera / Light alloy / Leicht Metall	PH79FM05	
	80	80	/	30	/	2+2	2	* Lega leggera / Light alloy / Leicht Metall	PH79FM06	
	80	100	/	30	/	2+2	2	* Lega leggera / Light alloy / Leicht Metall	PH79FM07	

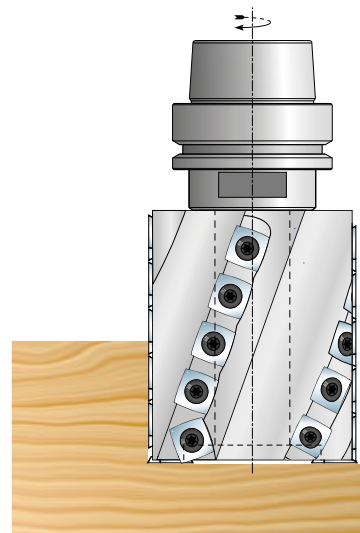
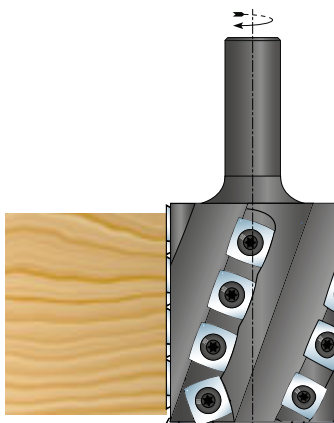
RICAMBI / SPARE PARTS / ERSATZTEILE

Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH79FM							€
		01	02	03	04	05	06	07	
Coltello / Knife / Messer	15x15x2,5	12	16	24	12	16	16	20	
Rasante / Spur / Vorschneider	14x14x2	2	2	2	2	2	2	2	
Vite per Coltello / Knife's Screw / Schraube	M5x12,5 Ø9	12	16	24	12	16	16	20	
Vite per Rasante / Spur's Screw / Schraube für VS	M5x6,5 Ø9	2	2	2	2	2	2	2	
Chiave per Coltello / Knife's Key / Torxschlüssel	Torx 20	1	1	1	1	1	1	1	

Attacco per tipo B
Shank for type B
Schaft für B



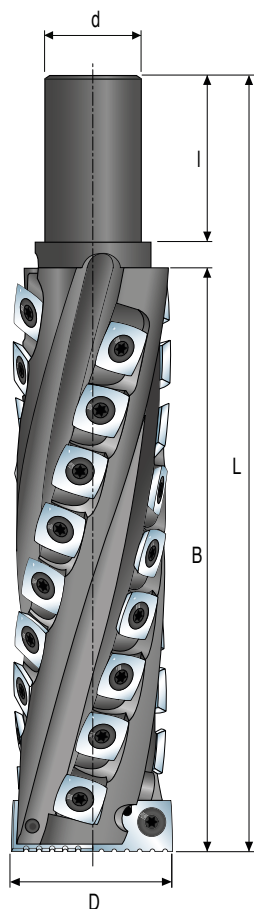
ESEMPI DI LAVORAZIONE WORKING EXAMPLE EINSATZBEISPIEL



PH80FM

HW | Z=4

FRESA MULTITAGLIANTE ELICOIDALE Z4
 HELICAL MULTI-CUTTING CUTTER Z4
 SPIRALFÖRMIGER MEHRSCHEIDIGER-SCHAFTFRÄSER Z4

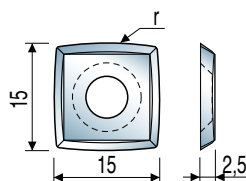


AXIAL

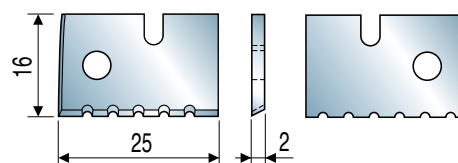
Ø D [mm]	B [mm]	L [mm]	Attacco / Shank / Schaft		Z	Rotation	Art. Nr.	€
			Ø d [mm]	l [mm]				
50	180	240	25/30	50	4	R	PH80FM01	
50	180	240	25/30	50	4	L	PH80FM02	
50	210	270	25/30	50	4	R	PH80FM03	
50	210	270	25/30	50	4	L	PH80FM04	

RICAMBI / SPARE PARTS / ERSATZTEILE

Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH80FM				€
		01	02	03	04	
① Coltello / Knife / Messer	15x15x2,5	34	34	40	40	
② Coltello / Knife / Messer	25x16x2	1	/	1	/	
② Coltello / Knife / Messer	25x16x2	1	/	1	/	
② Coltello / Knife / Messer	25x16x2	/	1	/	1	
② Coltello / Knife / Messer	25x16x2	/	1	/	1	
Vite per Coltello / Knife's Screw / Schraube	M5x12,5 Ø8,8	34	34	40	40	
Vite per Coltello / Knife's Screw / Schraube	M4x8,3 Ø9	2	2	2	2	
Chiave per Coltello / Knife's Key / Torxschlüssel	Torx 15	1	1	1	1	
Chiave per Coltello / Knife's Key / Torxschlüssel	Torx 20	1	1	1	1	

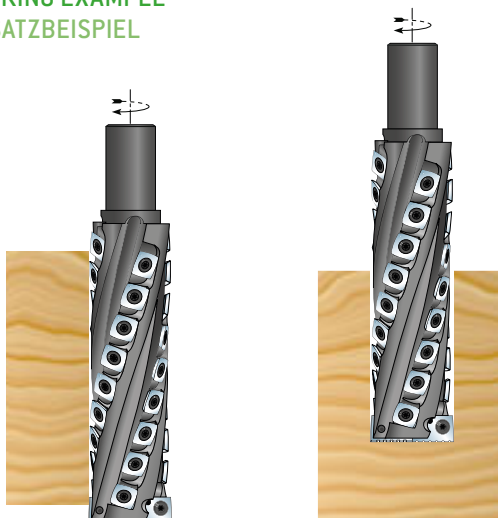


① Coltello / Knife / Messer



② Coltello / Knife / Messer

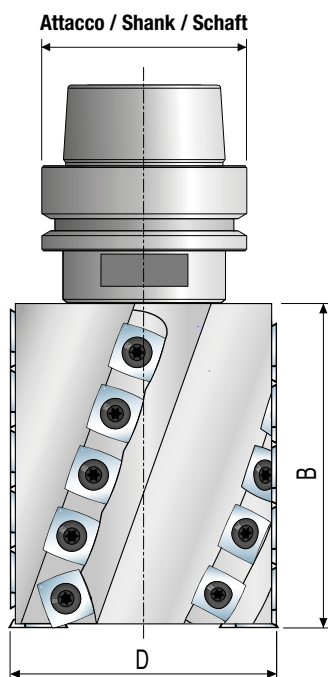
ESEMPI DI LAVORAZIONE
 WORKING EXAMPLE
 EINSATZBEISPIEL



PH81FM

HW | Z=4 - V=2

FRESA MULTITAGLIANTE CON COLTELLO BOMBATO MULTI-CUTTING CUTTER WITH ROUNDED KNIFE Z4 SPIRALFÜRGERFRÄSER

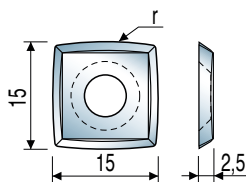


AXIAL

Ø D [mm]	B [mm]	Ø d [mm]	Z	V	Attacco Shank Schaft	Rotation	Material	Art. Nr.	€
80	122	30	4	2	HSK 63F	R	Lega leggera / Light alloy / Leicht Metall	PH81FM01	
80	122	30	4	2	HSK 63F	L	Lega leggera / Light alloy / Leicht Metall	PH81FM02	

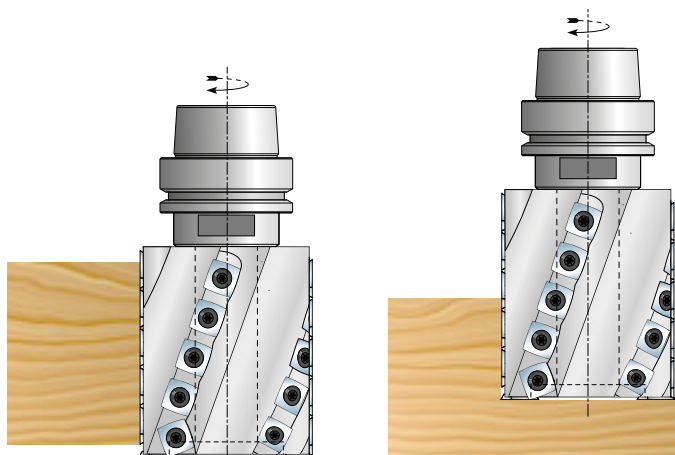
RICAMBI / SPARE PARTS / ERSATZTEILE

Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH81FM		€
		01	02	
Mandrino / Toolholder / Schaft	HSK 63F H=100	1	1	
Coltello / Knife / Messer	15x15x2,5	24	24	
Rasante / Spur / Vorschneider	14x14x2	2	2	
Vite per Coltello / Knife's Screw / Schraube	M5x12,5 Ø9	24	24	
Vite per Rasante / Spur's Screw / Schraube für VS	M5x6,5 Ø9	2	2	
Vite per Flangia / Flange's Screw / Schraube	M6x26 Ø10	3	3	
Chiave per Coltello / Knife's Key / Torxschlüssel	Torx 20	1	1	
Chiave per Flangia / Flange's Key / Sechskant Schlüssel	Esagonale 5	1	1	



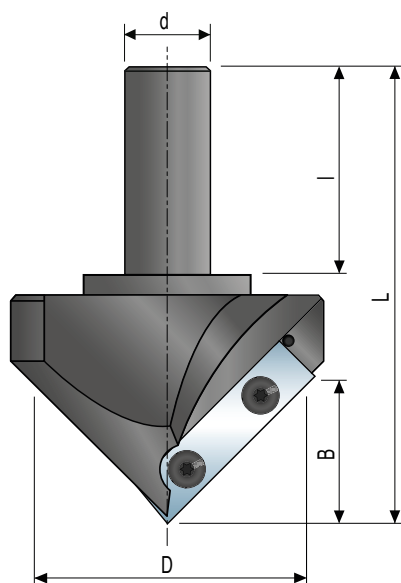
Coltello / **Knife** / Messer

ESEMPI DI LAVORAZIONE WORKING EXAMPLE EINSATZBEISPIEL



PH82FM

HW | Z=1

FRESA PER FOLDING
ROUTER BIT FOR FOLDING
FOLDINGFRÄSER

Ø D [mm]	B [mm]	L [mm]	Attacco / Shank / Schaft		Z	Rotation	Art. Nr.	€
			Ø d [mm]	l [mm]				
38	19	80	16	50	1	R	PH82FM01	
38	19	80	16	50	1	L	PH82FM02	
65	34	110	20	50	1	R	PH82FM03	
65	34	110	20	50	1	L	PH82FM04	

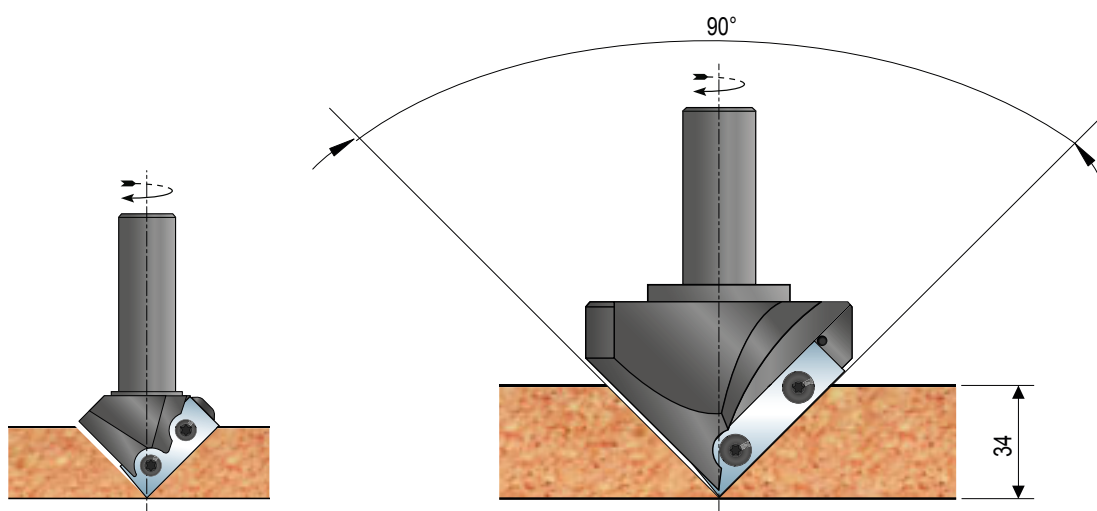
Punte con angoli diversi a richiesta

Folding router with other angles available on request

Foldingfräser mit anderen Winkel auf Anfrage

RICAMBI / SPARE PARTS / ERSATZTEILE

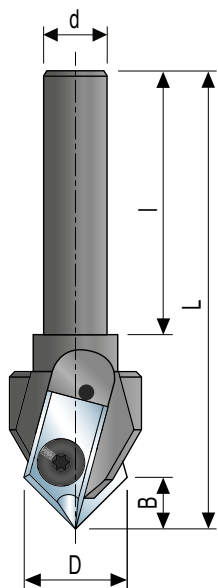
Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH82FM				€
		01	02	03	04	
Coltello / Knife / Messer	29x12x1,5	1	/	/	/	
Coltello / Knife / Messer	29x12x1,5	/	1	/	/	
Coltello / Knife / Messer	49x12x1,5	/	/	1	/	
Coltello / Knife / Messer	49x12x1,5	/	/	/	1	
Vite per Coltello / Knife's Screw / Schraube	M3,5x6,5 Ø6	2	2	/	/	
Vite per Coltello / Knife's Screw / Schraube	M3,5x6,2 Ø9	/	/	2	2	
Vite di riferimento / Positioning Screw / Anschlagsschraube	M3,5x6,2 Ø9	1	1	/	/	
Chiave per Coltello / Knife's Key / Torxschlüssel	Torx 15	1	1	1	1	

ESEMPI DI LAVORAZIONE
WORKING EXAMPLE
EINSATZBEISPIEL

PH83FM

HW | Z=2

SET MULTIPROFILO MULTI-PROFILE CUTTER SET ZIERNUTFRÄSER



Ø D [mm]	B [mm]	L [mm]	Attacco / Shank / Schaft		Z	Rotation	Art. Nr.	€
			Ø d [mm]	l [mm]				
19	10	88	12	50	2	R	PH83FM01	
19	10	88	12	50	2	L	PH83FM02	

	Ø D [mm]	B [mm]	L [mm]	Attacco / Shank / Schaft		Z	Rotation	Art. Nr.	€
				Ø d [mm]	l [mm]				
Set	19	10	88	12	50	2	R	PH83FM10	
Set	19	10	88	12	50	2	L	PH83FM20	

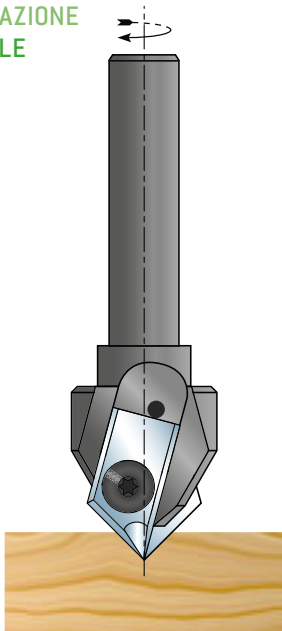
RICAMBI / SPARE PARTS / ERSATZTEILE						
Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH83FM				€
		01	02	03	04	
Coltello / Knife / Messer	25x12x1,5 90°	/	/	2	2	
Coltello Concavo / Concave Knife / Konkaves Messer	25x12x1,5 R 3	/	/	2	2	
Coltello Convesso / Convex Knife / Konkaves Messer	25x12x1,5 R 5	/	/	2	2	
Coltello Concavo / Concave Knife / Konkaves Messer	25x12x1,5 R 4	/	/	2	2	
Vite per Coltello / Knife's Screw / Schraube	M3,5x4 Ø9	2	2	3	3	
Chiave per Coltello / Knife's Key / Torxschlüssel	Torx15	1	1	1	1	

Altri profili disponibili a richiesta

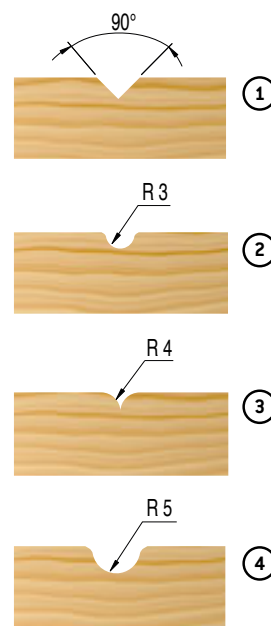
Other profiles available on request

Weitere Profile auf Anfrage lieferbar

ESEMPI DI LAVORAZIONE WORKING EXAMPLE EINSATZBEISPIEL



DOTAZIONE DEL SET PROVIDED SET SET IN HOLZKASSETTE



Set fornito in cassetta di legno

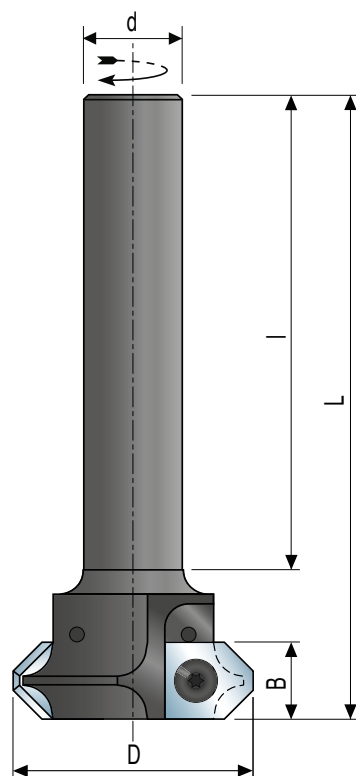
Set supplied in a wooden box

Set wird in Holzkassette geliefert

PH84FM01

HW | Z=2

PUNTE PER RAGGIARE E SMUSSARE DISPOSABLE KNIFE ROUTERS FOR ROUNDING AND CHAMFERING WECHSELPLATTEN-ABRUND- UND FASEFRÄSER



Ø D [mm]	B [mm]	L [mm]	Attacco / Shank / Schaft		Z	Rotation	Art. Nr.	€
			Ø d [mm]	l [mm]				
50	16	130	20 / 25	100	2	R	PH84FM01	

Punta compresa di coltelli. In fase d'ordine specificare il profilo richiesto.

Router already equipped with profiled knives. When ordering please specify the profile required.

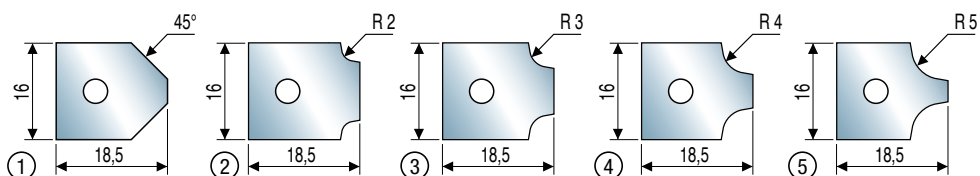
Profilmesser im Lieferumfang enthalten. Bitte das benötigte Profil bei Bestellung angeben.

RICAMBI / SPARE PARTS / ERSATZTEILE

Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH84FM		€
		01		
Vite per Coltello / Knife's Screw / Schraube	M4x8,3 Ø9	2		
Chiave per Coltello / Knife's Key / Torxschlüssel	Torx 15	1		

COLTELLI STANDARD/ STANDARD KNIVES / STANDARD MESSER

Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH84FM		€
		Type	01	
Coltello 45° / Knife 45° / Messer 45°	16x18,5x2	①	2	
Coltello R2 / Knife R2 / Messer R2	16x18,5x2	②	2	
Coltello R3 / Knife R3 / Messer R3	16x18,5x2	③	2	
Coltello R4 / Knife R4 / Messer R4	16x18,5x2	④	2	
Coltello R5 / Knife R5 / Messer R5	16x18,5x2	⑤	2	

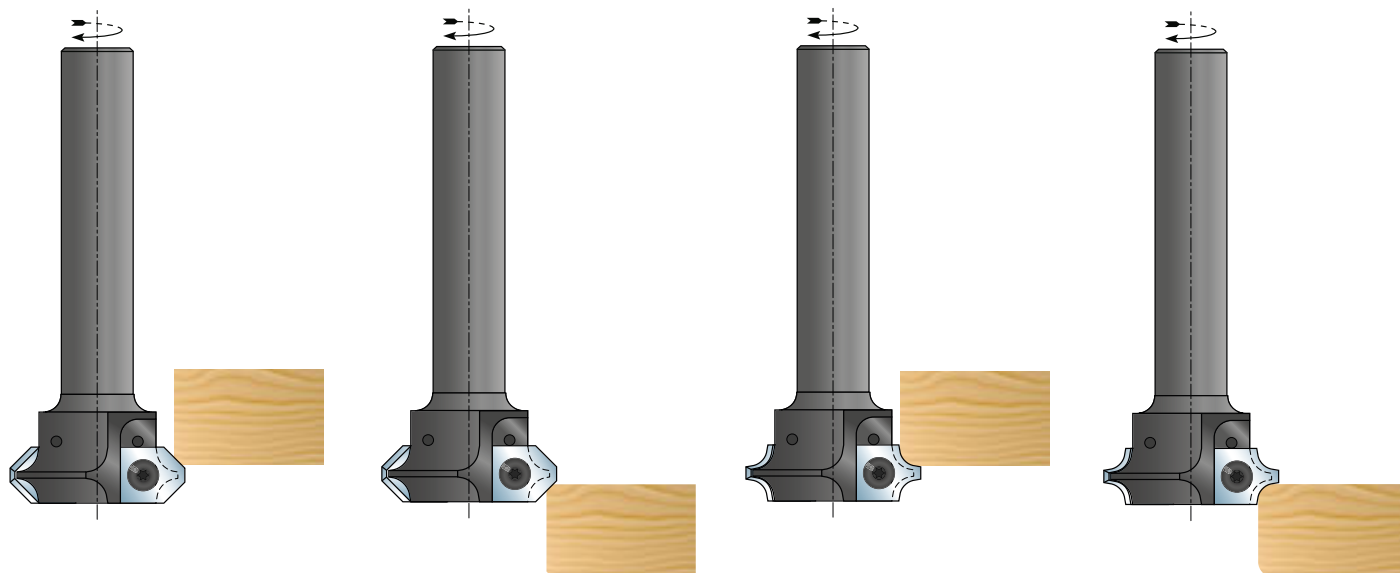


Altri profili disponibili a richiesta

Other profiles available on request

Weitere Profile auf Anfrage lieferbar

ESEMPI DI LAVORAZIONE WORKING EXAMPLE EINSATZBEISPIEL



PH89FM01

HW | Z=2

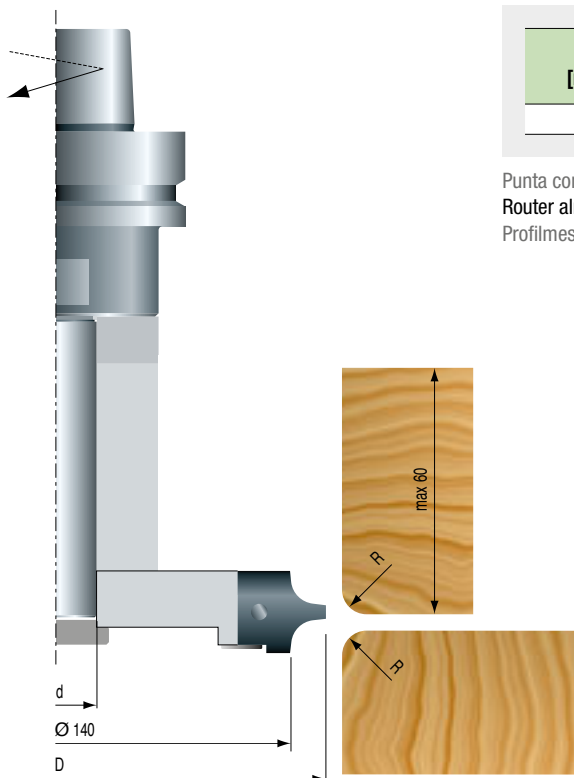
GRUPPO PER RAGGIARE E SMUSSARE DISPOSABLE KNIFE ROUTER FOR ROUNDING AND CHAMFERING WECHSELPLATTEN-ABRUND-FASE-KOMBINATION

Ø D [mm]	B [mm]	Ø d [mm]	Z	Type	Art. Nr.	€
157	120	30	2	HSK 63F	PH89FM01	

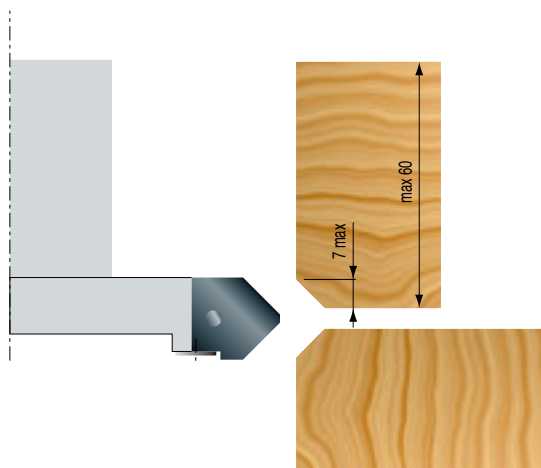
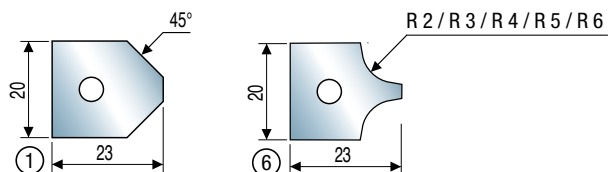
Punta compresa di coltelli. In fase d'ordine specificare il profilo richiesto.

Router already equipped with profiled knives. When ordering please specify the profile required.

Profilmesser im Lieferumfang enthalten. Bitte das benötigte Profil bei Bestellung angeben.



COLTELLI STANDARD/ STANDARD KNIVES / STANDARD MESSER				
Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH89FM		€
		Type	01	
Coltello 45° / Knife 45° / Messer 45°	20x23x2	①	2	
Coltello R2 / Knife R2 / Messer R2	20x23x2	②	2	
Coltello R3 / Knife R3 / Messer R3	20x23x2	③	2	
Coltello R4 / Knife R4 / Messer R4	20x23x2	④	2	
Coltello R5 / Knife R5 / Messer R5	20x23x2	⑤	2	
Coltello R6 / Knife R6 / Messer R6	20x23x2	⑥	2	

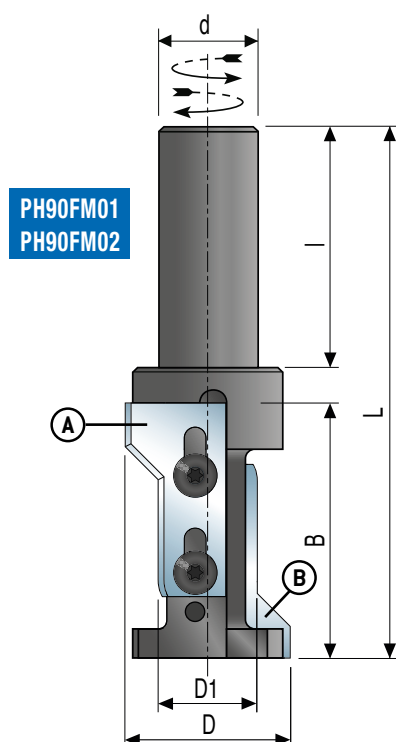


RICAMBI / SPARE PARTS / ERSATZTEILE				
Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH89FM		€
		01		
Cuneo / Wedge / spannkeil	15	2		
Vite per cuneo / Wedge's screw / Schraube	M8 x 16	2		

PH90FM

HW | Z=2

FRESA MULTIPROFILO PER STONDARE E SMUSSARE REGOLABILE Ø MIN = 20 MM
 ADJUSTABLE MULTI-PROFILE CUTTER FOR ROUNDING AND CHAMFERING Ø MIN 20MM
 VERSTELLBARER MULTIPROFIL-KANTEN-BZW. ABRUND-FRÄSER Ø MIN 20MM



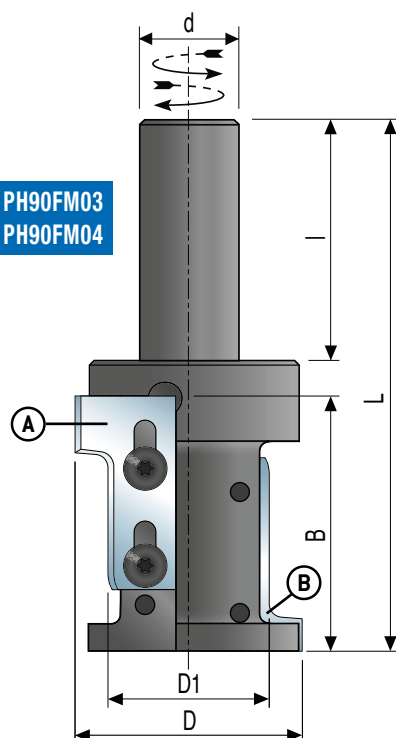
PH90FM01
PH90FM02

Ø D [mm]	D1 [mm]	B [mm]	L [mm]	Attacco / Shank / Schaft		Z	Rotation	Art. Nr.	€
				Ø d [mm]	l [mm]				
33,4	20	39,5÷54	110	20 / 25	50	2	R	PH90FM01	
33,4	20	39,5÷54	110	20 / 25	50	2	L	PH90FM02	
48	35	39,5÷54	110	20 / 25	50	2	R	PH90FM03	
48	35	39,5÷54	110	20 / 25	50	2	L	PH90FM04	

Punta compresa di coltelli. In fase d'ordine specificare il profilo richiesto.

Router already equipped with profiled knives. When ordering please specify the profile required.

Profilmesser im Lieferumfang enthalten. Bitte das benötigte Profil bei Bestellung angeben.



PH90FM03
PH90FM04

RICAMBI / SPARE PARTS / ERSATZTEILE						
Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH90FM				€
		01	02	03	04	
Vite per Coltello / Knife's Screw / Schraube	M4x8,3 Ø9	4	4	4	4	
Chiave per Coltello / Knife's Key / Torxschlüssel	Torx 15	1	1	1	1	

COLTELLI STANDARD/ STANDARD KNIVES / STANDARD MESSER						
Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH90FM				€
		01	02	03	04	
Ⓐ Coltello 45° / Knife 45° / Messer 45°	40x25x2 DX	1	/	1	/	
Ⓑ Coltello 45° / Knife 45° / Messer 45°	40x25x2 DX	1	/	1	/	
Ⓐ Coltello R2 / Knife R2 / Messer R2	40x25x2 DX	1	/	1	/	
Ⓑ Coltello R2 / Knife R2 / Messer R2	40x25x2 DX	1	/	1	/	
Ⓐ Coltello R3 / Knife R3 / Messer R3	40x25x2 DX	1	/	1	/	
Ⓑ Coltello R3 / Knife R3 / Messer R3	40x25x2 DX	1	/	1	/	
Ⓐ Coltello R5 / Knife R5 / Messer R5	40x25x2 DX	1	/	1	/	
Ⓑ Coltello R5 / Knife R5 / Messer R5	40x25x2 DX	1	/	1	/	
Ⓐ Coltello 45° / Knife 45° / Messer 45°	40x25x2 SX	/	1	/	1	
Ⓑ Coltello 45° / Knife 45° / Messer 45°	40x25x2 SX	/	1	/	1	
Ⓐ Coltello R2 / Knife R2 / Messer R2	40x25x2 SX	/	1	/	1	
Ⓑ Coltello R2 / Knife R2 / Messer R2	40x25x2 SX	/	1	/	1	
Ⓐ Coltello R3 / Knife R3 / Messer R3	40x25x2 SX	/	1	/	1	
Ⓑ Coltello R3 / Knife R3 / Messer R3	40x25x2 SX	/	1	/	1	
Ⓐ Coltello R5 / Knife R5 / Messer R5	40x25x2 SX	/	1	/	1	
Ⓑ Coltello R5 / Knife R5 / Messer R5	40x25x2 SX	/	1	/	1	

Altri profili disponibili a richiesta

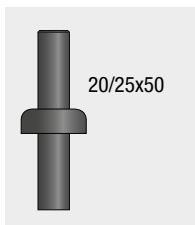
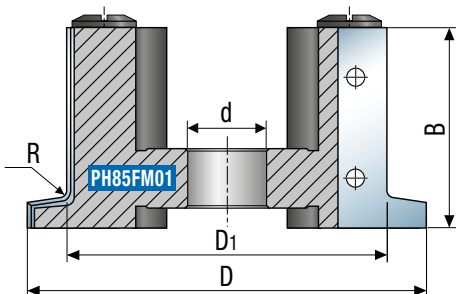
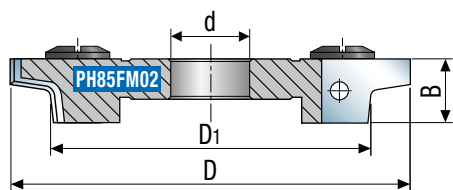
More profile available on request

Weitere Profile auf Anfrage verfügbar

PH85FM

HW | Z=2

PUNTE PER RAGGIARE E SMUSSARE REGOLABILE Ø MIN = 80 MM DISPOSABLE KNIFE ROUTERS FOR ROUNDING AND CHAMFERING Ø MIN 80MM WECHSELPLATTEN-ABRUND- UND FASEFRÄSER Ø MIN 80MM



20/25x50

Ø D [mm]	Ø D1 [mm]	B [mm]	Ø d [mm]	Z	Art. Nr.	€
100	80	50	20 / 25	2	PH85FM01	
100	80	16	20 / 25	2	PH85FM02	

Punta compresa di coltelli. In fase d'ordine specificare il profilo richiesto.

Router already equipped with profiled knives. When ordering please specify the profile required.

Profilmesser im Lieferumfang enthalten. Bitte das benötigte Profil bei Bestellung angeben.

RICAMBI / SPARE PARTS / ERSATZTEILE

Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH85FM		€
		01	02	
Cuneo / Wedge / Spannkeil	48x15x8	2	/	
Cuneo / Wedge / Spannkeil	15x15x8	/	2	
Set Anelli / Set Rings / Ringsatz	Ø20x25	1	1	
Vite per cuneo / Wedge's Screw / Schraube	M8x10	4	2	
Viti di Riferimento / Positioning Screw / Spannkeilschraube	M5x7 Ø16	2	2	

COLTELLI STANDARD/ STANDARD KNIVES / STANDARD MESSER

Art.	Dimensioni Dimensions Abmessungen [mm]	Type	Art. Nr. PH84FM		€
			01	02	
Coltello 45° / Knife 45° / Messer 45°	50x25x2	①	2	/	
Coltello R2 / Knife R2 / Messer R2	50x25x2	②	2	/	
Coltello R3 / Knife R3 / Messer R3	50x25x2	③	2	/	
Coltello R5 / Knife R5 / Messer R5	50x25x2	④	2	/	
Coltello R6 / Knife R6 / Messer R6	50x25x2	⑤	2	/	
Coltello R8 / Knife R8 / Messer R8	50x25x2	⑥	2	/	
Coltello 45° / Knife 45° / Messer 45°	16x25x2	⑦	/	2	
Coltello R2 / Knife R2 / Messer R2	16x25x2	⑧	/	2	
Coltello R3 / Knife R3 / Messer R3	16x25x2	⑨	/	2	
Coltello R5 / Knife R5 / Messer R5	16x25x2	⑩	/	2	
Coltello R6 / Knife R6 / Messer R6	16x25x2	⑪	/	2	
Coltello R8 / Knife R8 / Messer R8	16x25x2	⑫	/	2	

Altri profili disponibili a richiesta

Other profiles available on request

Weitere Profile auf Anfrage lieferbar

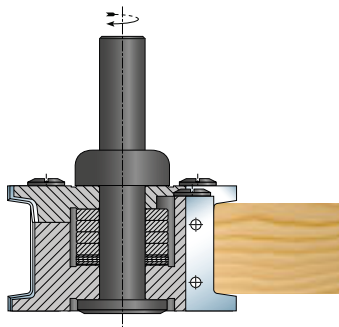
Mandrino portafresa compreso nel prezzo.

In fase d'ordine specificare attacco da 20 o 25

Chuck included in the price. When ordering, please specify if you need the shank diam. 20 or 25.

Preis inklusive Schaft. Im Auftragsfall bitte angeben, ob Ø20mm oder Ø25mm Schaft benötigt wird.

ESEMPI DI LAVORAZIONE WORKING EXAMPLE EINSATZBEISPIEL

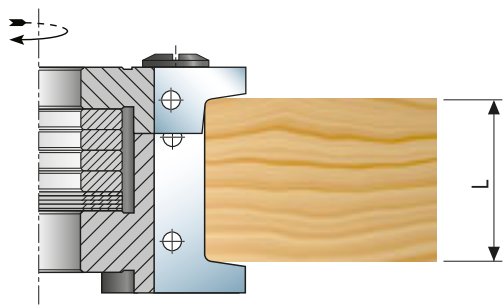


PH85FM

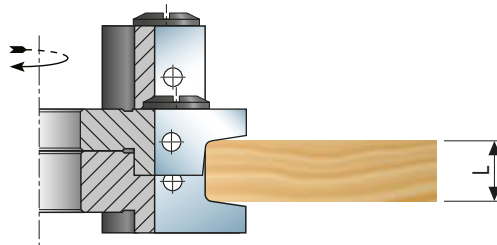
HW | Z=2

PUNTE PER RAGGIARE E SMUSSARE REGOLABILE Ø MIN = 80 MM
DISPOSABLE KNIFE ROUTERS FOR ROUNDING AND CHAMFERING Ø MIN 80MM
WECHSELPLATTEN-ABRUND- UND FASEFRÄSER Ø MIN 80MM

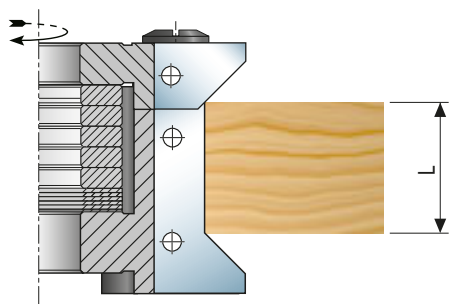
ESEMPI DI LAVORAZIONE WORKING EXAMPLE EINSATZBEISPIEL



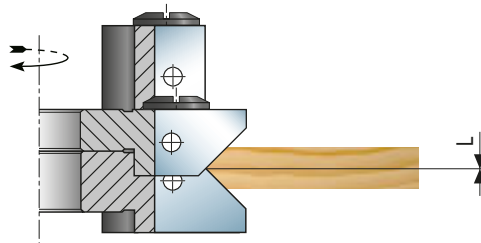
L max = 40,5 mm
R = 8 mm



L min = 14 mm
R = 2 mm

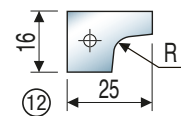
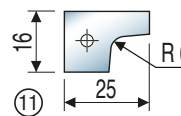
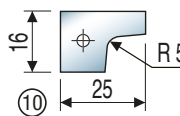
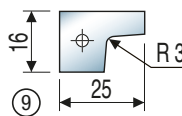
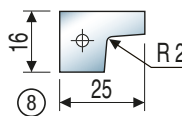
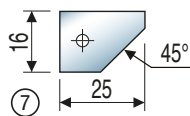
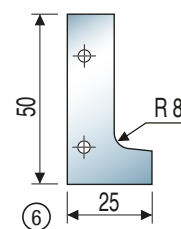
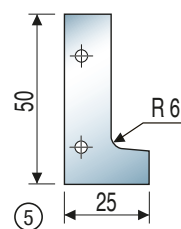
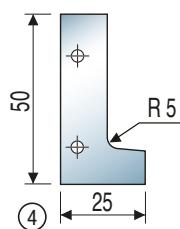
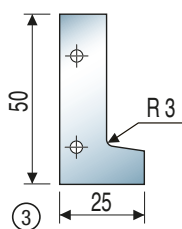
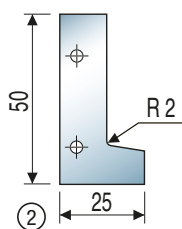
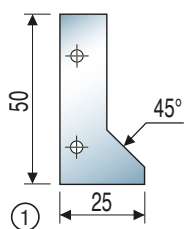


L max = 24 mm



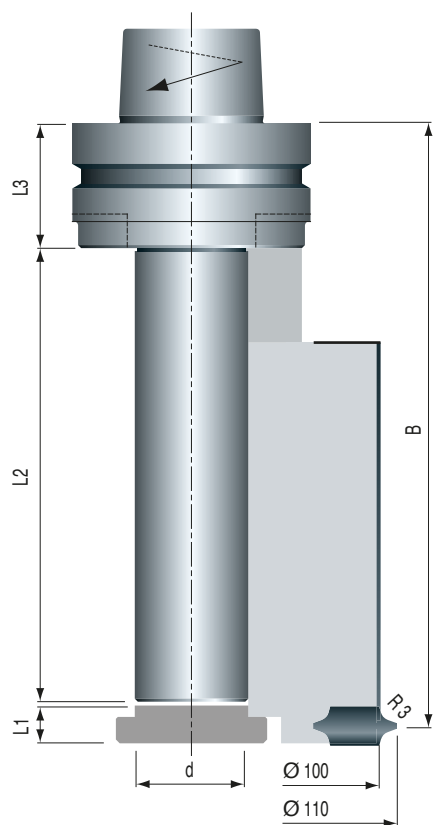
L min = 0 mm

COLTELLI STANDARD STANDARD KNIVES STANDARD MESSER



PH91FM01

HW | Z=4

PUNTE PER RAGGIARE
DISPOSABLE KNIFE ROUTERS FOR ROUNDING
FÜGE - UND ABRUND - KOMBINATION


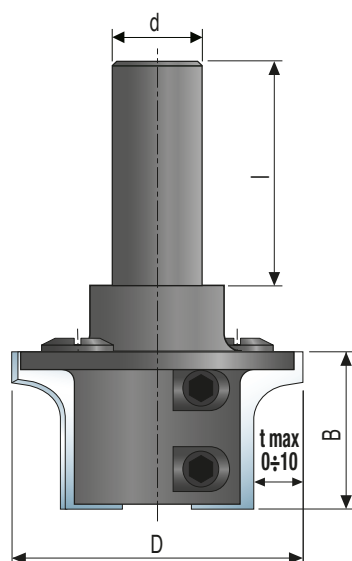
Ø [mm]	Ø d [mm]	L1 [mm]	L2 [mm]	L3 [mm]	B [mm]	Z	Art. Nr.	€
100	30	10	120	33	160,9	4	PH91FM01	

RICAMBI / SPARE PARTS / ERSATZTEILE			
Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH91FM	€
		01	
Coltello / Knife / Messer "PLANEX"	100x14x2,2	4	
Cuneo / Wedge / Spannkeil	98	4	
Vite per cuneo / Wedge's screw / Schraube	M5x10	4	
Raggiatore DX / Rounding knife RH / Radiusmesser RL	27x6x14 R3	2	
Raggiatore SX / Rounding knife LH / Radiusmesser LL	27x6x14 R3	2	
Vite per raggiatore / Rounding knife's screw / Schraube	M6x19	2	

PH86FM

HW | Z=2

FRESA SAGOMATA SPECIALE CON PROFILO DA 0 A 10 MM DI PROFONDITÀ PROFIED CUTTER, FROM 0 TO 10 MM PROFILFRÄSER, PROFILTIEFE BIS 10 MM



Ø D [mm]	B [mm]	Attacco / Shank / Schaft		Z	Art. Nr.	€
		Ø d [mm]	l [mm]			
60	20	20	50	2	PH86FM01	
60	30	20	50	2	PH86FM02	
60	40	20	50	2	PH86FM03	
60	50	20	50	2	PH86FM04	
60	60	20	50	2	PH86FM05	
70	20	20	50	2	PH86FM06	
70	30	20	50	2	PH86FM07	
70	40	20	50	2	PH86FM08	
70	50	20	50	2	PH86FM09	
70	60	20	50	2	PH86FM10	
80	20	20	50	2	PH86FM11	
80	30	20	50	2	PH86FM12	
80	40	20	50	2	PH86FM13	
80	50	20	50	2	PH86FM14	
80	60	20	50	2	PH86FM15	
100	20	20	50	2	PH86FM16	
100	30	20	50	2	PH86FM17	
100	40	20	50	2	PH86FM18	
100	50	20	50	2	PH86FM19	
100	60	20	50	2	PH86FM20	
120	20	20	50	2	PH86FM21	
120	30	20	50	2	PH86FM22	
120	40	20	50	2	PH86FM23	
120	50	20	50	2	PH86FM24	
120	60	20	50	2	PH86FM25	

Impiego / Use / Anwendung

Punte e coltellini per lavorazioni di contornatura con profili speciali.

Router and knives developed for routing operations with special profiles.

Werkzeug entwickelt zum Fräsen von Sonderprofilen.

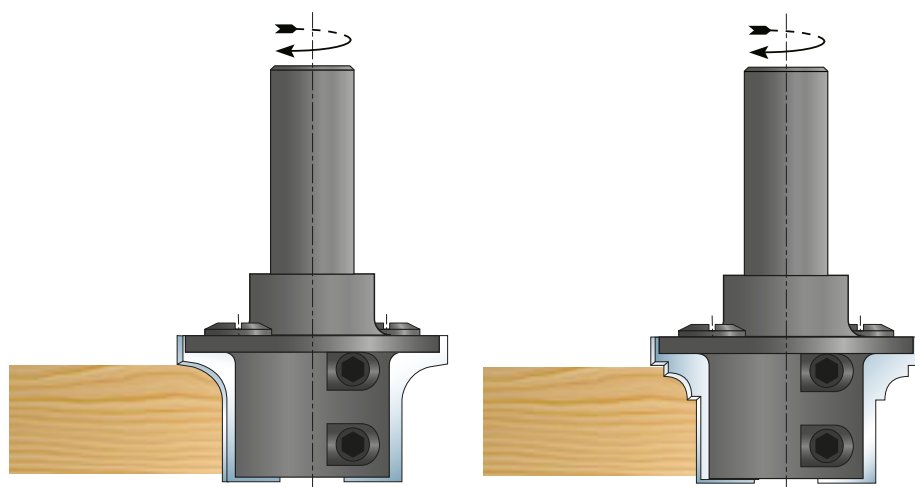
Attenzione / Attention / Achtung

Profilo a richiesta

Special profile on request

Sonder profile auf Anfrage

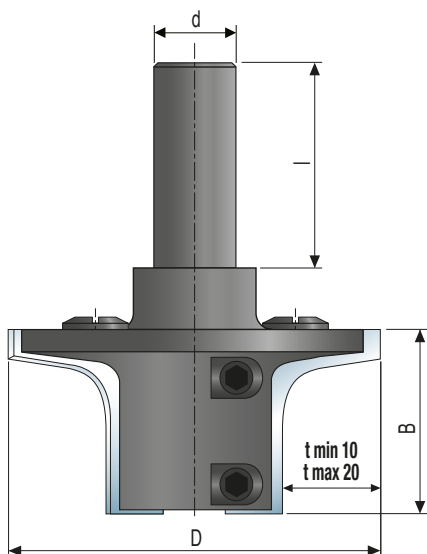
ESEMPI DI LAVORAZIONE WORKING EXAMPLE EINSATZBEISPIEL



PH87FM

HW | Z=2

FRESA SAGOMATA SPECIALE CON PROFILO DA 10 A 20 MM DI PROFONDITÀ PROFIED CUTTER, FROM 10 TO 20 MM PROFILFRÄSER, PROFILTIEFE BIS 20 MM



Ø D [mm]	B [mm]	Attacco / Shank / Schaft		Z	Art. Nr.	€
		Ø d [mm]	l [mm]			
60	20	20	50	2	PH87FM01	
60	30	20	50	2	PH87FM02	
60	40	20	50	2	PH87FM03	
60	50	20	50	2	PH87FM04	
60	60	20	50	2	PH87FM05	
70	20	20	50	2	PH87FM06	
70	30	20	50	2	PH87FM07	
70	40	20	50	2	PH87FM08	
70	50	20	50	2	PH87FM09	
70	60	20	50	2	PH87FM10	
80	20	20	50	2	PH87FM11	
80	30	20	50	2	PH87FM12	
80	40	20	50	2	PH87FM13	
80	50	20	50	2	PH87FM14	
80	60	20	50	2	PH87FM15	
100	20	20	50	2	PH87FM16	
100	30	20	50	2	PH87FM17	
100	40	20	50	2	PH87FM18	
100	50	20	50	2	PH87FM19	
100	60	20	50	2	PH87FM20	
120	20	20	50	2	PH87FM21	
120	30	20	50	2	PH87FM22	
120	40	20	50	2	PH87FM23	
120	50	20	50	2	PH87FM24	
120	60	20	50	2	PH87FM25	

Impiego / Use / Anwendung

Punte e coltellini per lavorazioni di contornatura con profili speciali.

Router and knives developed for routing operations with special profiles.

Werkzeug entwickelt zum Fräsen von Sonderprofilen.

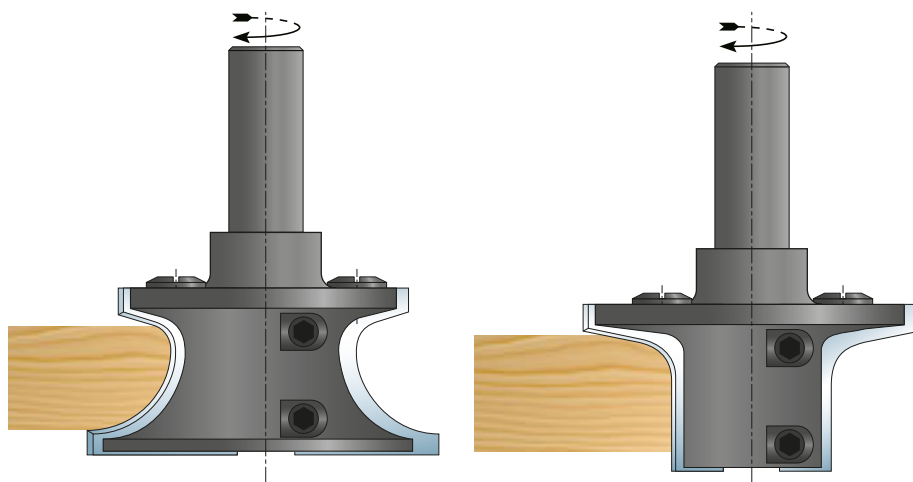
Attenzione / Attention / Achtung

Profilo a richiesta

Special profile on request

Sonder profile auf Anfrage

ESEMPI DI LAVORAZIONE WORKING EXAMPLE EINSATZBEISPIEL

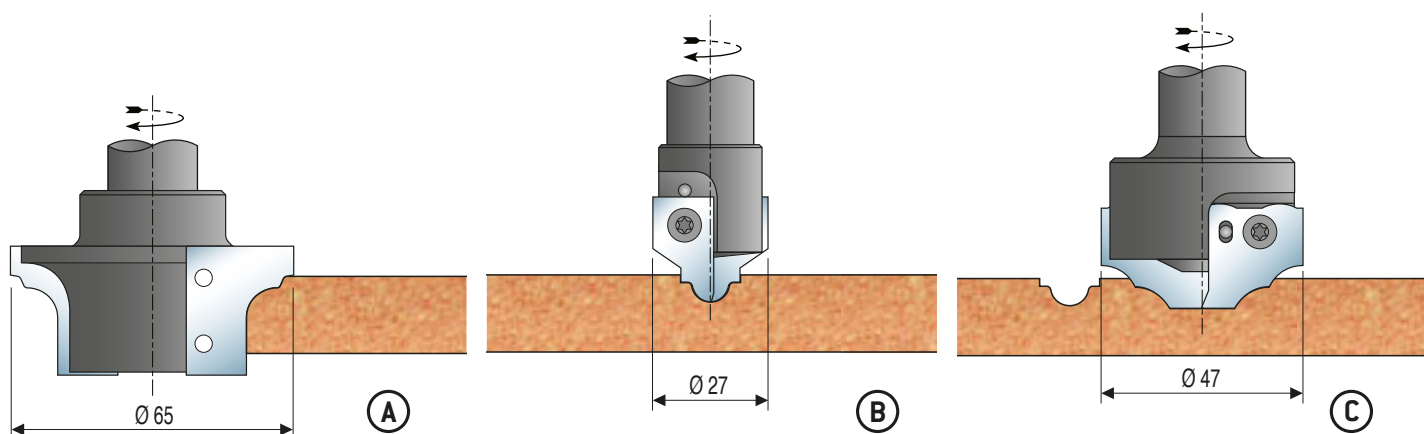


PH88FM

HW | Z=2

FRESE PER ANTINE ROUTERS FOR CABINETS WERKZEUGE FÜR MOBELFRÖNTEN

Type	Ø D [mm]	B [mm]	Attacco / Shank / Schaft		Z	Art. Nr.	€
			Ø d [mm]	l [mm]			
(A)	65	30	20	50	2	PH88FM01	
(B)	27	25	20	50	2	PH88FM02	
(C)	47	25	20	50	2	PH88FM03	



COLTELLI STANDARD/ STANDARD KNIVES / STANDARD MESSER

Type	Dimensioni Dimensions Abmessungen [mm]	€
①	30X25X2	
②	15X25X2	
③	25X25X2	
④	25X25X2	
⑤	25X25X2	
⑥	25X25X2	
⑦	25X25X2	
⑧	25X25X2	
⑨	15X25X2	
⑩	25X25X2	
⑪	25X25X2	
⑫	25X25X2	
⑬	25x25x2	
⑭	25x25x2	
⑮	25x25x2	

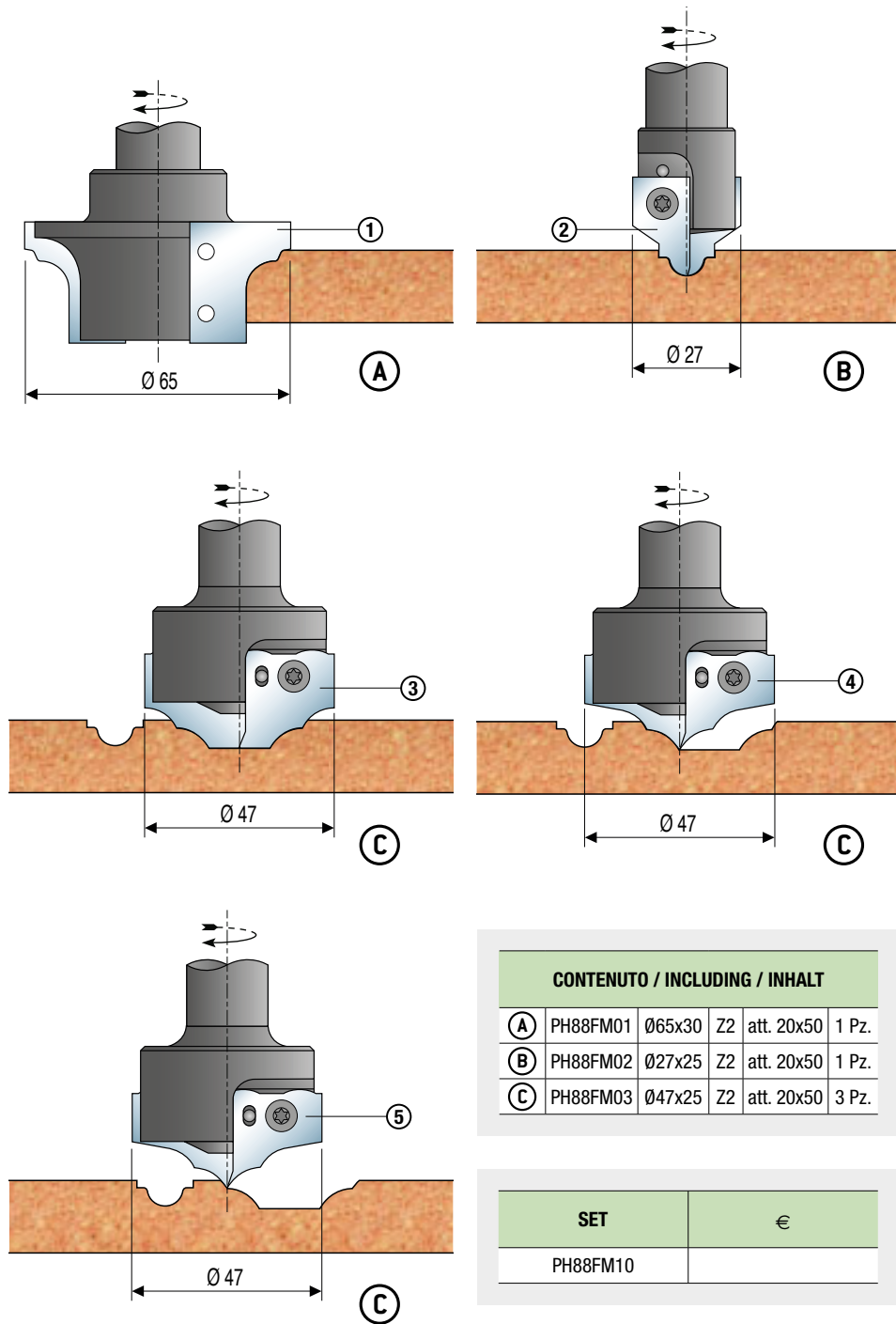
PH88FM10

SET PER ANTINE
SET FOR CABINETS
SET FÜR MOBELFRÖNTEN



CONTENUTO / INCLUDING / INHALT

5 punte + 5 profili + ricambi
5 drills + 5 knives + spare parts
5 Schafffräser + 5 Profile + 5 Ersatzmesser



CONTENUTO / INCLUDING / INHALT

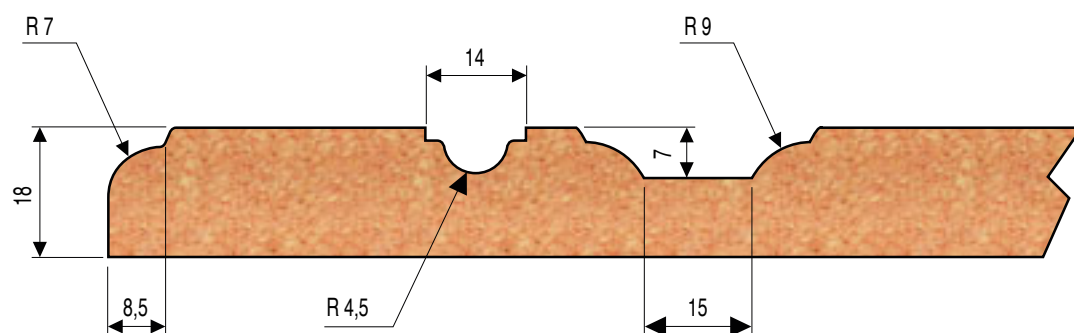
(A)	PH88FM01	Ø65x30	Z2	att. 20x50	1 Pz.
(B)	PH88FM02	Ø27x25	Z2	att. 20x50	1 Pz.
(C)	PH88FM03	Ø47x25	Z2	att. 20x50	3 Pz.

SET

€

PH88FM10

PROFILO / PROFILE / PROFIL



PH88FM20

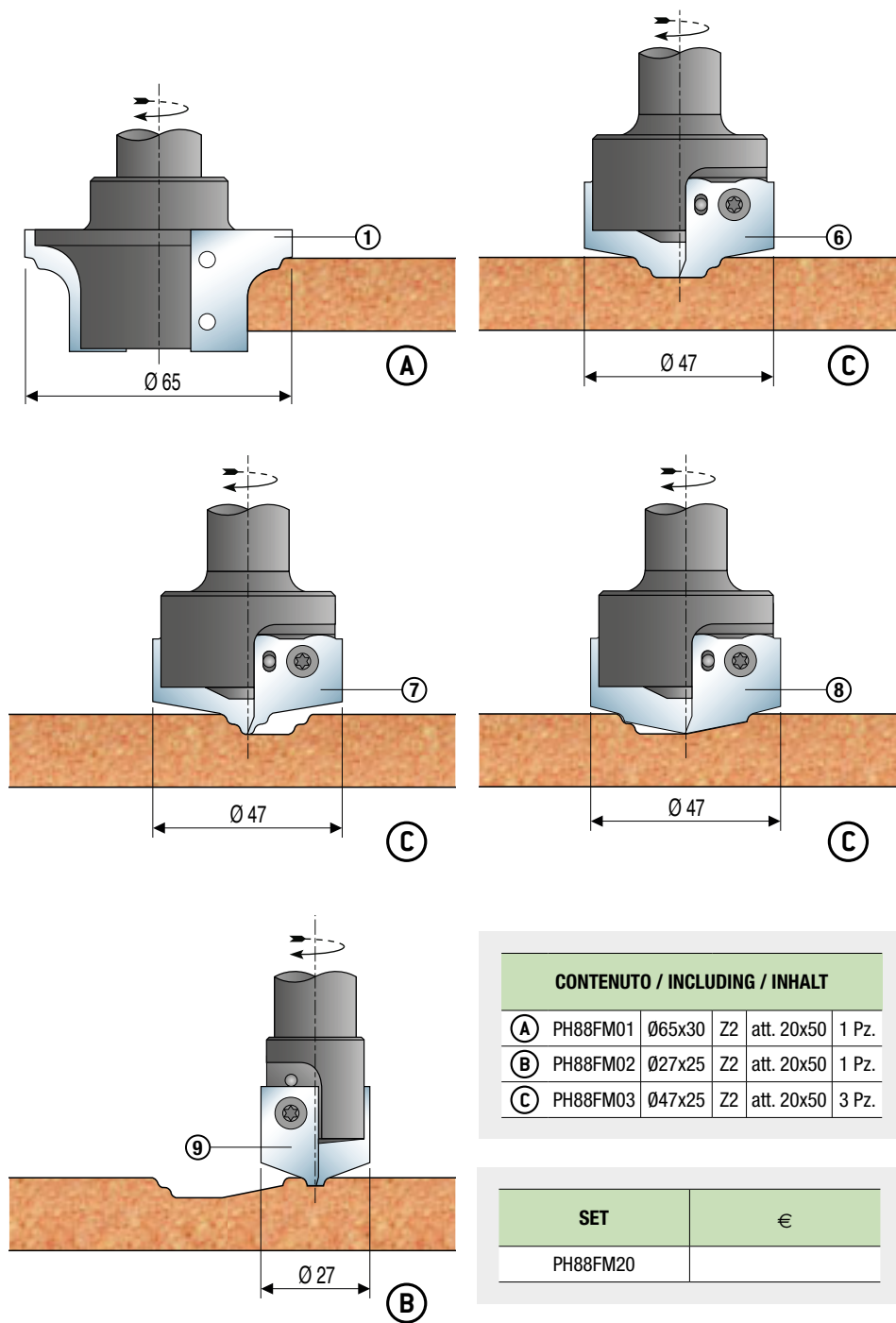
 SET PER ANTINE
 SET FOR CABINETS
 SET FÜR MOBELFRÖNTEN


CONTENUTO / INCLUDING / INHALT

5 punte + 5 profili + ricambi

5 drills + 5 knives + spare parts

5 Schafffräser + 5 Profile + 5 Ersatzmesser



CONTENUTO / INCLUDING / INHALT

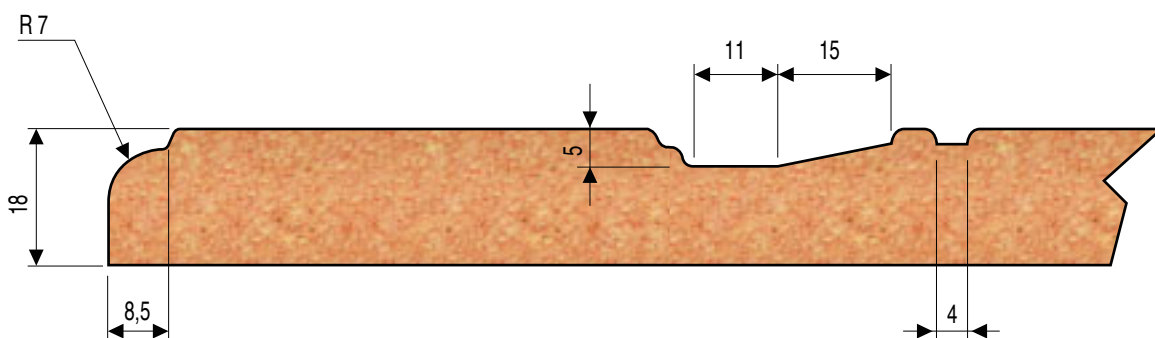
(A)	PH88FM01	Ø65x30	Z2	att. 20x50	1 Pz.
(B)	PH88FM02	Ø27x25	Z2	att. 20x50	1 Pz.
(C)	PH88FM03	Ø47x25	Z2	att. 20x50	3 Pz.

SET

€

PH88FM20

PROFILO / PROFILE / PROFIL



PH88FM30

SET PER ANTINE
SET FOR CABINETS
SET FÜR MOBELFRÖNTEN

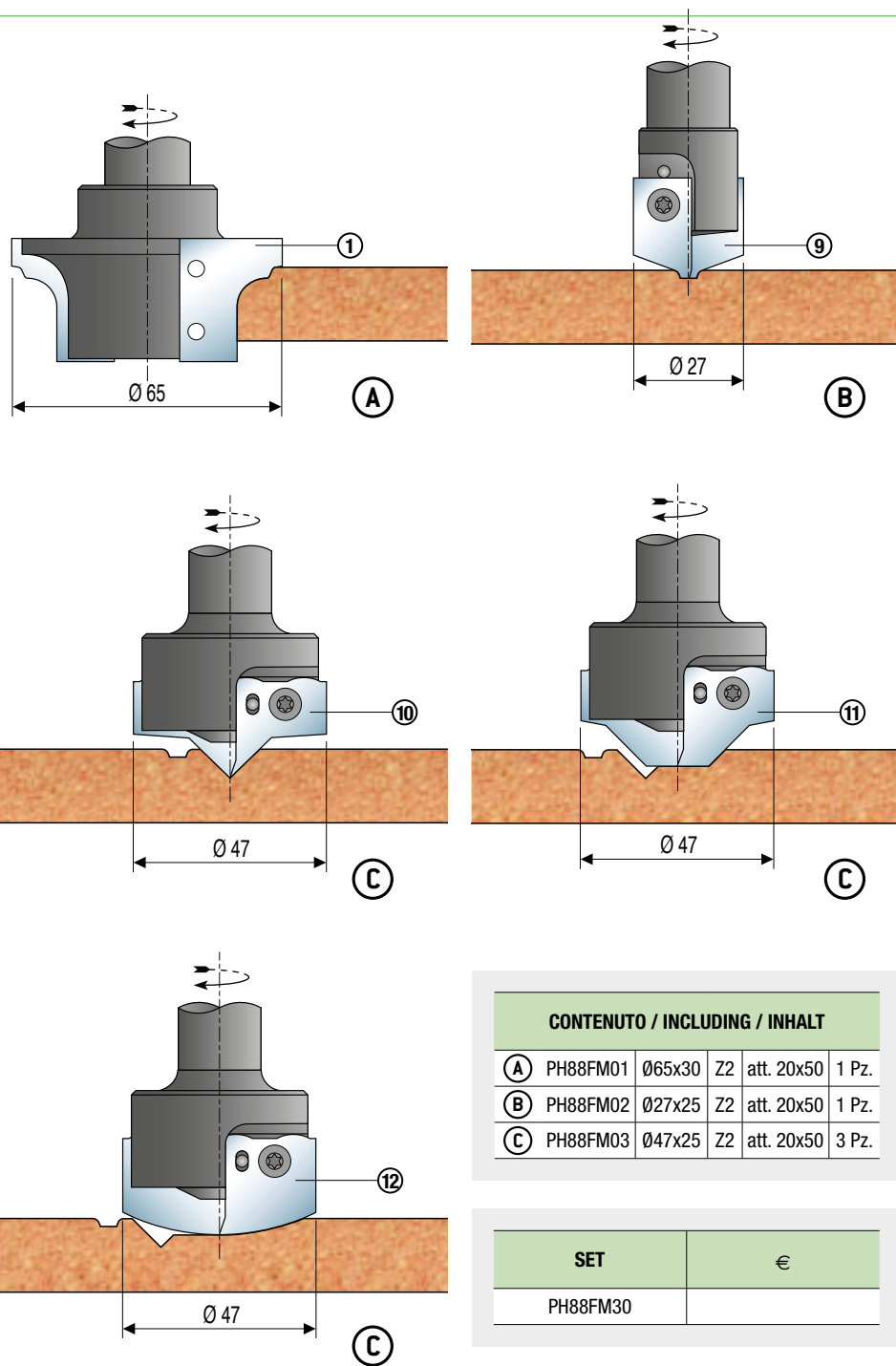
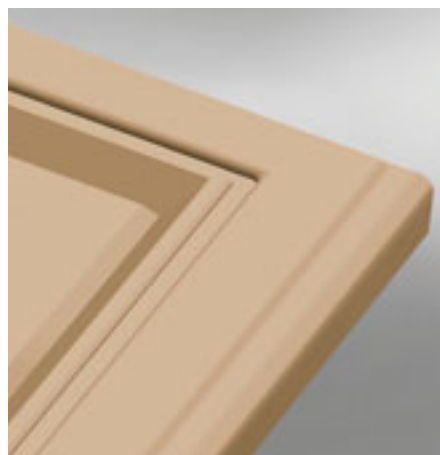


CONTENUTO / INCLUDING / INHALT

5 punte + 5 profili + ricambi

5 drills + 5 knives + spare parts

5 Schafffräser + 5 Profile + 5 Ersatzmesser



CONTENUTO / INCLUDING / INHALT

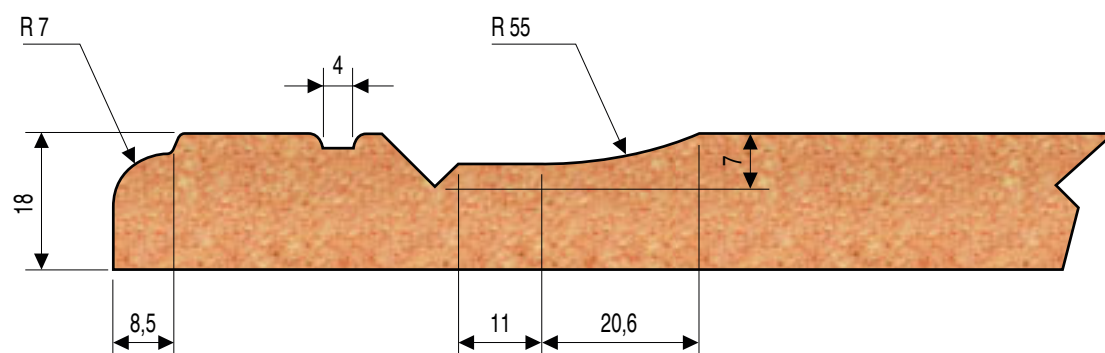
(A)	PH88FM01	Ø65x30	Z2	att. 20x50	1 Pz.
(B)	PH88FM02	Ø27x25	Z2	att. 20x50	1 Pz.
(C)	PH88FM03	Ø47x25	Z2	att. 20x50	3 Pz.

SET

€

PH88FM30

PROFILO / PROFILE / PROFIL



PH88FM40

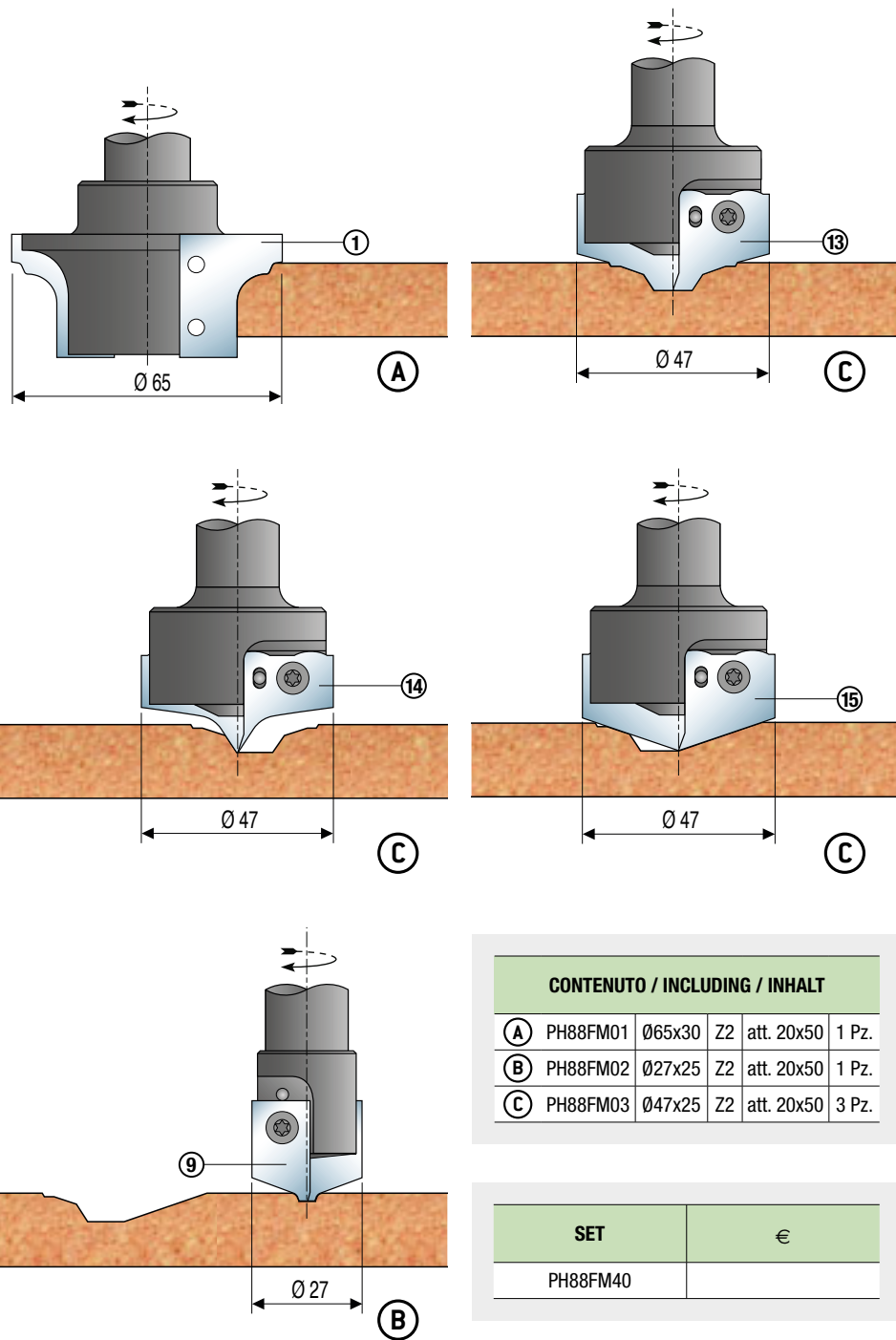
SET PER ANTINE
SET FOR CABINETS
SET FÜR MOBELFRÖNTEN

CONTENUTO / INCLUDING / INHALT

5 punte + 5 profili + ricambi

5 drills + 5 knives + spare parts

5 Schafffräser + 5 Profile + 5 Ersatzmesser



CONTENUTO / INCLUDING / INHALT

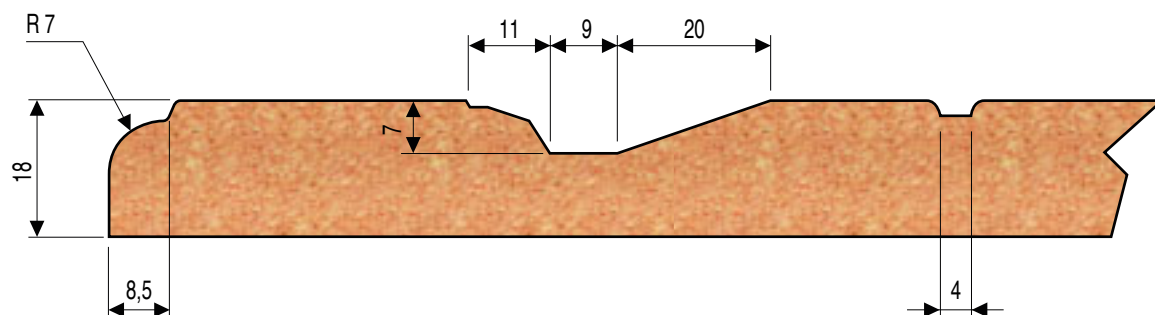
(A)	PH88FM01	Ø65x30	Z2	att. 20x50	1 Pz.
(B)	PH88FM02	Ø27x25	Z2	att. 20x50	1 Pz.
(C)	PH88FM03	Ø47x25	Z2	att. 20x50	3 Pz.

SET

€

PH88FM40

PROFILO / PROFILE / PROFIL



FRESE PER PORTE PROFILO E CONTROPROFILO CUTTERS FOR DOORS - PROFILE AND COUNTERPROFILE KONTERPROFILFRÄSER

PH92FM



Ø D [mm]	B [mm]	Ø d [mm]	Z	V	Material	Art. nr.	€
140	25	30	3	/	* Lega leggera / Light alloy / Leicht Metall	PH92FM01	
132	10÷20	30	4	2+2	Acciaio / Steel / Stahl	PH92FM02	
140	25	30	3	/	* Lega leggera / Light alloy / Leicht Metall	PH92FM03	
140	35	30	3	/	* Lega leggera / Light alloy / Leicht Metall	PH92FM04	
140	35	30	3	/	* Lega leggera / Light alloy / Leicht Metall	PH92FM05	
138	16	30	3	/	Acciaio / Steel / Stahl	PH92FM06	
131	30,3	30	3	3	* Lega leggera / Light alloy / Leicht Metall	PH92FM07	
160	20,3	30	3	3	* Lega leggera / Light alloy / Leicht Metall	PH92FM08	

Altri profili disponibili a richiesta
Other profiles available on request
Weitere Profile auf Anfrage lieferbar

Mandrino portafresa non compreso. In fase d'ordine specificare la lunghezza dell'albero.
Toolholder not included. When order please specify the arbor's length.
Werkzeugaufnahme im Lieferumfang nicht inbegriffen. Bei Bestellung bitte Länge des Aufnahmedorns angeben.

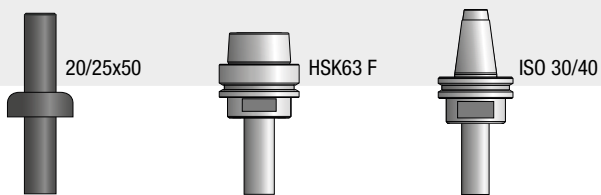
RICAMBI / SPARE PARTS / ERSATZTEILE

Art.	Dimensioni / Dimensions / Abmessungen [mm]	CODE PH92FM								€
		01	02	03	04	05	06	07	08	
Coltello / Knife / Messer	25x35x2 DX	3	/	/	/	/	/	/	/	
Coltello / Knife / Messer	9,6x12x1,5	/	4	/	/	/	/	/	/	
Coltello / Knife / Messer	25x35x2 SX	/	/	3	/	/	/	/	/	
Coltello / Knife / Messer	35x30x2 DX	/	/	/	3	/	/	/	/	
Coltello / Knife / Messer	35x30x2 SX	/	/	/	/	3	/	/	/	
Coltello / Knife / Messer	16x20x2	/	/	/	/	/	3	/	/	
Coltello / Knife / Messer	30x12x1,5	/	/	/	/	/	/	3	/	
Coltello / Knife / Messer	20x30x2	/	/	/	/	/	/	/	3	
Rasante / Spur / Vorschneider	14x14x2	/	4	/	/	/	/	3	/	
Rasante / Spur / Vorschneider	22x19x2	/	/	/	/	/	/	/	3	
Cuneo / Wedge / Spankeil	24x25x8 DX	3	/	/	/	/	/	/	/	
Cuneo / Wedge / Spankeil	9x12x10	/	4	/	/	/	/	/	/	
Cuneo / Wedge / Spankeil	24x25x8 SX	/	/	3	/	/	/	/	/	
Cuneo / Wedge / Spankeil	35x12x8 DX	/	/	/	3	/	/	/	/	
Cuneo / Wedge / Spankeil	35x12x8 SX	/	/	/	/	3	/	/	/	
Cuneo / Wedge / Spankeil	16x13,5x8	/	/	/	/	/	3	/	/	
Cuneo / Wedge / Spankeil	26x15x8	/	/	/	/	/	/	3	/	
Cuneo / Wedge / Spankeil	19x15x8	/	/	/	/	/	/	/	3	
Vite per Cuneo / Wedge's Screw / Spannkeilschraube	M8x16	3	/	3	6	6	3	6	3	
Vite per Cuneo / Wedge's Screw / Spannkeilschraube	M6x16	/	4	/	/	/	/	/	/	
Vite per Rasante / Spur's Screw / Schraube für VS	M5x6,5 Ø9	/	4	/	/	/	/	3	/	
Vite di riferimento / Positioning Screw / Schraube für VS	M5x7 Ø16	3	/	3	3	3	3	/	3	
Set Anelli / Set Rings / Ringsatz	d30x12,4			*	/	/	/	/	/	
Set Anelli / Set Rings / Ringsatz	d30x15	/	/	/		*	/	/	/	
Set Anelli / Set Rings / Ringsatz	d30x24,6	/	/	/	/	/			*	
Vite per Rasante / Spur's Screw / Anschlagsschraube	Torx 20	/	1	/	/	/	/	1	1	
Chiave per Cuneo / Wedge's Key / Torxschlüssel	Esagonale 3	/	1	/	/	/	/	/	/	
Chiave per Cuneo / Wedge's Key / Torxschlüssel	Esagonale 4	1	/	1	1	1	1	1	1	

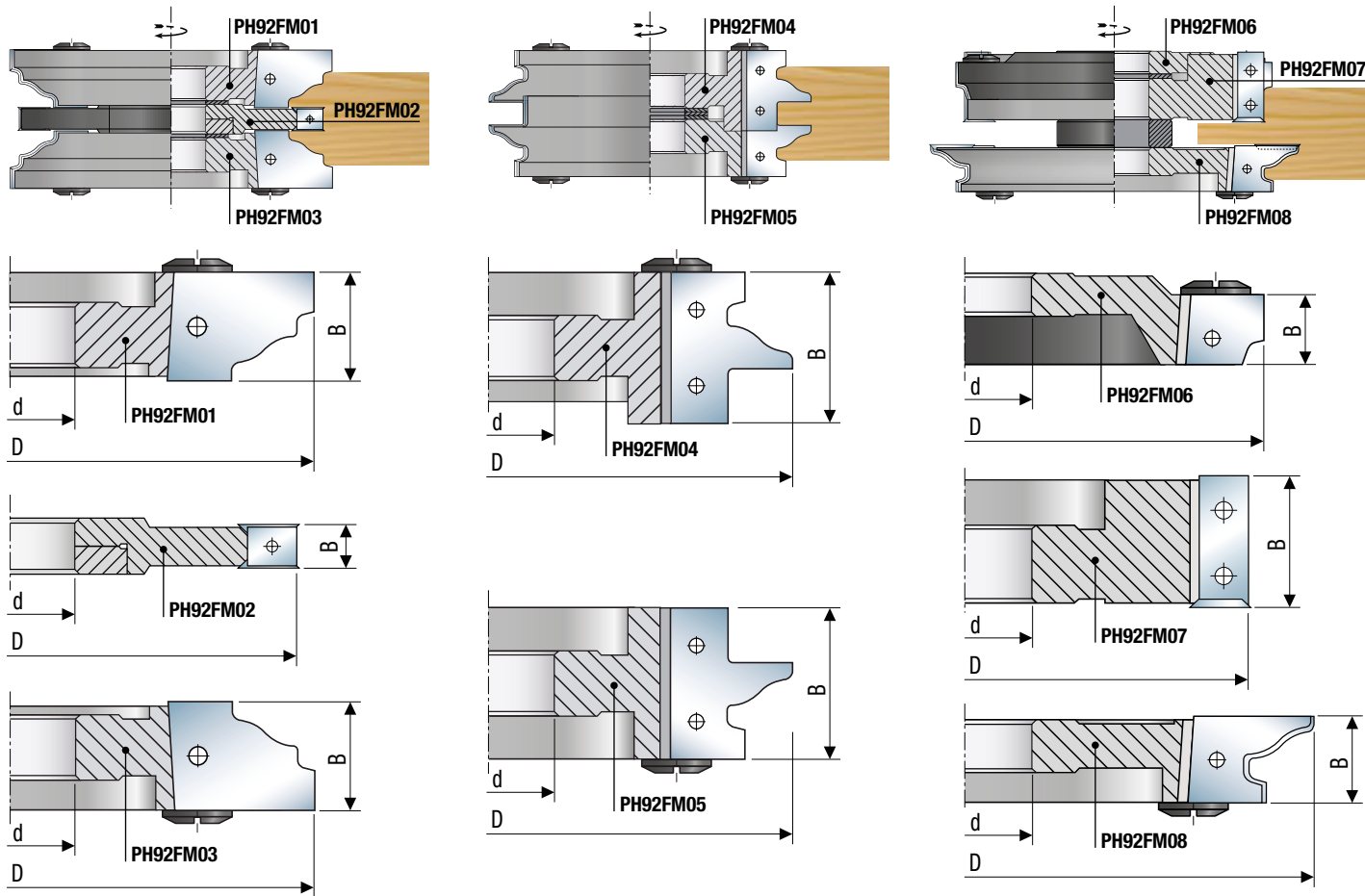
PH92FM

FRESE PER PORTE PROFILO E CONTROPROFILO
 CUTTERS FOR DOORS - PROFILE AND COUNTERPROFILE
 KONTERPROFILFRÄSER

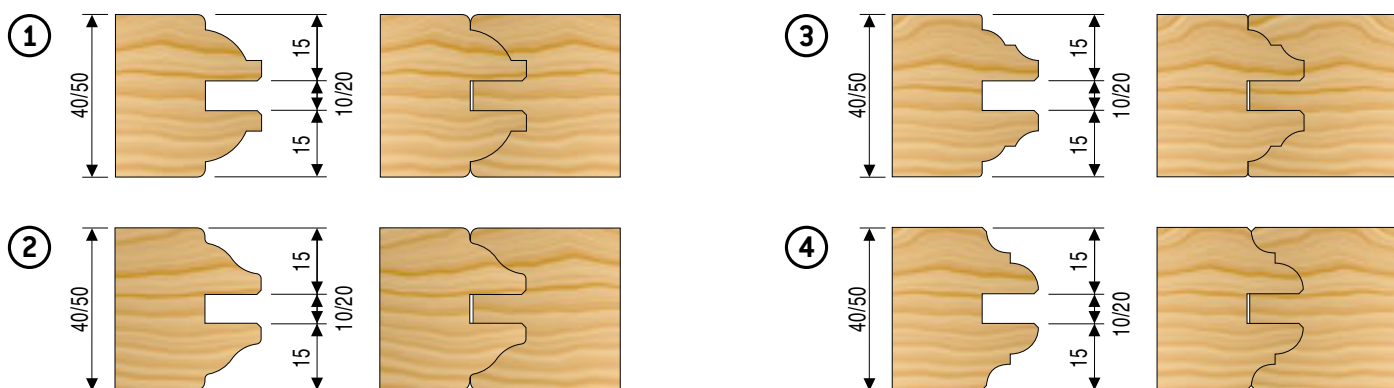
Attacco per PH92FM
 Shank for PH92FM
 Schaft für PH92FM



ESEMPI DI LAVORAZIONE
 WORKING EXAMPLE
 BEISPIELE



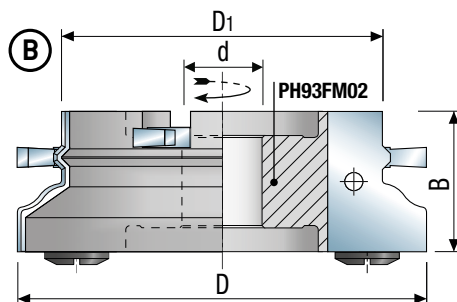
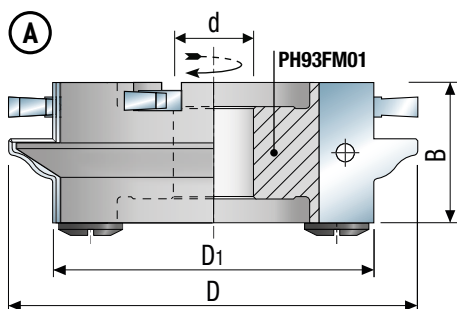
ESEMPI DI PROFILI
 EXAMPLE OF PROFILE
 EINSATZBEISPIEL



PH93FM

HW | Z=2

FRESE PER ANTINE PROFILO E CONTROPROFILO CUTTERS FOR CABINE - PROFILE AND COUNTERPROFILE KONTERPROFILFRÄSER



Type	Ø D [mm]	D1 [mm]	B [mm]	Ø Ø d [mm]	Z	l	Art. Nr.	€
Ⓐ	102	80	35	20 / 25	2	2+2	PH93FM01	
Ⓑ	102	80	35	20 / 25	2	2+2	PH93FM02	

Fresa compresa di coltelli. In fase d'ordine specificare il profilo richiesto.

Router already equipped with profiled knives. When ordering please specify the profile required.

Profilmesser im Lieferumfang enthalten. Bitte das benötigte Profil bei Bestellung angeben.

RICAMBI / SPARE PARTS / ERSATZTEILE

Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH93FM		€
		01	02	
Inserito per incastri / Grooving insert / Nutmesser	34x16x5	2	2	
Inserito per incastri / Grooving insert / Nutmesser	34x16x6	2	2	
Cuneo / Wedge / Spannkeil	35x20x8	2	/	
Cuneo / Wedge / Spannkeil	35x20x8	/	2	
Vite per cuneo / Wedge's screw / Spannkeil Schraube	M8x16	4	4	
Vite di riferimento / Positioning screw / Schraube für VS	M5x7 Ø16	2	2	
Vite per inserto / Insert's screw / Schraube für nutmesser	M5x10	4	4	
Chiave per cuneo / Wedge's key / Torxschlüssel	Esagonale 4	1	1	
Chiave per inserto / Insert's key / Torxschlüssel	Esagonale 3	1	1	

COLTELLI STANDARD/ STANDARD KNIVES / STANDARD MESSER

Type	Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH93FM		€
			01	02	
Ⓐ	Coltello / Knife / Messer	35x30x3	2	/	
Ⓑ	Coltello / Knife / Messer	35x30x3	2	/	
Ⓒ	Coltello / Knife / Messer	35x30x3	2	/	
Ⓓ	Coltello / Knife / Messer	35x30x3	2	/	
Ⓔ	Coltello / Knife / Messer	35x30x3	2	/	
Ⓒ ₁	Controprofilo / Counterprofile / Konterprofilmesser	35x30x3	/	2	
Ⓒ ₂	Controprofilo / Counterprofile / Konterprofilmesser	35x30x3	/	2	
Ⓒ ₃	Controprofilo / Counterprofile / Konterprofilmesser	35x30x3	/	2	
Ⓒ ₄	Controprofilo / Counterprofile / Konterprofilmesser	35x30x3	/	2	
Ⓒ ₅	Controprofilo / Counterprofile / Konterprofilmesser	35x30x3	/	2	

Mandrino portafresa non compreso.

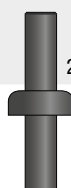
Toolholder not included.

Werkzeugaufnahme nicht inbegriffen.

Attacco per PH93FM

Shank for PH93FM

Schaft für PH93FM



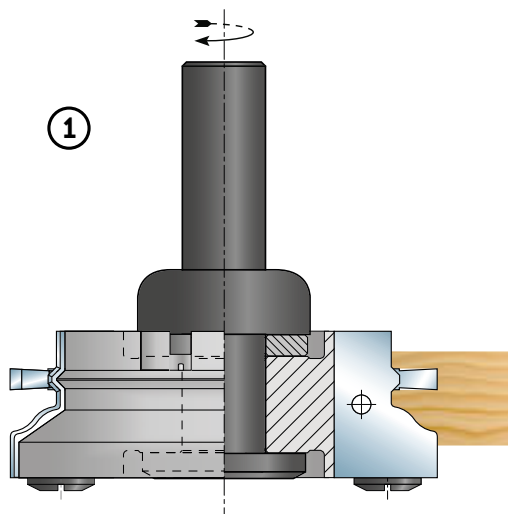
20/25x50

PH93FM

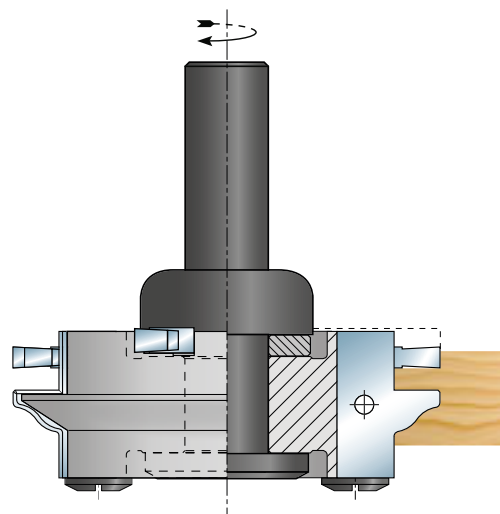
HW | Z=2

FRESE PER ANTINE PROFILO E CONTROPROFILO
 CUTTERS FOR CABINE - PROFILE AND COUNTERPROFILE
 KONTERPROFILFRÄSER

ESEMPI DI LAVORAZIONE
 WORKING EXAMPLE
 EINSATZBEISPIEL

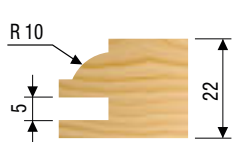


Con spina
 With tenon
 Mit Zapfen

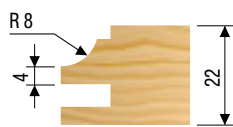


Senza spina
 Without tenon
 Ohne Zapfen

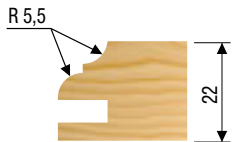
PROFILO / PROFILE / KONTERPROFIL



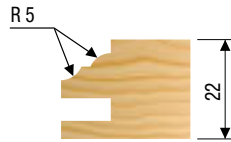
P1



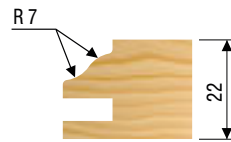
P2



P3

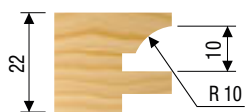


P4

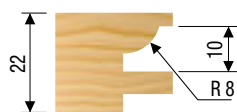


P5

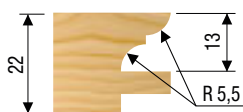
CONTROPROFILO / SCRIBE / PROFIL



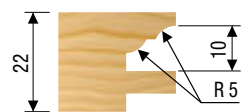
C1



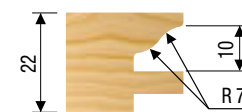
C2



C3



C4



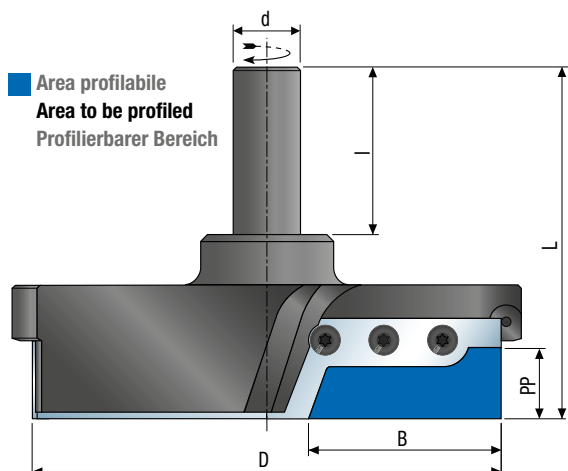
C5

Altri profili disponibili a richiesta
 Other profiles available on request
 Weitere Profile auf Anfrage lieferbar

PH94FM

HW | Z=2

FRESE MULTIPROFILO PER SAGOME INTERNE O PIATTABANDA MULTI-PROFILE PLATBAND FOR INTERNAL PROFILES ABPLATTFRÄSER FÜR INNENPROFILE



Ø D [mm]	B [mm]	PP [mm]	L [mm]	Attacco / Shank / Schaft		Z	Art. Nr.	€
				Ø d [mm]	l [mm]			
119	59,5	14	100	20	50	2	PH94FM01	
140	57	21	105	20	50	2	PH94FM02	

Impiego / Use / Anwendung

Materiale : Mdf - Legno
Material : MDF - Wood
Werkstoff : MDF - Holz

Fresa compressa di coltelli. In fase d'ordine specificare il profilo richiesto.

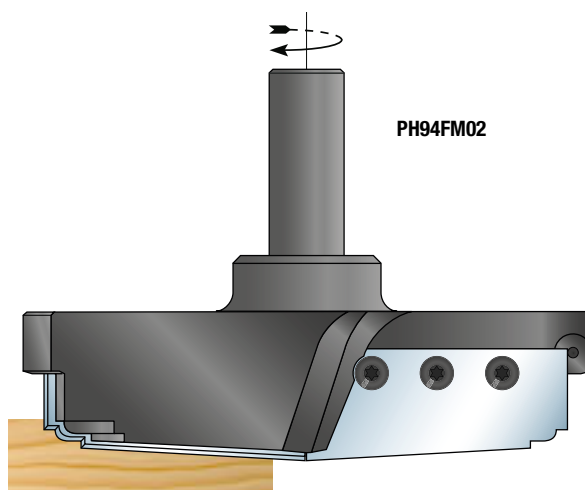
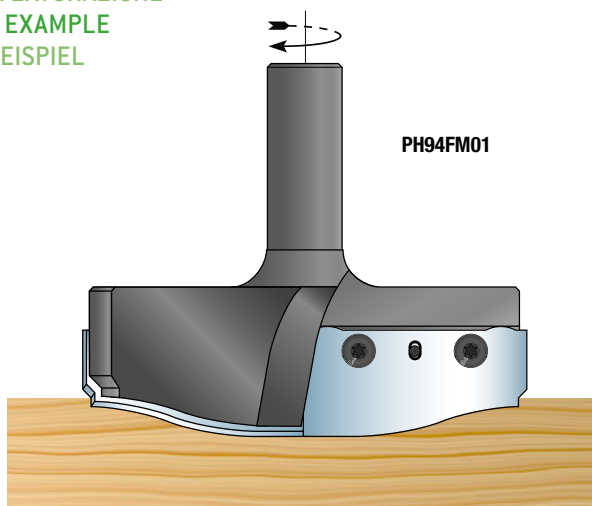
Router already equipped with profiled knives. When ordering please specify the profile required.

Profilmesser im Lieferumfang enthalten. Bitte das benötigte Profil bei Bestellung angeben.

RICAMBI / SPARE PARTS / ERSATZTEILE

Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH94FM		€
		01	02	
Coltello / Knife / Messer	70x30x2	/	2	
Coltelli FIX / Knife FIX / Messer FIX	60x30x2	2	/	
Vite per Coltello / Knife's Screw / Schraube	M4x8,3 Ø9	/	6	
Vite per Coltello / Knife's Screw / Schraube	M5x10,2 Ø10,5	4	/	
Chiave per Coltello / Knife's Key / Torxschlüssel	Torx 15	/	1	
Chiave per Coltello / Knife's Key / Torxschlüssel	Torx 20	1	/	

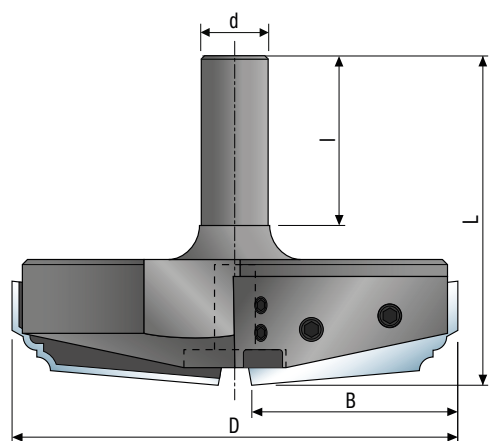
ESEMPI DI LAVORAZIONE WORKING EXAMPLE EINSATZBEISPIEL



PH95FM01

HW | Z=2

PIATTABANDA MULTIPROFILO Z2 MULTI-PROFILE PANEL RAISING Z2 MULTIPROFILABPLATTFRÄSER Z2



Ø D [mm]	B [mm]	L [mm]	Attacco / Shank / Schaft		Z	Art. Nr.	€
			Ø d [mm]	l [mm]			
138	46,5	97	20 / 25	50	2	PH95FM01	

Fresa composta di coltelli. In fase d'ordine specificare il profilo richiesto.

Router already equipped with profiled knives. When ordering please specify the profile required.

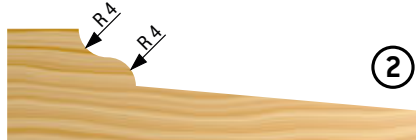
Profilmesser im Lieferumfang enthalten. Bitte das benötigte Profil bei Bestellung angeben.

RICAMBI / SPARE PARTS / ERSATZTEILE				
Type	Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH95FM	€
			01	
①	Coltello / Knife / Messer	65x25x2	2	
②	Coltello / Knife / Messer	65x25x2	2	
③	Coltello / Knife / Messer	65x25x2	2	
④	Coltello / Knife / Messer	65x25x2	2	
⑤	Coltello / Knife / Messer	65x25x2	2	
①	Supporto / Backing plate / Stützplatte	65x25x4	2	
②	Supporto / Backing plate / Stützplatte	65x25x4	2	
③	Supporto / Backing plate / Stützplatte	65x25x4	2	
④	Supporto / Backing plate / Stützplatte	65x25x4	2	
⑤	Supporto / Backing plate / Stützplatte	65x25x4	2	

ESEMPI DI LAVORAZIONE WORKING EXAMPLE EINSATZBEISPIEL



①



②



③



④

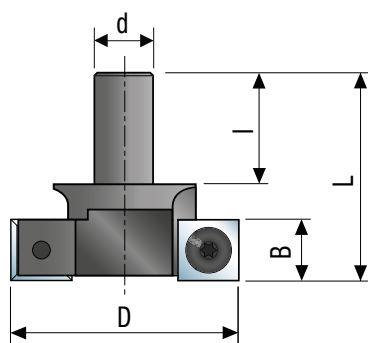


⑤

PH96FM01

HW | Z=2

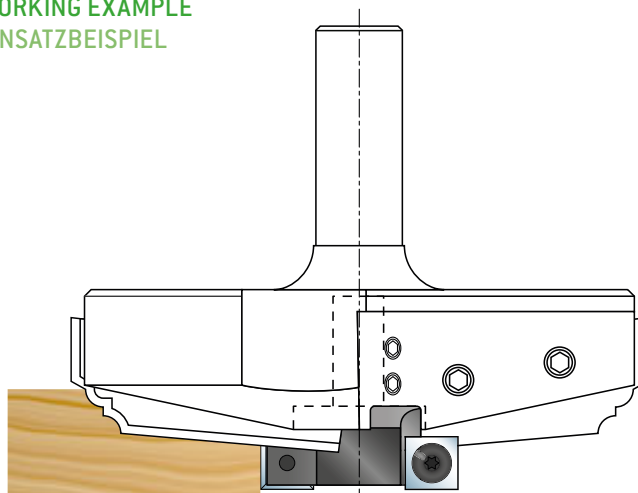
SOTTOPUNTA OPZIONALE PER PH95FM01 ADDITIONAL ROUTER FOR CENTER CAN BE MOUNTED ON PH95FM01 AUFSATZ MONTIERBAR AUF PH95FM01



Ø D [mm]	B [mm]	L [mm]	Attacco / Shank / Schaft		Z	Art. Nr.	€
			Ø d [mm]	l [mm]			
45	12	40	12	22	2	PH96FM01	

RICAMBI / SPARE PARTS / ERSATZTEILE			
Art.	Dimensioni Dimensions Abmessungen [mm]	Art. Nr. PH96FM	€
		01	
Coltello / Knife / Messer	12x12x1,5	2	
Vite per Coltello / Knife's Screw / Schraube	M3,5x7 Ø9	2	
Chiave per Coltello / Knife's Key / Torxschlüssel	Torx 15	1	
Chiave per Vite di blocc. / Block Screw's Key / Sechskantschlüssel	Esagonale 2,5	1	

ESEMPI DI LAVORAZIONE WORKING EXAMPLE EINSATZBEISPIEL





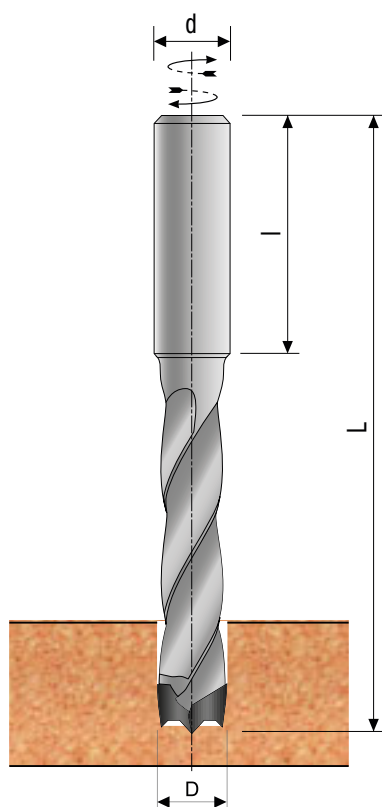
LINEA UTENSILI IN DIAMANTE / DIAMOND TOOLS LINE / DIAMANT-WERKZEUGE



PD10FD

DIA | Z=2

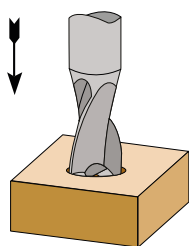
PUNTA PER FORATRICE - FORO CIECO BLIND HOLE DRILL BIT DÜBELLOCHBOHRER



M Materiale forante
Drilling tip material
Bohrschneide Material

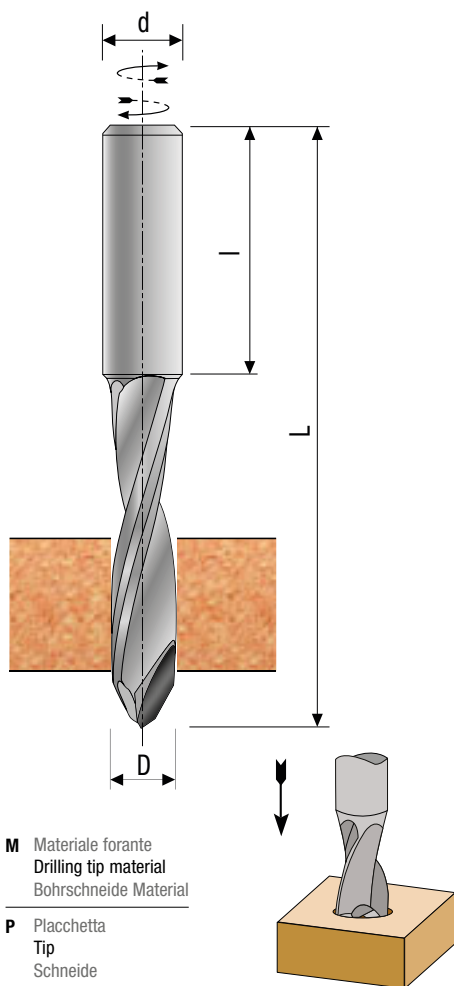
P Placchetta
Tip
Schneide

Ø D [mm]	L [mm]	Attacco / Shank / Schaft		Z	Rotation	P		Art. Nr.	€
		Ø d [mm]	l [mm]			n°	M		
5	57,5	10	20	2	DX / RH / RL	2	PCD / PKD	PD10FD01	
5	57,5	10	20	2	SX / LH / LL	2	PCD / PKD	PD10FD02	
6	57,5	10	20	2	DX / RH / RL	2	PCD / PKD	PD10FD03	
6	57,5	10	20	2	SX / LH / LL	2	PCD / PKD	PD10FD04	
7	57,5	10	20	2	DX / RH / RL	2	PCD / PKD	PD10FD05	
7	57,5	10	20	2	SX / LH / LL	2	PCD / PKD	PD10FD06	
8	57,5	10	20	2	DX / RH / RL	2	PCD / PKD	PD10FD07	
8	57,5	10	20	2	SX / LH / LL	2	PCD / PKD	PD10FD08	
9	57,5	10	20	2	DX / RH / RL	2	PCD / PKD	PD10FD09	
9	57,5	10	20	2	SX / LH / LL	2	PCD / PKD	PD10FD10	
10	57,5	10	20	2	DX / RH / RL	2	PCD / PKD	PD10FD11	
10	57,5	10	20	2	SX / LH / LL	2	PCD / PKD	PD10FD12	
12	57,5	10	20	2	DX / RH / RL	2	PCD / PKD	PD10FD13	
12	57,5	10	20	2	SX / LH / LL	2	PCD / PKD	PD10FD14	
5	70	10	20	2	DX / RH / RL	2	PCD / PKD	PD10FD15	
5	70	10	20	2	SX / LH / LL	2	PCD / PKD	PD10FD16	
6	70	10	20	2	DX / RH / RL	2	PCD / PKD	PD10FD17	
6	70	10	20	2	SX / LH / LL	2	PCD / PKD	PD10FD18	
7	70	10	20	2	DX / RH / RL	2	PCD / PKD	PD10FD19	
7	70	10	20	2	SX / LH / LL	2	PCD / PKD	PD10FD20	
8	70	10	20	2	DX / RH / RL	2	PCD / PKD	PD10FD21	
8	70	10	20	2	SX / LH / LL	2	PCD / PKD	PD10FD22	
9	70	10	20	2	DX / RH / RL	2	PCD / PKD	PD10FD23	
9	70	10	20	2	SX / LH / LL	2	PCD / PKD	PD10FD24	
10	70	10	20	2	DX / RH / RL	2	PCD / PKD	PD10FD25	
10	70	10	20	2	SX / LH / LL	2	PCD / PKD	PD10FD26	
12	70	10	20	2	DX / RH / RL	2	PCD / PKD	PD10FD27	
12	70	10	20	2	SX / LH / LL	2	PCD / PKD	PD10FD28	



PD11FD

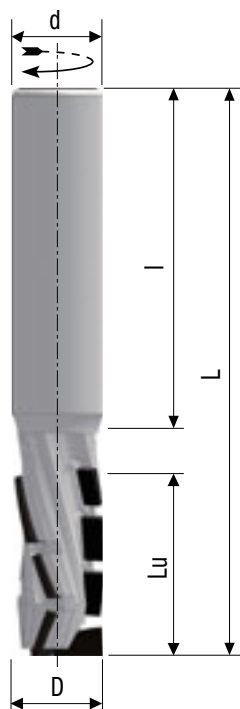
DIA | Z=2

**PUNTA PER FORATRICE - FORO PASSANTE
THROUGH-OUT DRILL BIT
DURCHGANGSBOHRER**

Ø D [mm]	L [mm]	Attacco Shank Schaft		Z	Rotation	P			Art. Nr.	€
		Ø d [mm]	l [mm]			n°	M	h [mm]		
5	57,5	10	20	2	DX / RH / RL	2	PCD / PKD	4	PD11FD01	
5	57,5	10	20	2	SX / LH / LL	2	PCD / PKD	4	PD11FD02	
6	57,5	10	20	2	DX / RH / RL	2	PCD / PKD	4	PD11FD03	
6	57,5	10	20	2	SX / LH / LL	2	PCD / PKD	4	PD11FD04	
7	57,5	10	20	2	DX / RH / RL	2	PCD / PKD	4	PD11FD05	
7	57,5	10	20	2	SX / LH / LL	2	PCD / PKD	4	PD11FD06	
8	57,5	10	20	2	DX / RH / RL	2	PCD / PKD	4	PD11FD07	
8	57,5	10	20	2	SX / LH / LL	2	PCD / PKD	4	PD11FD08	
9	57,5	10	20	2	DX / RH / RL	2	PCD / PKD	4	PD11FD09	
9	57,5	10	20	2	SX / LH / LL	2	PCD / PKD	4	PD11FD10	
10	57,5	10	20	2	DX / RH / RL	2	PCD / PKD	4	PD11FD11	
10	57,5	10	20	2	SX / LH / LL	2	PCD / PKD	4	PD11FD12	
12	57,5	10	20	2	DX / RH / RL	2	PCD / PKD	4	PD11FD13	
12	57,5	10	20	2	SX / LH / LL	2	PCD / PKD	4	PD11FD14	
5	70	10	20	2	DX / RH / RL	2	PCD / PKD	4	PD11FD15	
5	70	10	20	2	SX / LH / LL	2	PCD / PKD	4	PD11FD16	
6	70	10	20	2	DX / RH / RL	2	PCD / PKD	4	PD11FD17	
6	70	10	20	2	SX / LH / LL	2	PCD / PKD	4	PD11FD18	
7	70	10	20	2	DX / RH / RL	2	PCD / PKD	4	PD11FD19	
7	70	10	20	2	SX / LH / LL	2	PCD / PKD	4	PD11FD20	
8	70	10	20	2	DX / RH / RL	2	PCD / PKD	4	PD11FD21	
8	70	10	20	2	SX / LH / LL	2	PCD / PKD	4	PD11FD22	
9	70	10	20	2	DX / RH / RL	2	PCD / PKD	4	PD11FD23	
9	70	10	20	2	SX / LH / LL	2	PCD / PKD	4	PD11FD24	
10	70	10	20	2	DX / RH / RL	2	PCD / PKD	4	PD11FD25	
10	70	10	20	2	SX / LH / LL	2	PCD / PKD	4	PD11FD26	
12	70	10	20	2	DX / RH / RL	2	PCD / PKD	4	PD11FD27	
12	70	10	20	2	SX / LH / LL	2	PCD / PKD	4	PD11FD28	

**PUNTA PER NESTING Z2 H3
ROUTER BIT FOR NESTING Z2 H3
NESTINGFRÄSER Z2 H3****PD12FD**

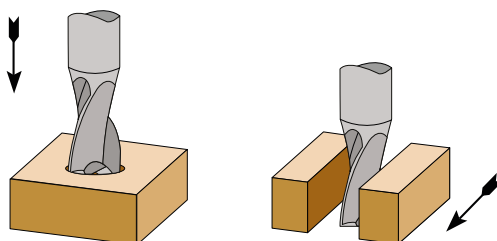
DIA | H3 - Z=2



Corpo in acciaio pesante
Heavy steel body
Schwermetallkörper

Ø D [mm]	Lu [mm]	L [mm]	Attacco Shank Schaft		Z	Rotation	P			Art. Nr.	€
			Ø d [mm]	l [mm]			n°	M	h [mm]		
12	21,5	75	12	43	2	DX / RH / RL	8	PCD / PKD	3	PD12FD01	
12	24,5	75	12	43	2	DX / RH / RL	9	PCD / PKD	3	PD12FD02	
12	31,5	80	12	43	2	DX / RH / RL	12	PCD / PKD	3	PD12FD03	

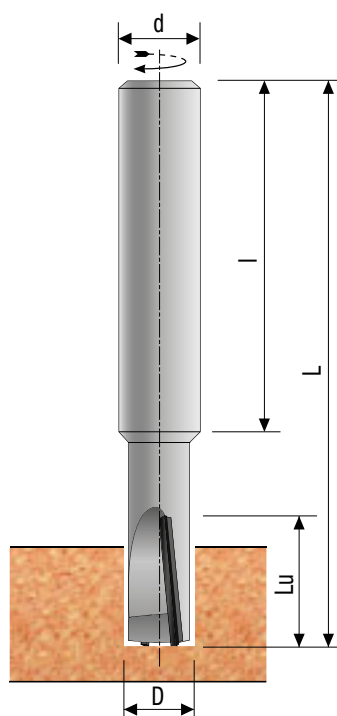
Altre misure su richiesta
Other dimension available on request
Weitere Abmessungen auf Anfrage



M Materiale forante
Drilling tip material
Bohrschneide Material
P Placchetta
Tip
Schneide

PD13FD

DIA | Z=1 - Z=2

PUNTA PER SCANALATURE CON CORPO IN HW
ROUTER BIT WITH HW BODY
SCHAFTFRÄSER MIT HW KÖRPER


M Materiale forante
Drilling tip material
Bohrschneide Material

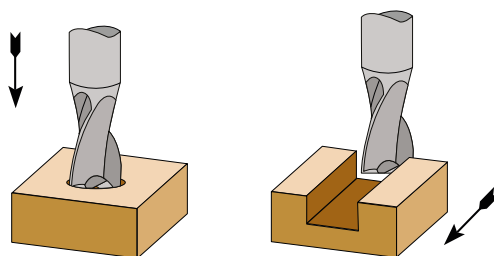
P Placchetta
Tip
Schneide

Forante in HW
HW drilling tip
HW Einbohrschneide

Forante in Diamante a richiesta
Diamond drilling tip on request
DIA Einbohrschneide auf Anfrage

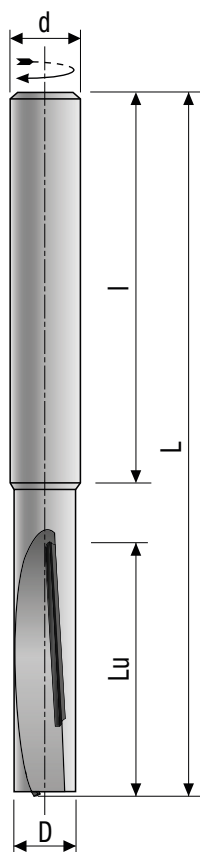
Ø D [mm]	Lu [mm]	L [mm]	Attacco Shank Schaft		Z	Rotation	P		Art. Nr.	€
			Ø d [mm]	l [mm]			n°	M		
5	10	70	6	40	1	DX / RH / RL	1	HW	PD13FD01	
6	10	70	6	40	1	DX / RH / RL	1	HW	PD13FD02	
7	10	70	8	40	1	DX / RH / RL	1	HW	PD13FD03	
8	10	70	10	40	1	DX / RH / RL	1	HW	PD13FD04	
8	13	70	10	40	1	DX / RH / RL	1	HW	PD13FD05	
8	16	70	10	40	1	DX / RH / RL	1	HW	PD13FD06	
8	20	70	10	40	1	DX / RH / RL	1	HW	PD13FD07	
10	10	70	10	40	1	DX / RH / RL	1	HW	PD13FD08	
10	10	70	10	40	2	DX / RH / RL	2	HW	PD13FD09	
10	13	70	10	40	1	DX / RH / RL	1	HW	PD13FD10	
10	13	70	10	40	2	DX / RH / RL	2	HW	PD13FD11	
10	16	70	10	40	1	DX / RH / RL	1	HW	PD13FD12	
10	16	70	10	40	2	DX / RH / RL	2	HW	PD13FD13	
10	20	70	10	40	1	DX / RH / RL	1	HW	PD13FD14	
10	20	70	10	40	2	DX / RH / RL	2	HW	PD13FD15	
10	25	70	10	40	1	DX / RH / RL	2	HW	PD13FD16	
10	25	70	10	40	2	DX / RH / RL	2	HW	PD13FD17	
12	10	70	12	40	1	DX / RH / RL	1	HW	PD13FD18	
12	10	70	12	40	2	DX / RH / RL	2	HW	PD13FD19	
12	13	70	12	40	1	DX / RH / RL	1	HW	PD13FD20	
12	13	70	12	40	2	DX / RH / RL	2	HW	PD13FD21	
12	16	70	12	40	1	DX / RH / RL	1	HW	PD13FD22	
12	16	70	12	40	2	DX / RH / RL	2	HW	PD13FD23	
12	20	70	12	40	1	DX / RH / RL	2	HW	PD13FD24	
12	20	70	12	40	2	DX / RH / RL	2	HW	PD13FD25	
12	25	70	12	40	1	DX / RH / RL	2	HW	PD13FD26	
12	25	70	12	40	2	DX / RH / RL	2	HW	PD13FD27	

Altre misure su richiesta
Other dimension available on request
Weitere Abmessungen auf Anfrage



PD14FD

DIA | H3 - Z=1+1

PUNTA CON CORPO IN HW
ROUTER BIT WITH HW BODY
SCHAFTFRÄSER MIT HW KÖRPER


Ø D [mm]	Lu [mm]	L [mm]	Attacco Shank Schaft		Z	Rotation	P		Art. Nr.	€
			Ø d [mm]	l [mm]			M	h [mm]		
8	28	80	8	45	1+1	DX / RH / RL	PCD / PKD	3	PD14FD01	
10	28	80	8	45	1+1	DX / RH / RL	PCD / PKD	3	PD14FD02	

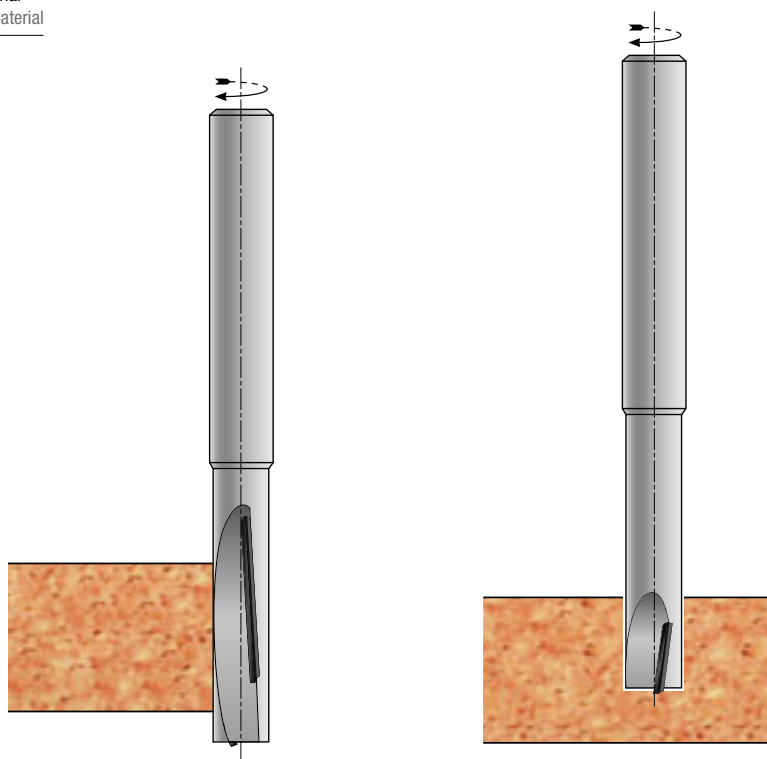
Impiego / Use / Anwendung

Punta per forare e contornare
 Disposable knife sizing and plunging router
 WP-Schaftfräser

Altre misure su richiesta
 Other dimension available on request
 Weitere Abmessungen auf Anfrage

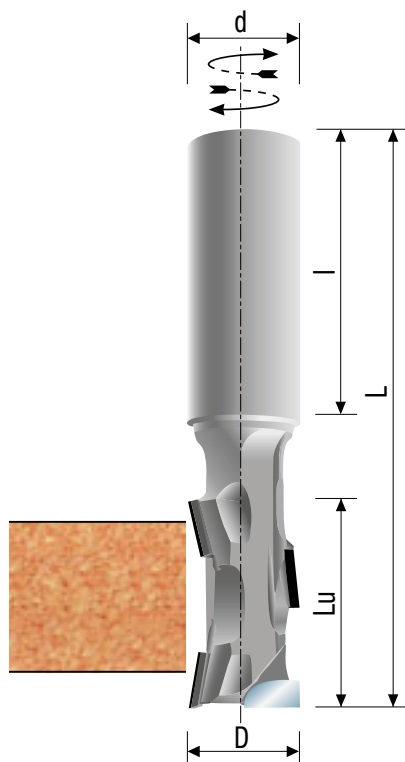
M Materiale forante
 Drilling tip material
 Bohrschneide Material

P Placchetta
 Tip
 Schneide



PD15FD

DIA | H2,5 - Z=1

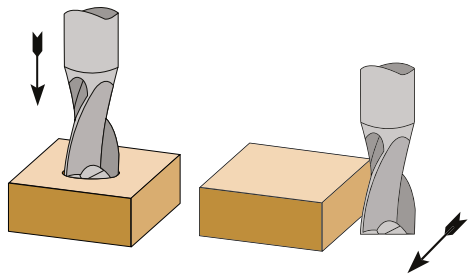


M Materiale forante
Drilling tip material
Bohrschneide Material

P Placchetta
Tip
Schneide

Forante in HW
HW drilling tip
HW Einbohrschneide

Forante in Diamante a richiesta
Diamond drilling tip on request
DIA Einbohrschneide auf Anfrage



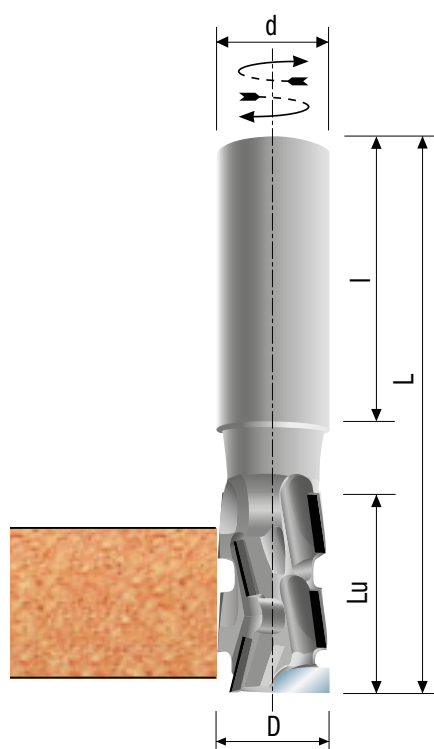
Altre misure su richiesta
Other dimension available on request
Weitere Abmessungen auf Anfrage

PUNTA PER FORARE E CONTORNARE ROUTER BIT FOR DRILLING AND ROUTING SCHAFTFRÄSER

Ø D [mm]	Lu [mm]	L [mm]	Attacco / Shank / Schaft		Z	Rotation	P		Art. Nr.	€
			Ø d [mm]	l [mm]			n°	M		
8	20	65	10	40	1	DX / RH / RL	2	HW	PD15FD01	
8	20	65	10	40	1	SX / LH / LL	2	HW	PD15FD02	
8	27	70	10	40	1	DX / RH / RL	3	HW	PD15FD03	
8	27	70	10	40	1	SX / LH / LL	3	HW	PD15FD04	
10	20	70	10	40	1	DX / RH / RL	2	HW	PD15FD05	
10	20	70	10	40	1	SX / LH / LL	2	HW	PD15FD06	
10	27	75	10	40	1	DX / RH / RL	3	HW	PD15FD07	
10	27	75	10	40	1	SX / LH / LL	3	HW	PD15FD08	
12	27	75	12	40	1	DX / RH / RL	4	HW	PD15FD09	
12	27	75	12	40	1	SX / LH / LL	4	HW	PD15FD10	
12	35	80	12	40	1	DX / RH / RL	5	HW	PD15FD11	
12	35	80	12	40	1	SX / LH / LL	5	HW	PD15FD12	
16	27	95	16/20	50	1	DX / RH / RL	3	HW	PD15FD13	
16	27	95	16/20	50	1	SX / LH / LL	3	HW	PD15FD14	
16	34	95	16/20	50	1	DX / RH / RL	4	HW	PD15FD15	
16	34	95	16/20	50	1	SX / LH / LL	4	HW	PD15FD16	
16	43	105	16/20	50	1	DX / RH / RL	5	HW	PD15FD17	
16	43	105	16/20	50	1	SX / LH / LL	5	HW	PD15FD18	
18	27	95	20	50	1	DX / RH / RL	3	HW	PD15FD19	
18	27	95	20	50	1	SX / LH / LL	3	HW	PD15FD20	
18	34	95	20	50	1	DX / RH / RL	4	HW	PD15FD21	
18	34	95	20	50	1	SX / LH / LL	4	HW	PD15FD22	
18	43	105	20	50	1	DX / RH / RL	5	HW	PD15FD23	
18	43	105	20	50	1	SX / LH / LL	5	HW	PD15FD24	
18	52	110	20	50	1	DX / RH / RL	6	HW	PD15FD25	
18	52	110	20	50	1	SX / LH / LL	6	HW	PD15FD26	
20	27	95	20	50	1	DX / RH / RL	3	HW	PD15FD27	
20	27	95	20	50	1	SX / LH / LL	3	HW	PD15FD28	
20	35	95	20	50	1	DX / RH / RL	4	HW	PD15FD29	
20	35	95	20	50	1	SX / LH / LL	4	HW	PD15FD30	
20	43	105	20	50	1	DX / RH / RL	5	HW	PD15FD31	
20	43	105	20	50	1	SX / LH / LL	5	HW	PD15FD32	
20	52	110	20	50	1	DX / RH / RL	6	HW	PD15FD33	
20	52	110	20	50	1	SX / LH / LL	6	HW	PD15FD34	
20	58	120	20	50	1	DX / RH / RL	7	HW	PD15FD35	
20	58	120	20	50	1	SX / LH / LL	7	HW	PD15FD36	
20	66	125	20	50	1	DX / RH / RL	8	HW	PD15FD37	
20	66	125	20	50	1	SX / LH / LL	8	HW	PD15FD38	
12,7 (1/2")	27	75	12,7 (1/2")	40	1	DX / RH / RL	4	HW	PD15FD39	
12,7 (1/2")	27	75	12,7 (1/2")	40	1	SX / LH / LL	4	HW	PD15FD40	
12,7 (1/2")	35	80	12,7 (1/2")	40	1	DX / RH / RL	5	HW	PD15FD41	
12,7 (1/2")	35	80	12,7 (1/2")	40	1	SX / LH / LL	5	HW	PD15FD42	
15,87 (5/8")	27	95	15,87 (5/8")	50	1	DX / RH / RL	3	HW	PD15FD43	
15,87 (5/8")	27	95	15,87 (5/8")	50	1	SX / LH / LL	3	HW	PD15FD44	
15,87 (5/8")	34	95	15,87 (5/8")	50	1	DX / RH / RL	4	HW	PD15FD45	
15,87 (5/8")	34	95	15,87 (5/8")	50	1	SX / LH / LL	4	HW	PD15FD46	
15,87 (5/8")	43	105	15,87 (5/8")	50	1	DX / RH / RL	5	HW	PD15FD47	
15,87 (5/8")	43	105	15,87 (5/8")	50	1	SX / LH / LL	5	HW	PD15FD48	
15,87 (5/8")	27	95	19,05 (3/4")	50	1	DX / RH / RL	3	HW	PD15FD49	
15,87 (5/8")	27	95	19,05 (3/4")	50	1	SX / LH / LL	3	HW	PD15FD50	
15,87 (5/8")	34	95	19,05 (3/4")	50	1	DX / RH / RL	4	HW	PD15FD51	
15,87 (5/8")	34	95	19,05 (3/4")	50	1	SX / LH / LL	4	HW	PD15FD52	
15,87 (5/8")	43	105	19,05 (3/4")	50	1	DX / RH / RL	5	HW	PD15FD53	
15,87 (5/8")	43	105	19,05 (3/4")	50	1	SX / LH / LL	5	HW	PD15FD54	
19,05 (3/4")	27	95	19,05 (3/4")	50	1	DX / RH / RL	3	HW	PD15FD55	
19,05 (3/4")	27	95	19,05 (3/4")	50	1	SX / LH / LL	3	HW	PD15FD56	
19,05 (3/4")	35	95	19,05 (3/4")	50	1	DX / RH / RL	4	HW	PD15FD57	
19,05 (3/4")	35	95	19,05 (3/4")	50	1	SX / LH / LL	4	HW	PD15FD58	
19,05 (3/4")	43	105	19,05 (3/4")	50	1	DX / RH / RL	5	HW	PD15FD59	
19,05 (3/4")	43	105	19,05 (3/4")	50	1	SX / LH / LL	5	HW	PD15FD60	
19,05 (3/4")	50	110	19,05 (3/4")	50	1	DX / RH / RL	6	HW	PD15FD61	
19,05 (3/4")	52	110	19,05 (3/4")	50	1	SX / LH / LL	6	HW	PD15FD62	
19,05 (3/4")	58	120	19,05 (3/4")	50	1	DX / RH / RL	7	HW	PD15FD63	
19,05 (3/4")	58	120	19,05 (3/4")	50	1	SX / LH / LL	7	HW	PD15FD64	
19,05 (3/4")	66	125	19,05 (3/4")	50	1	DX / RH / RL	8	HW	PD15FD65	
19,05 (3/4")	66	125	19,05 (3/4")	50	1	SX / LH / LL	8	HW	PD15FD66	

PD16FD

DIA | H2,5 - Z=2

PUNTA PER FORARE E CONTORNARE
ROUTER BIT FOR DRILLING AND ROUTING
SCHAFTFRÄSER


Ø D [mm]	Lu [mm]	L [mm]	Attacco Shank Schaft		Z	Rotation	P		Art. Nr.	€
			Ø d [mm]	l [mm]			n°	M		
18	42	105	20	50	2	DX / RH / RL	10	HW	PD16FD01	
18	42	105	20	50	2	SX / LH / LL	10	HW	PD16FD02	
18	51	110	20	50	2	DX / RH / RL	12	HW	PD16FD03	
18	51	110	20	50	2	SX / LH / LL	12	HW	PD16FD04	
20	25	95	20	50	2	DX / RH / RL	6	HW	PD16FD05	
20	25	95	20	50	2	SX / LH / LL	6	HW	PD16FD06	
20	32	95	20	50	2	DX / RH / RL	8	HW	PD16FD07	
20	32	95	20	50	2	SX / LH / LL	8	HW	PD16FD08	
20	42	105	20	50	2	DX / RH / RL	10	HW	PD16FD09	
20	42	105	20	50	2	SX / LH / LL	10	HW	PD16FD10	
20	51	110	20	50	2	DX / RH / RL	12	HW	PD16FD11	
20	51	110	20	50	2	SX / LH / LL	12	HW	PD16FD12	

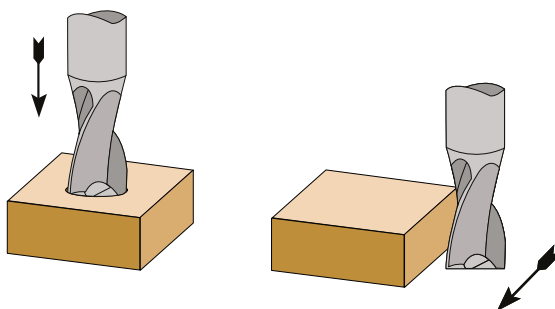
Altre misure su richiesta
 Other dimension available on request
 Weitere Abmessungen auf Anfrage

M Materiale forante
 Drilling tip material
 Bohrschneide Material

P Placchetta
 Tip
 Schneide

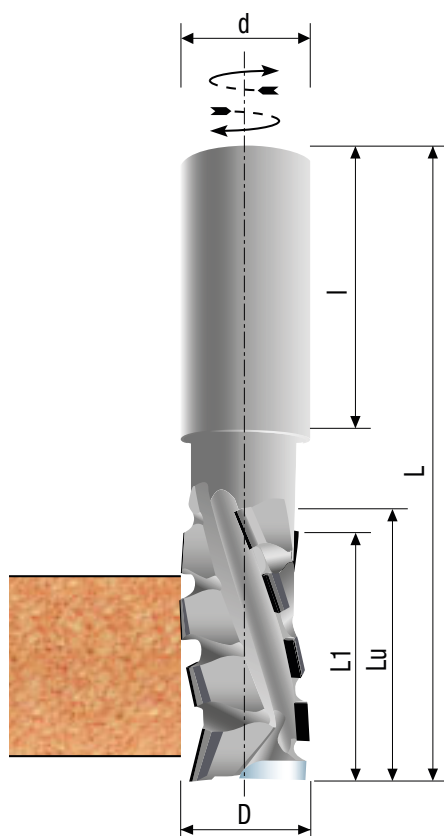
Forante in HW
 HW drilling tip
 HW Einbohrschneide

Forante in Diamante a richiesta
 Diamond drilling tip on request
 DIA Einbohrschneide auf Anfrage



PD17FD

DIA | H2,5 - Z=2

PUNTA ELICOIDALE CON BUONA EVACUAZIONE TRUCIOLO
HELICAL ROUTER BIT FOR GOOD CHIP EJECTION
SCHAFTFRÄSER FÜR EXZELLENTE SPANFLUSS


M Materiale forante
 Drilling tip material
 Bohrschneide Material

P Placchetta
 Tip
 Schneide

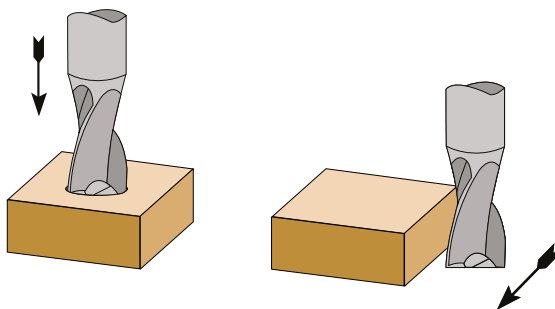
Forante in HW
 HW drilling tip
 HW Einbohrschneide

Forante in Diamante a richiesta
 Diamond drilling tip on request
 DIA Einbohrschneide auf Anfrage

Ø D [mm]	L1 [mm]	Lu [mm]	L [mm]	Attacco Shank Schaft		Z	Rotation	P		Art. Nr.	€
				Ø d [mm]	l [mm]			n°	M		
20	27	30	96	20	50	2	DX / RH / RL	7	HW	PD17FD01	
20	27	30	96	20	50	2	SX / LH / LL	7	HW	PD17FD02	
20	32	36	96	20	50	2	DX / RH / RL	8	HW	PD17FD03	
20	32	36	96	20	50	2	SX / LH / LL	8	HW	PD17FD04	
20	42	44	104	20	50	2	DX / RH / RL	10	HW	PD17FD05	
20	42	44	104	20	50	2	SX / LH / LL	10	HW	PD17FD06	
20	52	54	112	20	50	2	DX / RH / RL	12	HW	PD17FD07	
20	52	54	112	20	50	2	SX / LH / LL	12	HW	PD17FD08	
20	65	69,5	125	25	50	2	DX / RH / RL	16	HW	PD17FD09	
20	65	69,5	125	25	50	2	SX / LH / LL	16	HW	PD17FD10	

Ø D [mm]	L1 [mm]	Lu [mm]	L [mm]	Attacco Shank Schaft		Z	Rotation	P		Art. Nr.	€
				Ø d [mm]	l [mm]			n°	M		
19,05 (3/4")	27	30	96	19,05 (3/4")	50	2	DX / RH / RL	7	HW	PD17FD11	
19,05 (3/4")	27	30	96	19,05 (3/4")	50	2	SX / LH / LL	7	HW	PD17FD12	
19,05 (3/4")	32	36	96	19,05 (3/4")	50	2	DX / RH / RL	8	HW	PD17FD13	
19,05 (3/4")	32	36	96	19,05 (3/4")	50	2	SX / LH / LL	8	HW	PD17FD14	
19,05 (3/4")	42	44	104	19,05 (3/4")	50	2	DX / RH / RL	10	HW	PD17FD15	
19,05 (3/4")	42	44	104	19,05 (3/4")	50	2	SX / LH / LL	10	HW	PD17FD16	
19,05 (3/4")	52	54	112	19,05 (3/4")	50	2	DX / RH / RL	12	HW	PD17FD17	
19,05 (3/4")	52	54	112	19,05 (3/4")	50	2	SX / LH / LL	12	HW	PD17FD18	
19,05 (3/4")	65	69,5	125	19,05 (3/4")	50	2	DX / RH / RL	15	HW	PD17FD19	
19,05 (3/4")	65	69,5	125	19,05 (3/4")	50	2	SX / LH / LL	15	HW	PD17FD20	

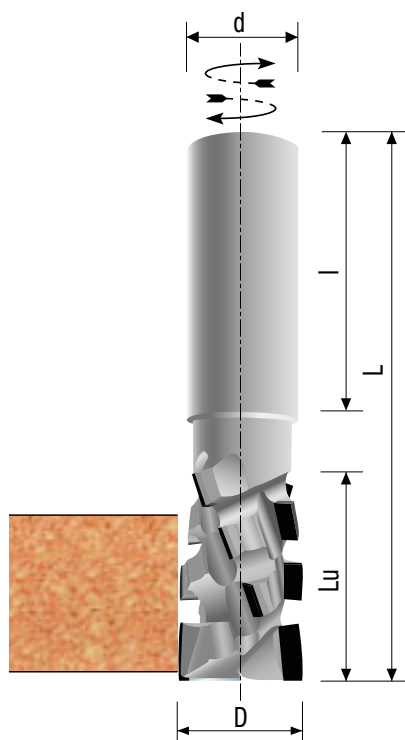
Altre misure su richiesta
 Other dimension available on request
 Weitere Abmessungen auf Anfrage



PD18FD

DIA | H4 - Z=2

PUNTA MULTIDENTI AD ALTA RESA HIGH PERFORMANCE MULTI-CUTTING ROUTER BIT HOCHSLEISTUNGS-SCHAFTFRÄSER



M Materiale forante
Drilling tip material
Bohrschneide Material

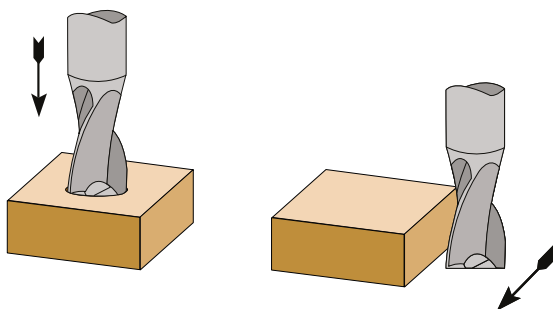
P Placchetta
Tip
Schneide

Forante in HW
HW drilling tip
HW Einbohrschneide

Forante in Diamante a richiesta
Diamond drilling tip on request
DIA Einbohrschneide auf Anfrage

Ø D [mm]	Lu [mm]	L [mm]	Attacco Shank Schaft		Z	Rotation	P		Art. Nr.	€
			Ø d [mm]	l [mm]			n°	M		
22	32	92	20	50	2	DX / RH / RL	10	HW	PD18FD01	
22	32	92	20	50	2	SX / LH / LL	10	HW	PD18FD02	
22	38	98	20	50	2	DX / RH / RL	12	HW	PD18FD03	
22	38	98	20	50	2	SX / LH / LL	12	HW	PD18FD04	
22	43,5	103	20	50	2	DX / RH / RL	14	HW	PD18FD05	
22	43,5	103	20	50	2	SX / LH / LL	14	HW	PD18FD06	
22	49	109	20	50	2	DX / RH / RL	16	HW	PD18FD07	
22	49	109	20	50	2	SX / LH / LL	16	HW	PD18FD08	
22	54,5	115	20	50	2	DX / RH / RL	18	HW	PD18FD09	
22	54,5	115	20	50	2	SX / LH / LL	18	HW	PD18FD10	
22	60	126	20	50	2	DX / RH / RL	20	HW	PD18FD11	
22	60	126	20	50	2	SX / LH / LL	20	HW	PD18FD12	
25	32	92	20/25	55	2	DX / RH / RL	10	HW	PD18FD13	
25	32	92	20/25	55	2	SX / LH / LL	10	HW	PD18FD14	
25	38	98	20/25	55	2	DX / RH / RL	12	HW	PD18FD15	
25	38	98	20/25	55	2	SX / LH / LL	12	HW	PD18FD16	
25	43,5	103	20/25	55	2	DX / RH / RL	14	HW	PD18FD17	
25	43,5	103	20/25	55	2	SX / LH / LL	14	HW	PD18FD18	
25	49	109	20/25	55	2	DX / RH / RL	16	HW	PD18FD19	
25	49	109	20/25	55	2	SX / LH / LL	16	HW	PD18FD20	
25	54,5	115	20/25	55	2	DX / RH / RL	18	HW	PD18FD21	
25	54,5	115	20/25	55	2	SX / LH / LL	18	HW	PD18FD22	
25	60	126	20/25	55	2	DX / RH / RL	20	HW	PD18FD23	
25	60	126	20/25	55	2	SX / LH / LL	20	HW	PD18FD24	
25	65	126	20/25	55	2	DX / RH / RL	22	HW	PD18FD25	
25	65	126	20/25	55	2	SX / LH / LL	22	HW	PD18FD26	
25	70	126	20/25	55	2	DX / RH / RL	24	HW	PD18FD27	
25	70	126	20/25	55	2	SX / LH / LL	24	HW	PD18FD28	

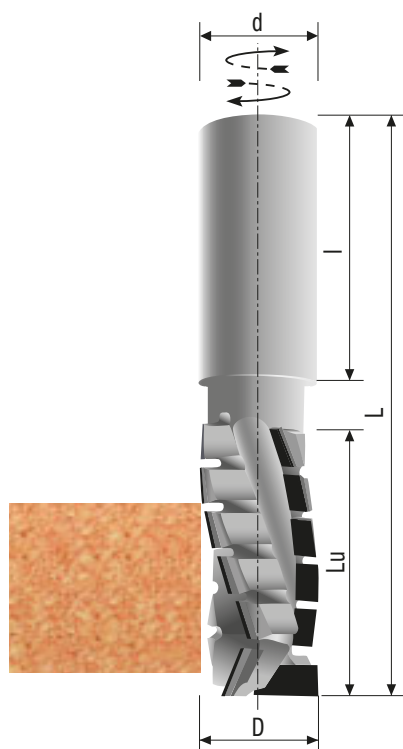
Altre misure su richiesta
Other dimension available on request
Weitere Abmessungen auf Anfrage



PD19FD

DIA | H4 - Z=3

PUNTA ELICOIDALE MULTIDENTI HELICAL MULTI-CUTTING ROUTER BIT DIA-SCHAFTFRÄSER



M Materiale forante
Drilling tip material
Bohrschneide Material

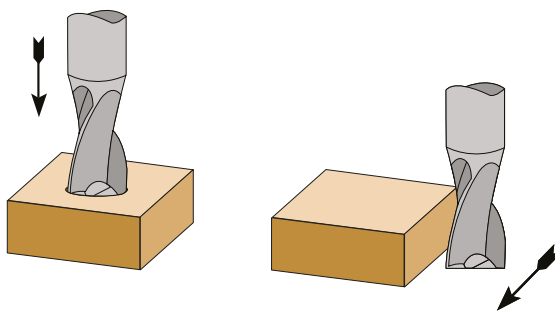
P Placchetta
Tip
Schneide

Ø D [mm]	Lu [mm]	L [mm]	Attacco Shank Schaft		Z	Rotation	P			Art. Nr.	€
			Ø d [mm]	l [mm]			n°	M	h [mm]		
20	22	95	20	50	3	DX / RH / RL	8	PCD / PKD	4	PD19FD01	
20	22	95	20	50	3	SX / LH / LL	8	PCD / PKD	4	PD19FD02	
20	29	95	20	50	3	DX / RH / RL	11	PCD / PKD	4	PD19FD03	
20	29	95	20	50	3	SX / LH / LL	11	PCD / PKD	4	PD19FD04	
20	37	95	20	50	3	DX / RH / RL	14	PCD / PKD	4	PD19FD05	
20	37	95	20	50	3	SX / LH / LL	14	PCD / PKD	4	PD19FD06	
20	44	105	20	50	3	DX / RH / RL	17	PCD / PKD	4	PD19FD07	
20	44	105	20	50	3	SX / LH / LL	17	PCD / PKD	4	PD19FD08	
20	52	110	20	50	3	DX / RH / RL	20	PCD / PKD	4	PD19FD09	
20	52	110	20	50	3	SX / LH / LL	20	PCD / PKD	4	PD19FD10	
20	59	120	20	50	3	DX / RH / RL	23	PCD / PKD	4	PD19FD11	
20	59	120	20	50	3	SX / LH / LL	23	PCD / PKD	4	PD19FD12	
20	67	125	20	50	3	DX / RH / RL	26	PCD / PKD	4	PD19FD13	
20	67	125	20	50	3	SX / LH / LL	26	PCD / PKD	4	PD19FD14	
25	22	95	25	55	3	DX / RH / RL	8	PCD / PKD	4	PD19FD15	
25	22	95	25	55	3	SX / LH / LL	8	PCD / PKD	4	PD19FD16	
25	29	95	25	55	3	DX / RH / RL	11	PCD / PKD	4	PD19FD17	
25	29	95	25	55	3	SX / LH / LL	11	PCD / PKD	4	PD19FD18	
25	37	100	25	55	3	DX / RH / RL	14	PCD / PKD	4	PD19FD19	
25	37	100	25	55	3	SX / LH / LL	14	PCD / PKD	4	PD19FD20	
25	44	110	25	55	3	DX / RH / RL	17	PCD / PKD	4	PD19FD21	
25	44	110	25	55	3	SX / LH / LL	17	PCD / PKD	4	PD19FD22	
25	52	115	25	55	3	DX / RH / RL	20	PCD / PKD	4	PD19FD23	
25	52	115	25	55	3	SX / LH / LL	20	PCD / PKD	4	PD19FD24	
25	59	125	25	55	3	DX / RH / RL	23	PCD / PKD	4	PD19FD25	
25	59	125	25	55	3	SX / LH / LL	23	PCD / PKD	4	PD19FD26	
25	67	130	25	55	3	DX / RH / RL	26	PCD / PKD	4	PD19FD27	
25	67	130	25	55	3	SX / LH / LL	26	PCD / PKD	4	PD19FD28	

Altre misure su richiesta

Other dimension available on request

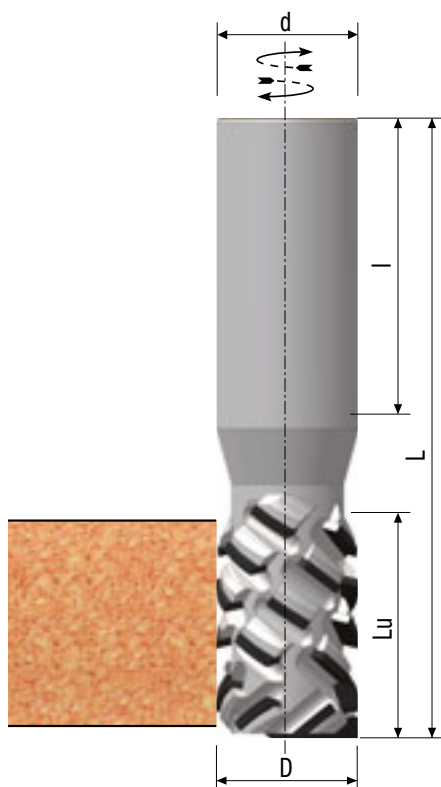
Weitere Abmessungen auf Anfrage



PD20FD

DIA | H4 - Z=2

PUNTA ELICOIDALE MULTIDENTI 54° PER L'OTTIMA FINITURA SPECIAL HELICAL MULTI-CUTTING ROUTER BIT 54° FOR EXCELLENT FINISH HOCHLEISTUNGS-DIA-SCHAFTFRÄSER 54° FÜR FEINBEARBEITUNG

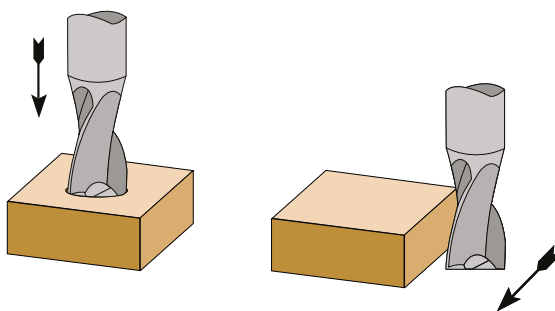


Ø D [mm]	Lu [mm]	L [mm]	Attacco Shank Schaft		Z	Rotation	P			Art. Nr.	€
			Ø d [mm]	l [mm]			n°	M	h [mm]		
25	30	95	20/25	50/55	2	DX / RH / RL	18	PCD / PKD	4	PD20FD01	
25	30	95	20/25	50/55	2	SX / LH / LL	18	PCD / PKD	4	PD20FD02	
25	40	105	20/25	50/55	2	DX / RH / RL	24	PCD / PKD	4	PD20FD03	
25	40	105	20/25	50/55	2	SX / LH / LL	24	PCD / PKD	4	PD20FD04	
25	49,5	115	20/25	50/55	2	DX / RH / RL	30	PCD / PKD	4	PD20FD05	
25	49,5	115	20/25	50/55	2	SX / LH / LL	30	PCD / PKD	4	PD20FD06	
25	59	125	20/25	50/55	2	DX / RH / RL	36	PCD / PKD	4	PD20FD07	
25	59	125	20/25	50/55	2	SX / LH / LL	36	PCD / PKD	4	PD20FD08	

Altre misure su richiesta
Other dimension available on request
Weitere Abmessungen auf Anfrage

M Materiale forante
Drilling tip material
Bohrschneide Material

P Placchetta
Tip
Schneide

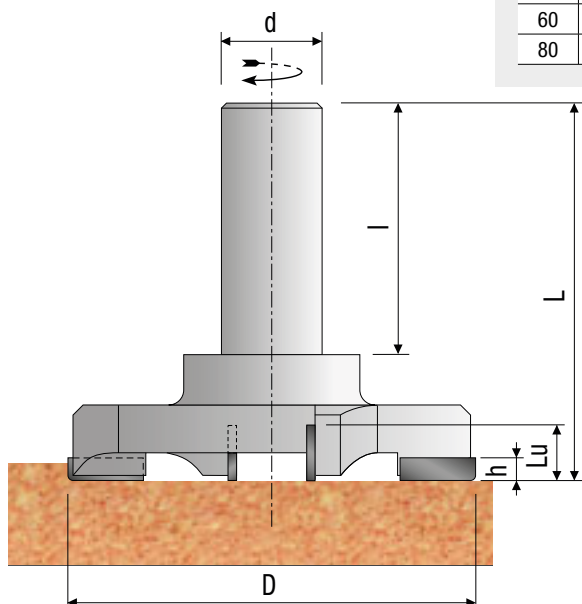


PD21FD

DIA | H4 - Z=2+2

PUNTA PER SPIANARE PLANING ROUTER BIT PLANFRÄSER

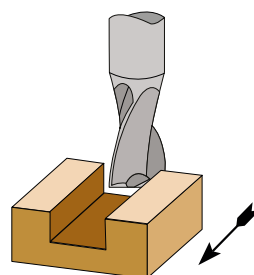
Ø D [mm]	Lu [mm]	L [mm]	Attacco Shank Schaft		Z	Rotation	P			Art. Nr.	€
			Ø d [mm]	l [mm]			n°	M	h [mm]		
40	15	75	20	50	2+2	DX / RH / RL	4	PCD / PKD	4	PD20FD01	
60	15	75	20	50	2+2	DX / RH / RL	4	PCD / PKD	4	PD20FD02	
80	15	75	20	50	2+2	DX / RH / RL	4	PCD / PKD	4	PD20FD03	



Altre misure su richiesta
Other dimension available on request
Weitere Abmessungen auf Anfrage

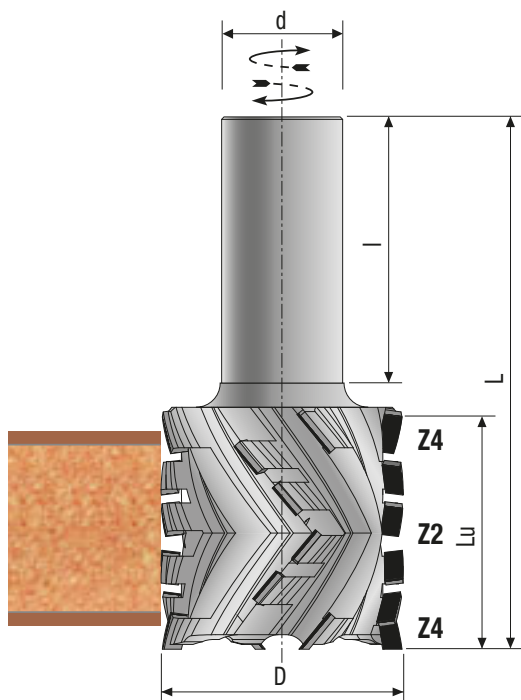
M Materiale forante
Drilling tip material
Bohrschneide Material

P Placchetta
Tip
Schneide



PD26FD

DIA | H4 - Z=4+2+4

PUNTA ELICOIDALE MULTIDENTI PER AVANZAMENTO RAPIDO
SPECIAL HELICAL MULTI-CUTTING ROUTER BIT FOR QUICK FEED RATES
HOCHSLEISTUNGS-SPIRALFÖRMIG SCHAFTFRÄSER


Ø D [mm]	Lu [mm]	L [mm]	Attacco Shank Schaft		Z	Rotation	P			Art. Nr.	€
			Ø d [mm]	l [mm]			n°	M	h [mm]		
50	22	85	20/25	50/55	4+2+4	DX / RH / RL	12	PCD / PKD	4	PD26FD01	
50	22	85	20/25	50/55	4+2+4	SX / LH / LL	12	PCD / PKD	4	PD26FD02	
50	30	90	20/25	50/55	4+2+4	DX / RH / RL	16	PCD / PKD	4	PD26FD03	
50	30	90	20/25	50/55	4+2+4	SX / LH / LL	16	PCD / PKD	4	PD26FD04	
50	39	100	20/25	50/55	4+2+4	DX / RH / RL	20	PCD / PKD	4	PD26FD05	
50	39	100	20/25	50/55	4+2+4	SX / LH / LL	20	PCD / PKD	4	PD26FD06	
50	48	110	20/25	50/55	4+2+4	DX / RH / RL	24	PCD / PKD	4	PD26FD07	
50	48	110	20/25	50/55	4+2+4	SX / LH / LL	24	PCD / PKD	4	PD26FD08	

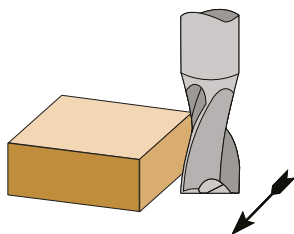
Altre misure su richiesta

Other dimension available on request

Weitere Abmessungen auf Anfrage

M Materiale forante
Drilling tip material
Bohrschneide Material

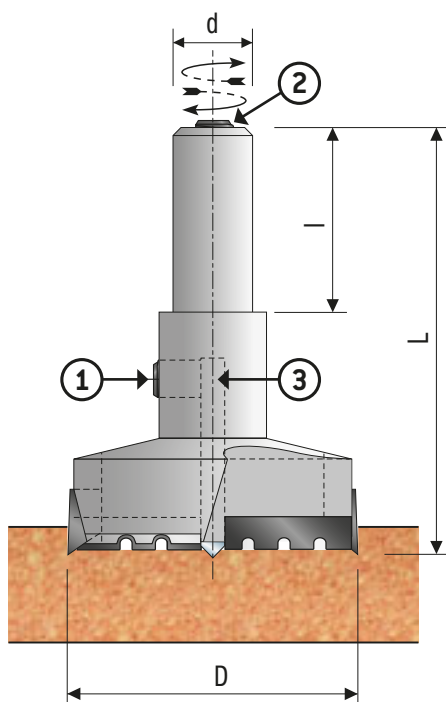
P Placchetta
Tip
Schneide



PD22FD

DIA | H4 - Z=2+2

PUNTA PER CERNIERE HINGE BORING BIT BESCHLAGSBOHRER MIT ZENTRIERSTIFT



M Materiale forante
Drilling tip material
Bohrschneide Material

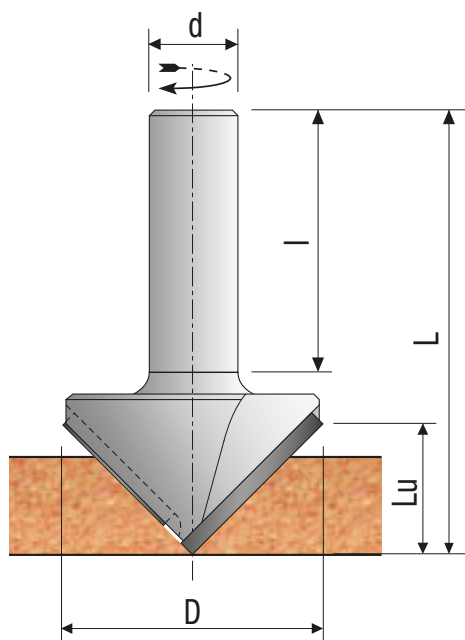
P Placchetta
Tip
Schneide



Ø D [mm]	L [mm]	Attacco Shank Schaft		Z	P		Rotation	Art. Nr.	€
		Ø d [mm]	l [mm]		M	h [mm]			
14	57,5	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD01	
14	57,5	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD02	
15	57,5	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD03	
15	57,5	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD04	
16	57,5	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD05	
16	57,5	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD06	
18	57,5	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD07	
18	57,5	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD08	
20	57,5	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD09	
20	57,5	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD10	
22	57,5	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD11	
22	57,5	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD12	
24	57,5	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD13	
24	57,5	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD14	
25	57,5	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD15	
25	57,5	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD16	
26	57,5	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD17	
26	57,5	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD18	
28	57,5	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD19	
28	57,5	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD20	
30	57,5	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD21	
30	57,5	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD22	
32	57,5	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD23	
32	57,5	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD24	
35	57,5	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD25	
35	57,5	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD26	
38	57,5	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD27	
38	57,5	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD28	
40	57,5	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD29	
40	57,5	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD30	
14	70	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD31	
14	70	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD32	
15	70	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD33	
15	70	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD34	
16	70	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD35	
16	70	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD36	
18	70	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD37	
18	70	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD38	
20	70	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD39	
20	70	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD40	
22	70	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD41	
22	70	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD42	
24	70	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD43	
24	70	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD44	
25	70	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD45	
25	70	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD46	
26	70	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD47	
26	70	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD48	
28	70	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD49	
28	70	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD50	
30	70	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD51	
30	70	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD52	
32	70	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD53	
32	70	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD54	
35	70	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD55	
35	70	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD56	
38	70	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD57	
38	70	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD58	
40	70	10	20	2+2	PCD / PKD	4	DX / RH / RL	PD22FD59	
40	70	10	20	2+2	PCD / PKD	4	SX / LH / LL	PD22FD60	

PD23FD

DIA | H4 - Z=1+1

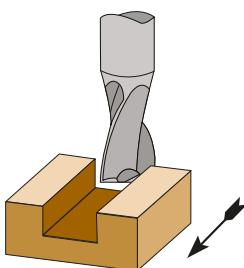

**PUNTA PER FOLDING
ROUTER BIT FOR FOLDING
FOLDINGFRÄSER**

Ø D [mm]	Lu [mm]	L [mm]	Attacco Shank Schaft		Z	Rotation	P			Art. Nr.	€
			Ø d [mm]	l [mm]			n°	M	h [mm]		
48	24	90	20	50	1+1	DX / RH / RL	2	PCD / PKD	4	PD23FD01	
65	32,5	95	20	50	1+1	DX / RH / RL	2	PCD / PKD	4	PD23FD02	

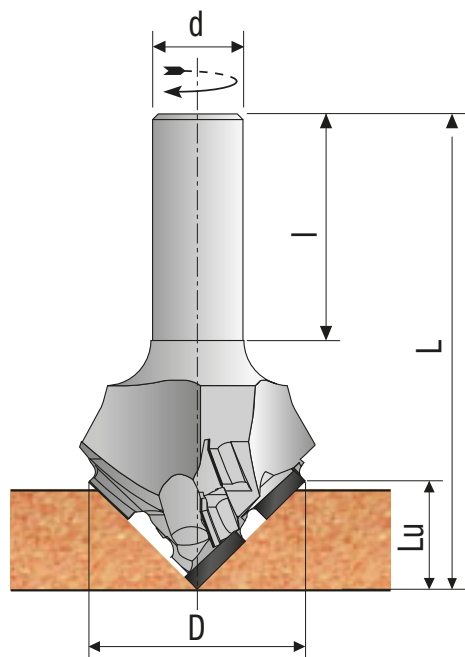
Altre misure su richiesta
Other dimension available on request
Weitere Abmessungen auf Anfrage

M Materiale forante
Drilling tip material
Bohrschneide Material

P Placchetta
Tip
Schneide


**PUNTA PER FOLDING CON TAGLIANTE FRAZIONATO
ROUTER BIT FOR FOLDING WITH MULTI-CUTTING EDGES
FOLDINGFRÄSER MIT GETEILTEN SCHNEIDEN**
PD24FD

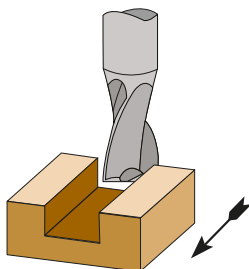
DIA | H4 - Z=2+2



Ø D [mm]	Lu [mm]	L [mm]	Attacco Shank Schaft		Z	Rotation	P			Art. Nr.	€
			Ø d [mm]	l [mm]			n°	M	h [mm]		
60	30	105	20	50	2+2	DX / RH / RL	7	PCD / PKD	4	PD24FD01	
73	36	105	20	50	2+2	DX / RH / RL	9	PCD / PKD	4	PD24FD02	

M Materiale forante
Drilling tip material
Bohrschneide Material

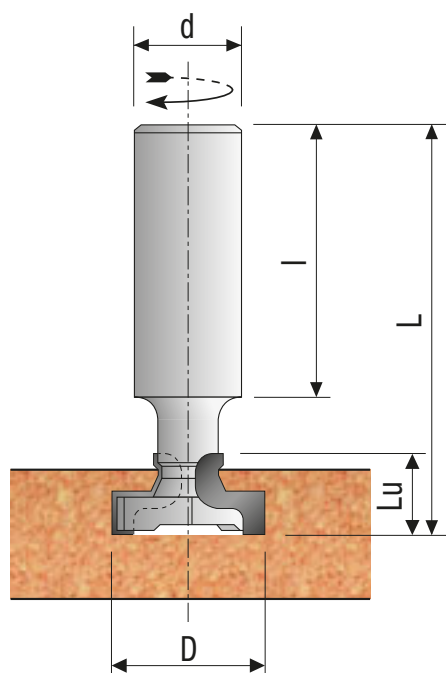
P Placchetta
Tip
Schneide



PD25FD

DIA | H4 - Z=2

PUNTA PER GUIDE IN ALLUMINIO PROFIED ROUTER BIT FOR ALUMINIUM GUIDES T-NUT-FRÄSER

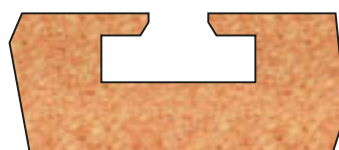
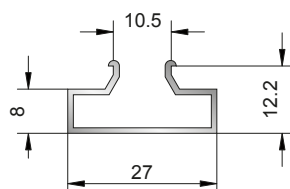


Ø D [mm]	Lu [mm]	L [mm]	Attacco Shank Schaft		Z	Rotation	P			Art. Nr.	€
			Ø d [mm]	l [mm]			n°	M	h [mm]		
27,9	15,2	75	20	50	2	DX / RH / RL	2	PCD / PKD	4	PD25FD01	
32,7	16,8	75	20	50	2	DX / RH / RL	2	PCD / PKD	4	PD25FD02	
27,3	20	75	20	50	2	DX / RH / RL	2	PCD / PKD	4	PD25FD03	
29	20	75	20	50	2	DX / RH / RL	2	PCD / PKD	4	PD25FD04	
28	20	75	20	50	2	DX / RH / RL	2	PCD / PKD	4	PD25FD05	
25,9	20	75	20	50	2	DX / RH / RL	2	PCD / PKD	4	PD25FD06	

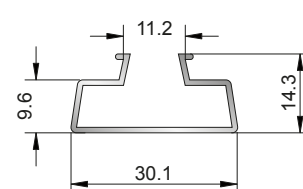
Altre misure su richiesta
Other dimension available on request
Weitere Abmessungen auf Anfrage

M Materiale forante
Drilling tip material
Bohrschneide Material

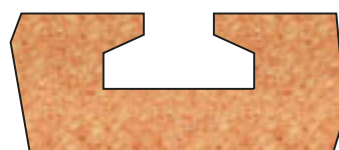
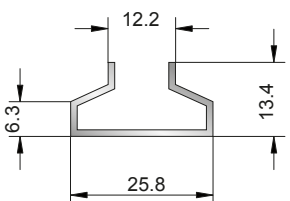
P Placchetta
Tip
Schneide



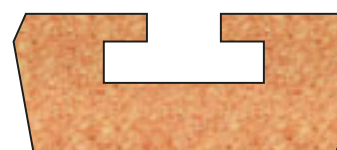
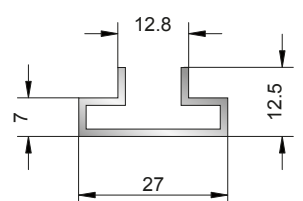
PD25FD01



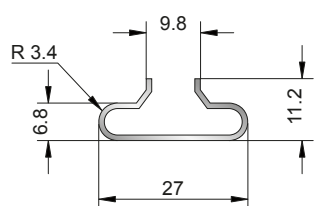
PD25FD02



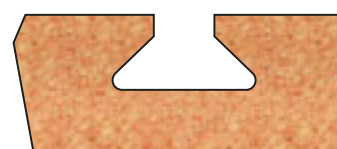
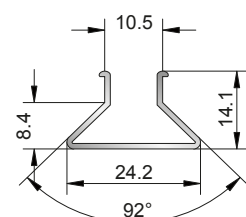
PD25FD03



PD25FD04



PD25FD05



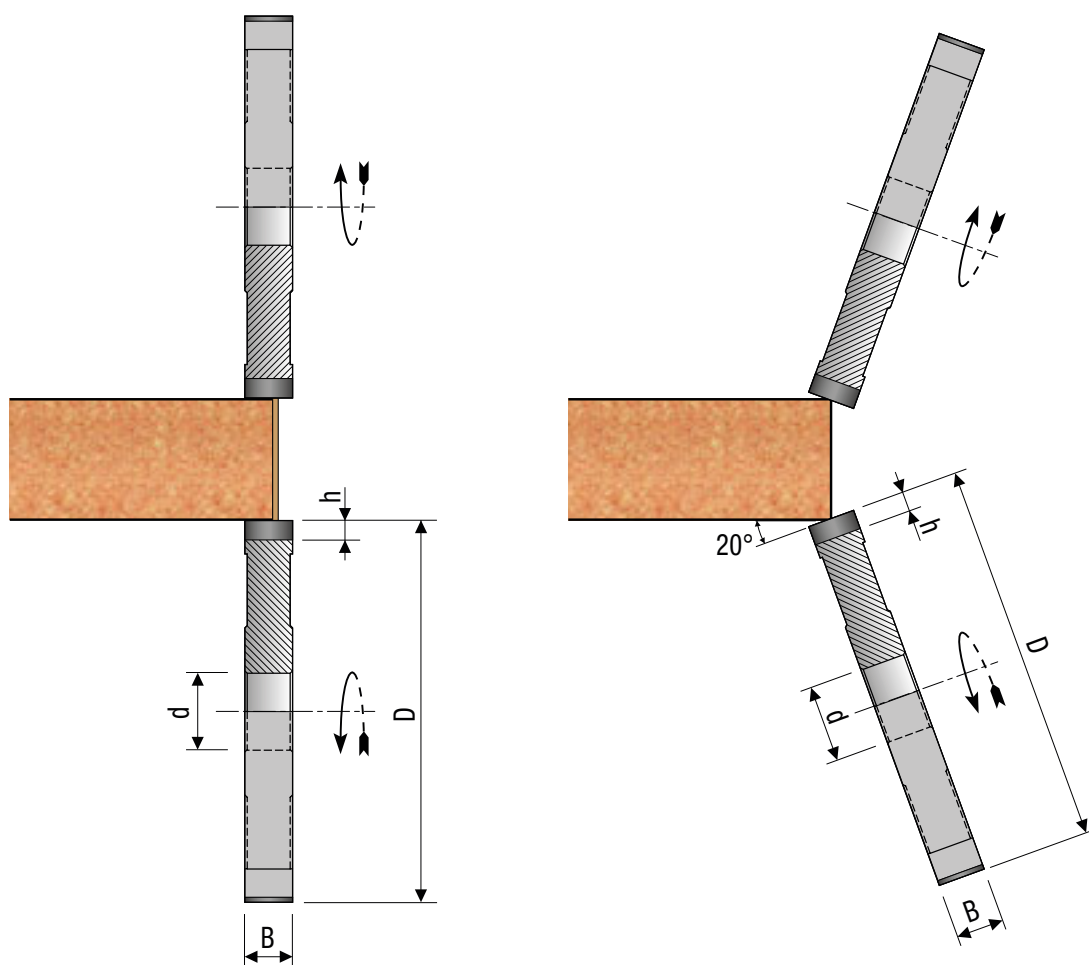
PD25FD06

FD01FD

DIA | H4 - Z=6 - Z=4

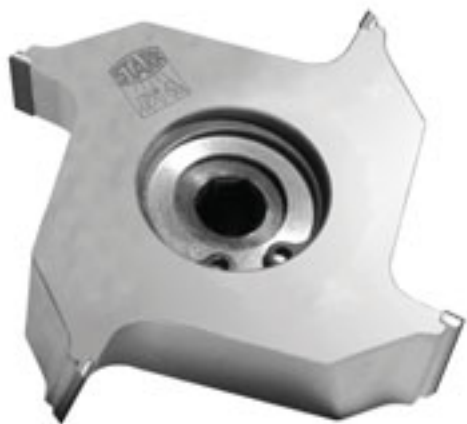
FRESA BORDATRICE PER REFILARE E SPIGOLARE
MILLING CUTTERS FOR TRIMMING AND BEVELING-DIA EDGE BANDER
KANTENFRÄSER DIA


Ø D [mm]	B [mm]	D [mm]	Chiavetta / Keyway / Doppelkeilnute [mm]	Z	PCD / PKD		Art. Nr.	€
					h [mm]			
70	8	16/20	2 - 6x3	4	4		FD01FD01	
70	12	16/20	2 - 6x3	4	4		FD01FD02	
70	8	16/20	2 - 6x3	6	6		FD01FD03	
70	12	16/20	2 - 10x5	6	6		FD01FD04	



FD02FD

DIA | H4 - Z=4

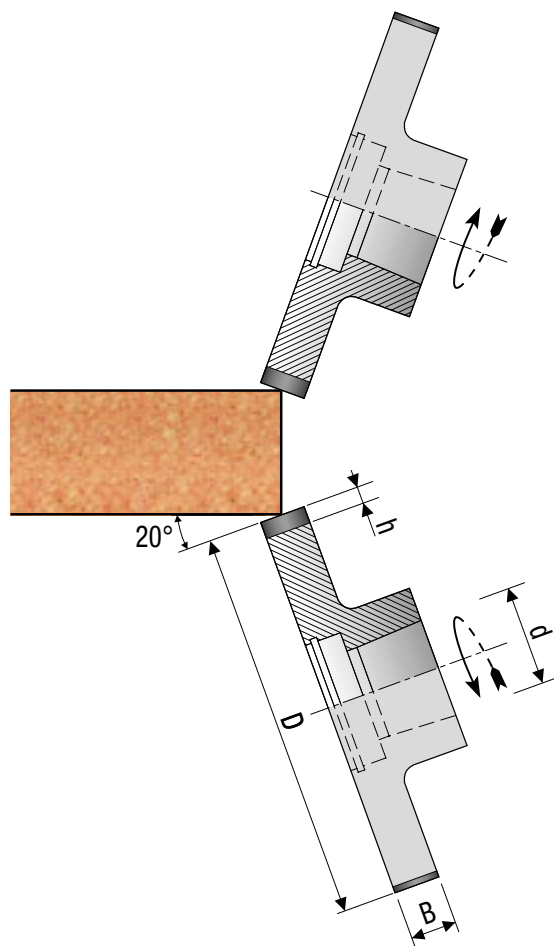
FRESA BORDATRICE PER REFILARE E SPIGOLARE
MILLING CUTTERS FOR TRIMMING AND BEVELING
KANTEN FRÄSER DIA


Ø D [mm]	B [mm]	D [mm]	Z	Rotation	PCD / PKD	Art. Nr.	€
					h [mm]		
70	8	HSK 25R	4	DX / RH / RL	4	FD02FD01	
70	8	HSK 25R	6	DX / RH / RL	4	FD02FD02	
70	12	HSK 25R	4	DX / RH / RL	4	FD02FD03	
70	12	HSK 25R	6	DX / RH / RL	4	FD02FD04	
70	8	HSK 25R	4	SX / LH / LL	4	FD02FD05	
70	8	HSK 25R	6	SX / LH / LL	4	FD02FD06	
70	12	HSK 25R	4	SX / LH / LL	4	FD02FD07	
70	12	HSK 25R	6	SX / LH / LL	4	FD02FD08	

Altre misure su richiesta

Other dimension available on request

Weitere Abmessungen auf Anfrage



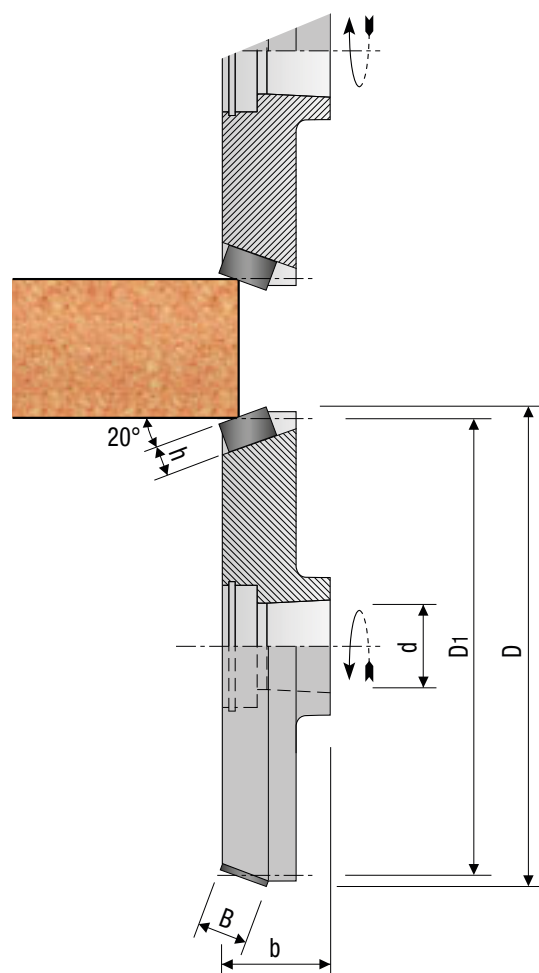
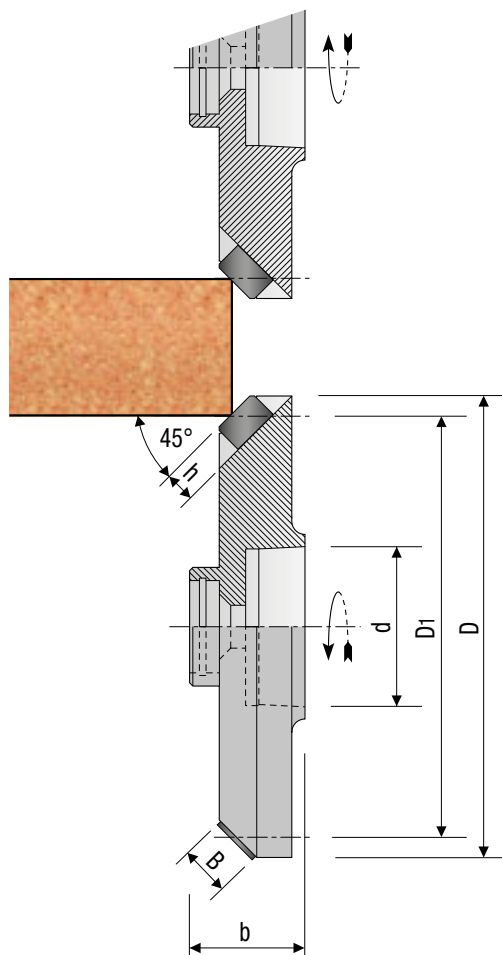
FD03FD

DIA | H4 - Z=4 - Z=4

FRESA PER BORDATRICE EDGEBANDING CUTTERS DIA FASEFRÄSER



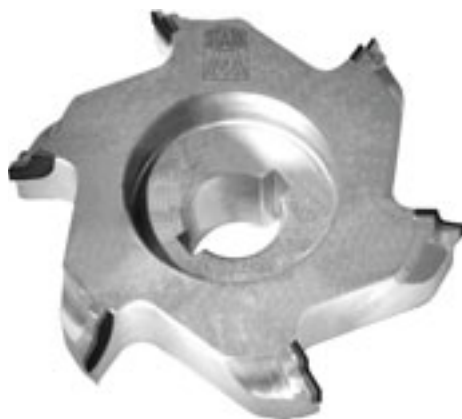
D/D1 [mm]	B/b [mm]	Ø d [mm]	R [mm]	Z	Rotation	PCD / PKD	Art. Nr.	€
						h [mm]		
73/70	6/23	HSK 25R	20°	4	DX / RH / RL	4	FD03FD01	
73/70	6/23	HSK 25R	20°	4	SX / LH / LL	4	FD03FD02	
64/62	6/17,5	HSK 32R	20°	4	DX / RH / RL	4	FD03FD03	
64/62	6/17,5	HSK 32R	20°	6	DX / RH / RL	4	FD03FD04	
64/62	6/17,5	HSK 32R	20°	4	SX / LH / LL	4	FD03FD05	
64/62	6/17,5	HSK 32R	20°	6	SX / LH / LL	4	FD03FD06	
73/62	6/17,5	HSK 32R	45°	4	DX / RH / RL	4	FD03FD07	
73/62	6/17,5	HSK 32R	45°	6	DX / RH / RL	4	FD03FD08	
73/62	6/17,5	HSK 32R	45°	4	SX / LH / LL	4	FD03FD09	
73/62	6/17,5	HSK 32R	45°	6	SX / LH / LL	4	FD03FD10	



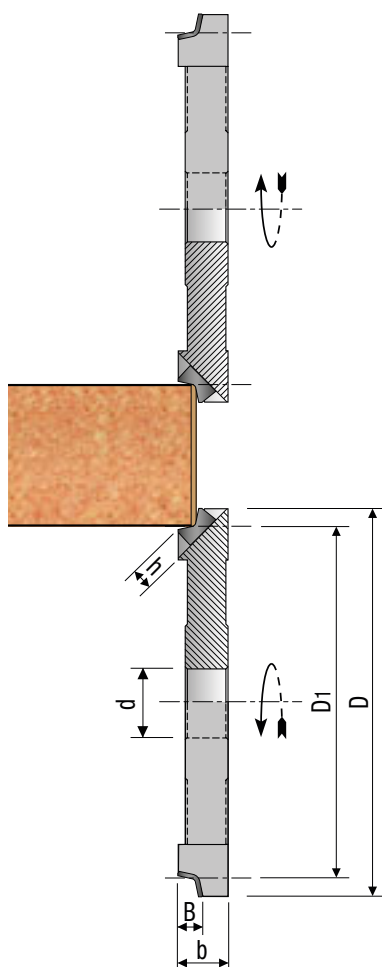
FD04FD

DIA | H4 - Z=4

FRESA BORDATRICE PER RAGGIARE RADIUS EDGEBANDER DIA-RADIUSFRÄSER

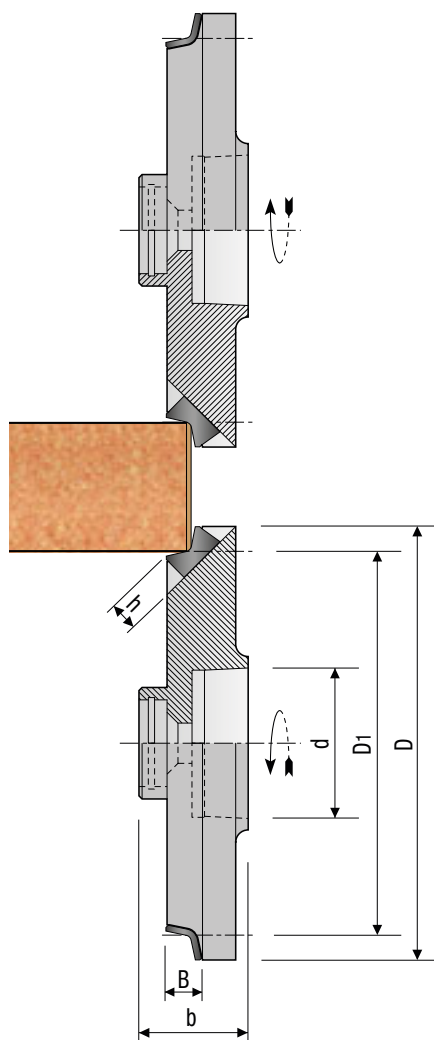


Ø D/D1 [mm]	B [mm]	Ø d [mm]	Chiavetta / Keyway / Doppelkeilnute [mm]	R [mm]	Z	Rotation	PCD / PKD	Art. Nr.	€
							h [mm]		
73/61	12	16/20	2 - 6x3	1,5	4	DX / RH / RL	4	FD04FD01	
73/61	12	16/20	2 - 6x3	2	4	DX / RH / RL	4	FD04FD02	
73/61	12	16/20	2 - 6x3	3	4	DX / RH / RL	4	FD04FD03	
73/61	12	16/20	2 - 6x3	4	4	DX / RH / RL	4	FD04FD04	
73/61	12	16/20	2 - 6x3	5	4	DX / RH / RL	4	FD04FD05	
73/61	12	16/20	2 - 6x3	1,5	4	SX / LH / LL	4	FD04FD06	
73/61	12	16/20	2 - 6x3	2	4	SX / LH / LL	4	FD04FD07	
73/61	12	16/20	2 - 6x3	3	4	SX / LH / LL	4	FD04FD08	
73/61	12	16/20	2 - 6x3	4	4	SX / LH / LL	4	FD04FD09	
73/61	12	16/20	2 - 6x3	5	4	SX / LH / LL	4	FD04FD10	
82/70	12	16/20	2 - 6x3	1,5	4	DX / RH / RL	4	FD04FD11	
82/70	12	16/20	2 - 6x3	2	4	DX / RH / RL	4	FD04FD12	
82/70	12	16/20	2 - 6x3	3	4	DX / RH / RL	4	FD04FD13	
82/70	12	16/20	2 - 6x3	4	4	DX / RH / RL	4	FD04FD14	
82/70	12	16/20	2 - 6x3	5	4	DX / RH / RL	4	FD04FD15	
82/70	12	16/20	2 - 6x3	1,5	4	SX / LH / LL	4	FD04FD16	
82/70	12	16/20	2 - 6x3	2	4	SX / LH / LL	4	FD04FD17	
82/70	12	16/20	2 - 6x3	3	4	SX / LH / LL	4	FD04FD18	
82/70	12	16/20	2 - 6x3	4	4	SX / LH / LL	4	FD04FD19	
82/70	12	16/20	2 - 6x3	5	4	SX / LH / LL	4	FD04FD20	



FD05FD

DIA | H4 - Z=6 - Z=4



FRESA BORDATRICE PER RAGGIARE RADIUS EDGEBANDER DIA-RADIUS-FRÄSER

Ø D/D1 [mm]	B [mm]	b [mm]	Ø d [mm]	R [mm]	Z	Rotation	PCD / PKD	Art. Nr.	€
							h [mm]		
84/70	10	23	HSK25R	1,5	4	DX / RH / RL	4	FD05FD01	
84/70	10	23	HSK25R	1,5	6	DX / RH / RL	4	FD05FD02	
84/70	10	23	HSK25R	2	4	DX / RH / RL	4	FD05FD03	
84/70	10	23	HSK25R	2	6	DX / RH / RL	4	FD05FD04	
84/70	10	23	HSK25R	3	4	DX / RH / RL	4	FD05FD05	
84/70	10	23	HSK25R	3	6	DX / RH / RL	4	FD05FD06	
84/70	10	23	HSK25R	4	4	DX / RH / RL	4	FD05FD07	
84/70	10	23	HSK25R	4	6	DX / RH / RL	4	FD05FD08	
84/70	10	23	HSK25R	5	4	DX / RH / RL	4	FD05FD09	
84/70	10	23	HSK25R	5	6	DX / RH / RL	4	FD05FD10	
84/70	10	23	HSK25R	1,5	4	SX / LH / LL	4	FD05FD11	
84/70	10	23	HSK25R	1,5	6	SX / LH / LL	4	FD05FD12	
84/70	10	23	HSK25R	2	4	SX / LH / LL	4	FD05FD13	
84/70	10	23	HSK25R	2	6	SX / LH / LL	4	FD05FD14	
84/70	10	23	HSK25R	3	4	SX / LH / LL	4	FD05FD15	
84/70	10	23	HSK25R	3	6	SX / LH / LL	4	FD05FD16	
84/70	10	23	HSK25R	4	4	SX / LH / LL	4	FD05FD17	
84/70	10	23	HSK25R	4	6	SX / LH / LL	4	FD05FD18	
84/70	10	23	HSK25R	5	4	SX / LH / LL	4	FD05FD19	
84/70	10	23	HSK25R	5	6	SX / LH / LL	4	FD05FD20	
73/62	10	33	HSK32R	1,5	4	DX / RH / RL	4	FD05FD21	
73/62	10	33	HSK32R	1,5	6	DX / RH / RL	4	FD05FD22	
73/62	10	33	HSK32R	2	4	DX / RH / RL	4	FD05FD23	
73/62	10	33	HSK32R	2	6	DX / RH / RL	4	FD05FD24	
73/62	10	33	HSK32R	3	4	DX / RH / RL	4	FD05FD25	
73/62	10	33	HSK32R	3	6	DX / RH / RL	4	FD05FD26	
73/62	10	33	HSK32R	4	4	DX / RH / RL	4	FD05FD27	
73/62	10	33	HSK32R	4	6	DX / RH / RL	4	FD05FD28	
73/62	10	33	HSK32R	5	4	DX / RH / RL	4	FD05FD29	
73/62	10	33	HSK32R	5	6	DX / RH / RL	4	FD05FD30	
73/62	10	33	HSK32R	1,5	4	SX / LH / LL	4	FD05FD31	
73/62	10	33	HSK32R	1,5	6	SX / LH / LL	4	FD05FD32	
73/62	10	33	HSK32R	2	4	SX / LH / LL	4	FD05FD33	
73/62	10	33	HSK32R	2	6	SX / LH / LL	4	FD05FD34	
73/62	10	33	HSK32R	3	4	SX / LH / LL	4	FD05FD35	
73/62	10	33	HSK32R	3	6	SX / LH / LL	4	FD05FD36	
73/62	10	33	HSK32R	4	4	SX / LH / LL	4	FD05FD37	
73/62	10	33	HSK32R	4	6	SX / LH / LL	4	FD05FD38	
73/62	10	33	HSK32R	5	4	SX / LH / LL	4	FD05FD39	
73/62	10	33	HSK32R	5	6	SX / LH / LL	4	FD05FD40	

FD06FD

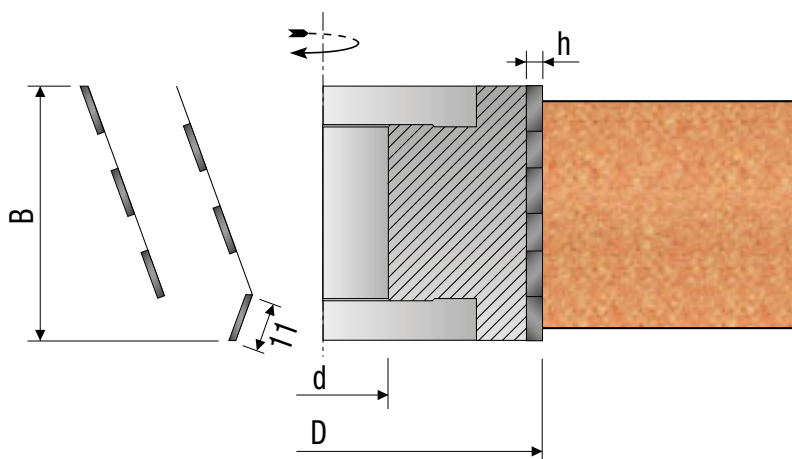
DIA | H4 - Z=3

FRESA A FINIRE PER BORDATRICE MONOSPALLA FINISHING EDGE BANDING CUTTER DIA-FÜGEFRÄSER



Ø D [mm]	B [mm]	Ø d [mm]	Chiavetta / Keyway / Doppelkeilnute [mm]	Z	Rotation	P		Art. Nr.	€
						n°	h [mm]		
80	42	30	2 - 8x4	3	DX / RH / RL	15	4	FD06FD01	
80	50	30	2 - 8x4	3	DX / RH / RL	18	4	FD06FD02	
80	58	30	2 - 8x4	3	DX / RH / RL	21	4	FD06FD03	
100	34	30	2 - 8x4	3	DX / RH / RL	12	4	FD06FD04	
100	42	30	2 - 8x4	3	DX / RH / RL	15	4	FD06FD05	
100	50	30	2 - 8x4	3	DX / RH / RL	18	4	FD06FD06	
100	58	30	2 - 8x4	3	DX / RH / RL	21	4	FD06FD07	
125	42	30	2 - 8x4	3	DX / RH / RL	15	4	FD06FD08	
125	50	30	2 - 8x4	3	DX / RH / RL	18	4	FD06FD09	
125	58	30	2 - 8x4	3	DX / RH / RL	21	4	FD06FD10	
125	66	30	2 - 8x4	3	DX / RH / RL	24	4	FD06FD11	
80	42	30	2 - 8x4	3	SX / LH / LL	15	4	FD06FD12	
80	50	30	2 - 8x4	3	SX / LH / LL	18	4	FD06FD13	
80	58	30	2 - 8x4	3	SX / LH / LL	21	4	FD06FD14	
100	34	30	2 - 8x4	3	SX / LH / LL	12	4	FD06FD15	
100	42	30	2 - 8x4	3	SX / LH / LL	15	4	FD06FD16	
100	50	30	2 - 8x4	3	SX / LH / LL	18	4	FD06FD17	
100	58	30	2 - 8x4	3	SX / LH / LL	21	4	FD06FD18	
125	42	30	2 - 8x4	3	SX / LH / LL	15	4	FD06FD19	
125	50	30	2 - 8x4	3	SX / LH / LL	18	4	FD06FD20	
125	58	30	2 - 8x4	3	SX / LH / LL	21	4	FD06FD21	
125	66	30	2 - 8x4	3	SX / LH / LL	24	4	FD06FD22	

P Placchetta
Tip
Schneide



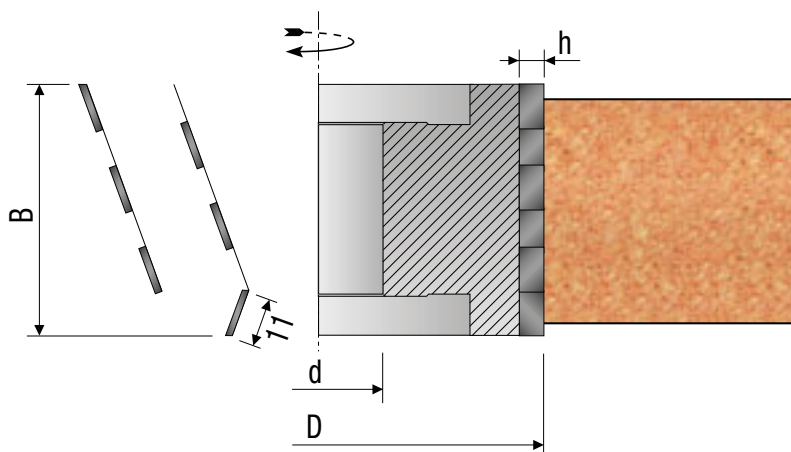
FD07FD

DIA | H6 - Z=3

FRESA A FINIRE PER BORDATRICE MONOSPALLA
FINISHING EDGE BANDING CUTTER
DIA-FÜGEFRÄSER


Ø D [mm]	B [mm]	Ø d [mm]	Chiavetta / Keyway / Doppelkeilnute [mm]	Z	Rotation	P		Art. Nr.	€
						n°	h [mm]		
80	42	30	2 - 8x4	3	DX / RH / RL	15	6	FD07FD01	
80	50	30	2 - 8x4	3	DX / RH / RL	18	6	FD07FD02	
80	58	30	2 - 8x4	3	DX / RH / RL	21	6	FD07FD03	
100	34	30	2 - 8x4	3	DX / RH / RL	12	6	FD07FD04	
100	42	30	2 - 8x4	3	DX / RH / RL	15	6	FD07FD05	
100	50	30	2 - 8x4	3	DX / RH / RL	18	6	FD07FD06	
100	58	30	2 - 8x4	3	DX / RH / RL	21	6	FD07FD07	
125	42	30	2 - 8x4	3	DX / RH / RL	15	6	FD07FD08	
125	50	30	2 - 8x4	3	DX / RH / RL	18	6	FD07FD09	
125	58	30	2 - 8x4	3	DX / RH / RL	21	6	FD07FD10	
125	66	30	2 - 8x4	3	DX / RH / RL	24	6	FD07FD11	
80	42	30	2 - 8x4	3	SX / LH / LL	15	6	FD07FD12	
80	50	30	2 - 8x4	3	SX / LH / LL	18	6	FD07FD13	
80	58	30	2 - 8x4	3	SX / LH / LL	21	6	FD07FD14	
100	34	30	2 - 8x4	3	SX / LH / LL	12	6	FD07FD15	
100	42	30	2 - 8x4	3	SX / LH / LL	15	6	FD07FD16	
100	50	30	2 - 8x4	3	SX / LH / LL	18	6	FD07FD17	
100	58	30	2 - 8x4	3	SX / LH / LL	21	6	FD07FD18	
125	42	30	2 - 8x4	3	SX / LH / LL	15	6	FD07FD19	
125	50	30	2 - 8x4	3	SX / LH / LL	18	6	FD07FD20	
125	58	30	2 - 8x4	3	SX / LH / LL	21	6	FD07FD21	
125	66	30	2 - 8x4	3	SX / LH / LL	24	6	FD07FD22	

P Placchetta
Tip
Schneide



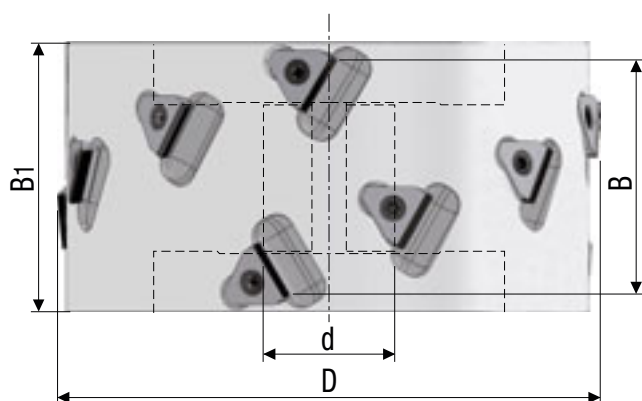
TD01FD

DIA | H3 - Z=2

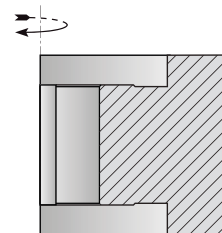
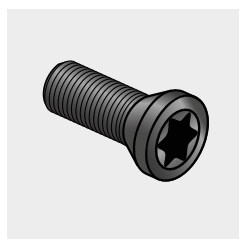
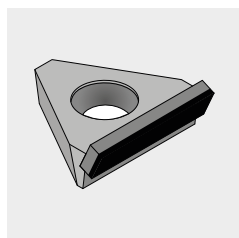
FRESA A FINIRE PER BORDATRICE CON INSERTI IN DIAMANTE A 30° FINISHING EDGE BANDING CUTTER WITH DIAMOND INSERTS - 30° FÜGEFRÄSER MIT DIAMANT-EINSÄTZEN 30°



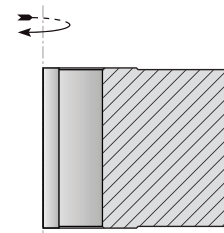
Material	Ø D [mm]	B [mm]	B1 [mm]	Ø d [mm]	Chiavetta Keyway Doppelkeinnute [mm]	Z	Rotation	P		Art. Nr.	€
								n°	h [mm]		
Lega leggera Light alloy Leicht Metall	80	43,5	51,5	30	2 8x4	3	DX / RH / RL	12	3	TD01FD01	
	80	64,5	72,5	30	2 8x4	3	DX / RH / RL	18	3	TD01FD02	
	85	43,5	51,5	30	2 8x4	3	DX / RH / RL	12	3	TD01FD03	
	100	33	41	30	2 8x4	3	DX / RH / RL	9	3	TD01FD04	
	100	43,5	51,5	30	2 8x4	3	DX / RH / RL	12	3	TD01FD05	
	100	54	63,5	30	2 8x4	3	DX / RH / RL	15	3	TD01FD06	
	100	64,5	72,5	30	2 8x4	3	DX / RH / RL	18	3	TD01FD07	
	125	33	41	30	2 8x4	3	DX / RH / RL	9	3	TD01FD08	
	125	43,5	51,5	30	2 8x4	3	DX / RH / RL	12	3	TD01FD09	
	125	54	63,5	30	2 8x4	3	DX / RH / RL	15	3	TD01FD10	
	125	64,5	72,5	30	2 8x4	3	DX / RH / RL	18	3	TD01FD11	
	125	75	83	30	2 8x4	3	DX / RH / RL	21	3	TD01FD12	
Lega leggera Light alloy Leicht Metall	80	43,5	51,5	30	2 8x4	3	SX / LH / LL	12	3	TD01FD13	
	80	64,5	72,5	30	2 8x4	3	SX / LH / LL	18	3	TD01FD14	
	85	43,5	51,5	30	2 8x4	3	SX / LH / LL	12	3	TD01FD15	
	100	33	41	30	2 8x4	3	SX / LH / LL	9	3	TD01FD16	
	100	43,5	51,5	30	2 8x4	3	SX / LH / LL	12	3	TD01FD17	
	100	54	63,5	30	2 8x4	3	SX / LH / LL	15	3	TD01FD18	
	100	64,5	72,5	30	2 8x4	3	SX / LH / LL	18	3	TD01FD19	
	125	33	41	30	2 8x4	3	SX / LH / LL	9	3	TD01FD20	
	125	43,5	51,5	30	2 8x4	3	SX / LH / LL	12	3	TD01FD21	
	125	54	63,5	30	2 8x4	3	SX / LH / LL	15	3	TD01FD22	
	125	64,5	72,5	30	2 8x4	3	SX / LH / LL	18	3	TD01FD23	
	125	75	83	30	2 8x4	3	SX / LH / LL	21	3	TD01FD24	



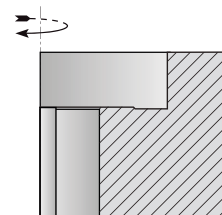
P Placchetta
Tip
Schneide



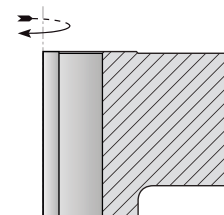
Type
A



Type
C



Type
B



Type
D

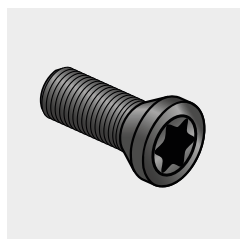
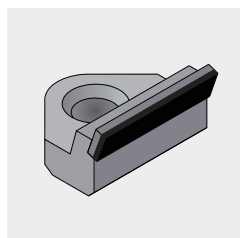
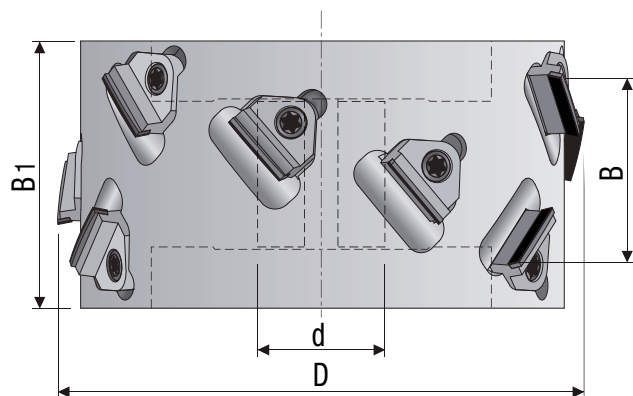
TD02FD

DIA | H5 - Z=3

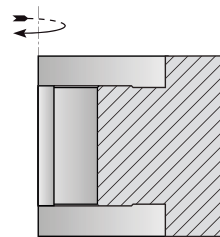


FRESA A FINIRE PER BORDATRICE CON INSERTI IN DIAMANTE A 40° FINISHING EDGE BANDING CUTTER WITH DIAMOND INSERTS - 40° FÜGEFRÄSER MIT DIAMANT - EINSÄTZEN 40°

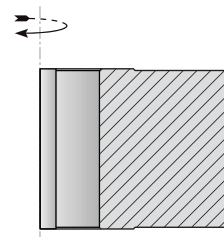
Ø D [mm]	B [mm]	B1 [mm]	Ø d [mm]	Chiavetta Keyway Doppelkeilnute [mm]	Z	Rotation	P		Material	Art. Nr.	€
							n°	h [mm]			
80	37,5	55	30	2 8x4	3	DX / RH / RL	9	5	Leggera Light alloy Leicht Metall	TD02FD01	
80	50	67	30	2 8x4	3	DX / RH / RL	12	5		TD02FD02	
85	37,5	55	30	2 8x4	3	DX / RH / RL	9	5		TD02FD03	
100	25,5	43	30	2 8x4	3	DX / RH / RL	6	5		TD02FD04	
100	37,5	55	30	2 8x4	3	DX / RH / RL	9	5		TD02FD05	
100	50	67	30	2 8x4	3	DX / RH / RL	12	5		TD02FD06	
100	62	79	30	2 8x4	3	DX / RH / RL	15	5		TD02FD07	
125	25,5	43	30	2 8x4	3	DX / RH / RL	6	5		TD02FD08	
125	37,5	55	30	2 8x4	3	DX / RH / RL	9	5		TD02FD09	
125	50	67	30	2 8x4	3	DX / RH / RL	12	5		TD02FD10	
125	62	79	30	2 8x4	3	DX / RH / RL	15	5		TD02FD11	
125	74	91	30	2 8x4	3	DX / RH / RL	18	5		TD02FD12	
80	37,5	55	30	2 8x4	3	SX / LH / LL	9	5	Leggera Light alloy Leicht Metall	TD02FD13	
80	50	67	30	2 8x4	3	SX / LH / LL	12	5		TD02FD14	
85	37,5	55	30	2 8x4	3	SX / LH / LL	9	5		TD02FD15	
100	25,5	43	30	2 8x4	3	SX / LH / LL	6	5		TD02FD16	
100	37,5	55	30	2 8x4	3	SX / LH / LL	9	5		TD02FD17	
100	50	67	30	2 8x4	3	SX / LH / LL	12	5		TD02FD18	
100	62	79	30	2 8x4	3	SX / LH / LL	15	5		TD02FD19	
125	25,5	43	30	2 8x4	3	SX / LH / LL	6	5		TD02FD20	
125	37,5	55	30	2 8x4	3	SX / LH / LL	9	5		TD02FD21	
125	50	67	30	2 8x4	3	SX / LH / LL	12	5		TD02FD22	
125	62	79	30	2 8x4	3	SX / LH / LL	15	5		TD02FD23	
125	74	91	30	2 8x4	3	SX / LH / LL	18	5		TD02FD24	



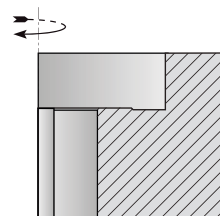
P Placchetta
Tip
Schneide



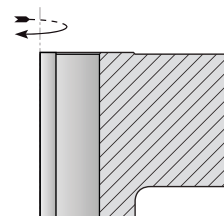
Type
A



Type
C



Type
B



Type
D

GP27FM

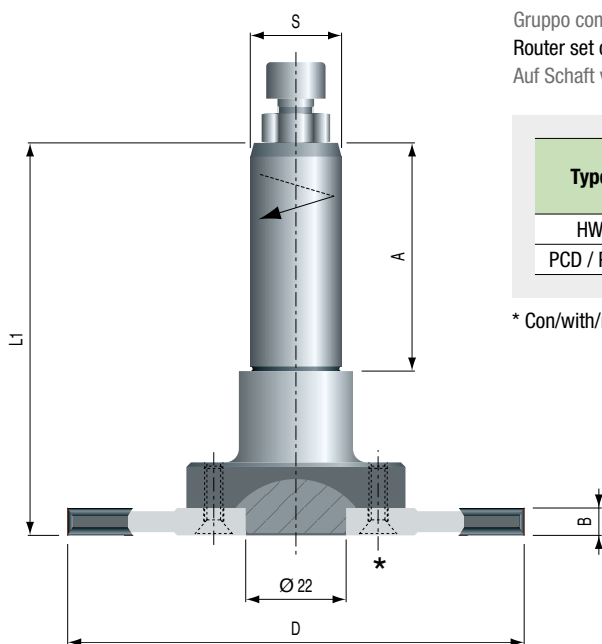
DIA | HW - Z=4

GRUPPO CON FRESA PER INCASTRI GROOVING ROUTER SET LAMELLEN-NUTFRÄSER

Gruppo completo di mandrino e utensile per incastri.

Router set complete with chuck for grooving.

Auf Schaft verschraubtes Nutwerkzeug für Lamellen-Verbindungen.

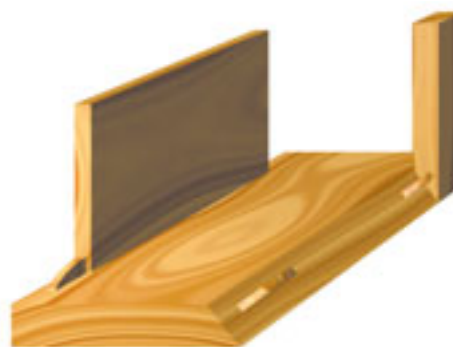
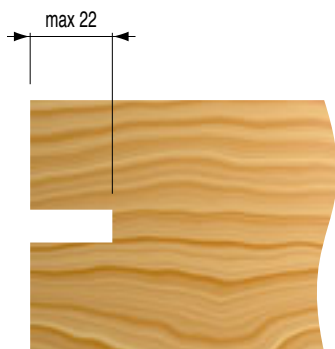


* Vite per fissare l'utensile sul mandrino
Screw for fastening the tool on the chuck **M 4x12**
Befestigungsschraube

Type	Ø D [mm]	B [mm]	Ø d [mm]	Attacco / Shank / Schaft		Z	V	Art. Nr.	€
				Ø d [mm]	l [mm]				
HW	100	3,95	22	20	60	2	4	GP27FM10*	
PCD / PKD	100	3,95	22	20	60	4	-	GP27FM20	

* Con/with/mit Art. IN03TM01 (pag. BAS-2 Basic Line)

Ø D [mm]	B [mm]	Ø d [mm]	Attacco / Shank / Schaft		L	Art. Nr.	€
			Ø d [mm]	l [mm]			
60	2,5	22	20	60	90	MN02FC10B	



FD08FD

DIA | H6

FRESA REGOLABILE CON ANELLI DISTANZIALI H6 ADJUSTABLE GROOVER H6 WITH DISTANCE RINGS VERSTELLNUTFRÄSER H6



Ø D [mm]	B [mm]	Ø d [mm]	Z	P		Art. Nr.	€
				n°	h [mm]		
120	3 / 5,5	25 / 30 / 35	6+6	2x6	6	FD08FD01	
120	4 / 7,5	25 / 30 / 35	6+6	2x6	6	FD08FD02	
120	5 / 9,5	25 / 30 / 35	6+6	2x6	6	FD08FD03	
120	6 / 11,5	25 / 30 / 35	6+6	2x6	6	FD08FD04	
150	3 / 5,5	25 / 30 / 35	6+6	2x6	6	FD08FD05	
150	4 / 7,5	25 / 30 / 35	6+6	2x6	6	FD08FD06	
150	5 / 9,5	25 / 30 / 35	6+6	2x6	6	FD08FD07	
150	6 / 11,5	25 / 30 / 35	6+6	2x6	6	FD08FD08	
200	3 / 5,5	30 / 35 / 40	6+6	2x6	6	FD08FD09	
200	4 / 7,5	30 / 35 / 40	6+6	2x6	6	FD08FD10	
200	5 / 9,5	30 / 35 / 40	6+6	2x6	6	FD08FD11	
200	6 / 11,5	30 / 35 / 40	6+6	2x6	6	FD08FD12	
200	3 / 5,5	30 / 35 / 40	8+8	2x8	6	FD08FD13	
200	4 / 7,5	30 / 35 / 40	8+8	2x8	6	FD08FD14	
200	5 / 9,5	30 / 35 / 40	8+8	2x8	6	FD08FD15	
200	6 / 11,5	30 / 35 / 40	8+8	2x8	6	FD08FD16	
200	3 / 5,5	30 / 35 / 40	12+12	2x12	6	FD08FD17	
200	4 / 7,5	30 / 35 / 40	12+12	2x12	6	FD08FD18	
200	5 / 9,5	30 / 35 / 40	12+12	2x12	6	FD08FD19	
200	6 / 11,5	30 / 35 / 40	12+12	2x12	6	FD08FD20	

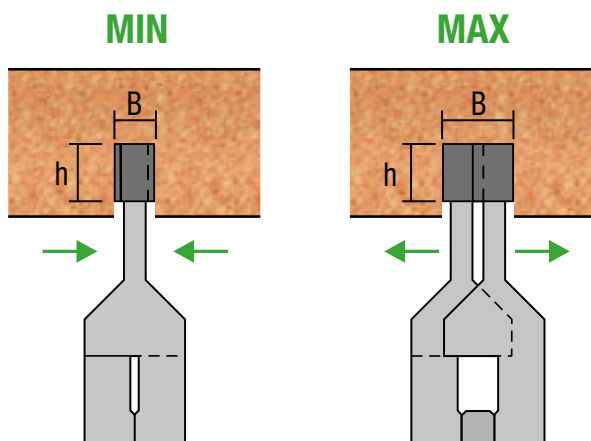
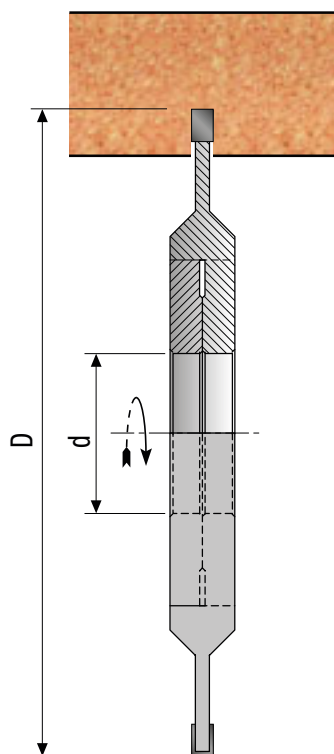
Attenzione / Attention / Achtung

Chiavetta a richiesta

Keyways on request

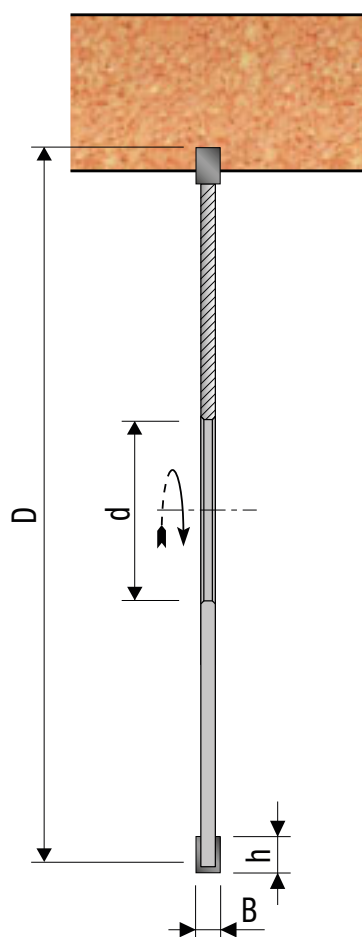
Keilnut auf Anfrage

P Placchetta
Tip
Schneide



LD01FD

DIA | H6 - Z=12 - Z=24

LAMA PER INCASTRI
GROOVER
DIA-NUTFRÄSER

Ø D [mm]	B [mm]	Ø d [mm]	Z	PCD / PKD	Art. Nr.	€
				h [mm]		
120	3	30 / 35 / 40	12	6	LD01FD01	
120	4	30 / 35 / 40	12	6	LD01FD02	
120	5	30 / 35 / 40	12	6	LD01FD03	
120	6	30 / 35 / 40	12	6	LD01FD04	
120	7	30 / 35 / 40	12	6	LD01FD05	
160	3	30 / 35 / 40	12	6	LD01FD06	
160	4	30 / 35 / 40	12	6	LD01FD07	
160	5	30 / 35 / 40	12	6	LD01FD08	
160	6	30 / 35 / 40	12	6	LD01FD09	
160	7	30 / 35 / 40	12	6	LD01FD10	
180	3	30 / 35 / 40	12	6	LD01FD11	
180	4	30 / 35 / 40	12	6	LD01FD12	
180	5	30 / 35 / 40	12	6	LD01FD13	
180	6	30 / 35 / 40	12	6	LD01FD14	
180	7	30 / 35 / 40	12	6	LD01FD15	
200	3	30 / 35 / 40	12	6	LD01FD16	
200	4	30 / 35 / 40	12	6	LD01FD17	
200	5	30 / 35 / 40	12	6	LD01FD18	
200	6	30 / 35 / 40	12	6	LD01FD19	
200	7	30 / 35 / 40	12	6	LD01FD20	
160	3	30 / 35 / 40	24	6	LD01FD21	
160	4	30 / 35 / 40	24	6	LD01FD22	
160	5	30 / 35 / 40	24	6	LD01FD23	
160	6	30 / 35 / 40	24	6	LD01FD24	
160	7	30 / 35 / 40	24	6	LD01FD25	
180	3	30 / 35 / 40	24	6	LD01FD26	
180	4	30 / 35 / 40	24	6	LD01FD27	
180	5	30 / 35 / 40	24	6	LD01FD28	
180	6	30 / 35 / 40	24	6	LD01FD29	
180	7	30 / 35 / 40	24	6	LD01FD30	
200	3	30 / 35 / 40	24	6	LD01FD31	
200	4	30 / 35 / 40	24	6	LD01FD32	
200	5	30 / 35 / 40	24	6	LD01FD33	
200	6	30 / 35 / 40	24	6	LD01FD34	
200	7	30 / 35 / 40	24	6	LD01FD35	