

# FOS-Excellence.<sup>®</sup>

The first line

## I NOSTRI PRODOTTI PER OUR PRODUCTS FOR

	<b>Macchine SILCA</b>	11
	<i>SILCA machines</i>	
	<b>Macchine KEYLINE*</b>	53
	<i>KEYLINE* machines</i>	
	<b>Macchine ILCO ORION</b>	67
	<i>ILCO ORION machines</i>	
	<b>Macchine MINIT, HK, LSA, KIS, KURT, RST</b>	77
	<i>MINIT, HK, LSA, KIS, KURT, RST machines</i>	
	<b>Macchine elettroniche ERREBI</b>	92
	<i>ERREBI electronic machines</i>	

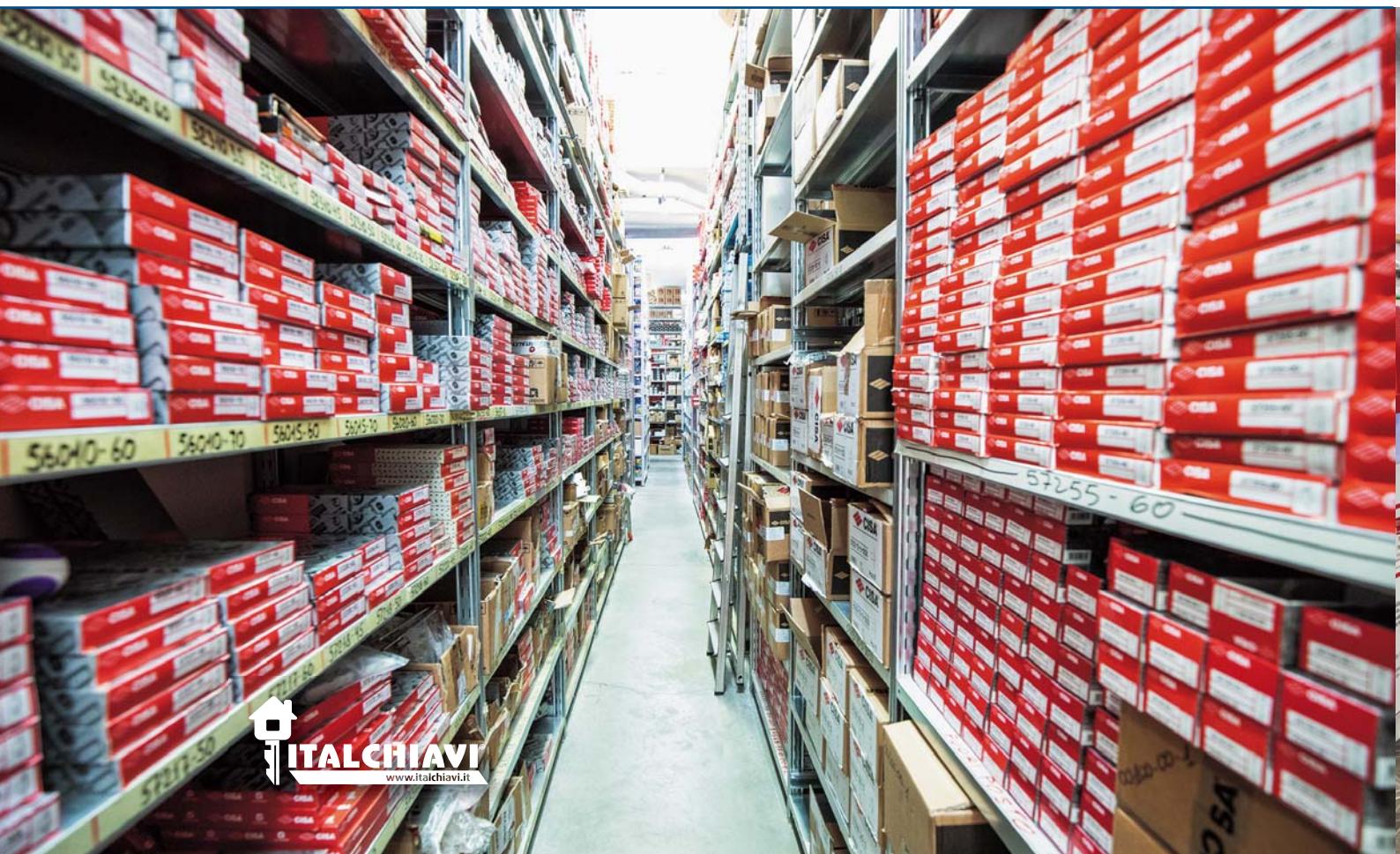
# L'EVOLUZIONE ANCORATA ALLA TRADIZIONE

La **ITALCHIAVI** srl rinasce nel 2006 dalle spoglie di una storica attività romana che vide le sue origini nei primi anni '80, sotto il nome di "Casa della Chiave", come rivendita al dettaglio, ma già con qualche inclinazione nell'ingrosso e sviluppa il proprio business sulla duplicazione chiavi soprattutto nel territorio romano; dopo qualche tempo si amplia e si evolve con l'inserimento di altre referenze come serrature e cilindri.

Sotto la guida del nuovo giovane titolare l'azienda ha puntato maggiormente al canale della distribuzione, trasferendosi in un magazzino più grande, sempre nel cuore di Roma, e da allora ha come core business l'ingrosso nel settore della sicurezza; inoltre, credendo fermamente nel proprio lavoro, con passione, il titolare, così come i suoi collaboratori, ne segue l'evoluzione cercando di garantire sempre un servizio ed un'assistenza ad hoc per i propri clienti, soprattutto specialisti e LockSmith, mantenendoli sempre aggiornati e lanciando nuove idee.

**"NON POSSIAMO PRETENDERE CHE LE COSE CAMBINO,  
SE CONTINUIAMO A FARE SEMPRE LE STESSE COSE"**

*da "Il mondo come la vedo io" - A. Einstein (1931)*



# EVOLUTION FIRMLY ANCHORED TO TRADITION

**ITALCHIAVI srl** emerges from the ashes of an historical roman Company, established in the early 80's under the name of "Casa della Chiave" - "key's home", as a retail company with an aptitude for wholesale.

It starts to improve its business since the beginning by focusing on key redoubling, mostly in the area of Rome. After some time the Company expands its business through the integration of other specialised manufactures such as locks and cylinders.

Under the leadership of its young owner the Company focused mostly on the distribution channel, starting from moving to a wider warehouse in the hearth of Rome, and, since then, its core business has been focused on the wholesale and the security branch; oreovemr, strongly believing in their job and values, the owner together with his associates, follow the continuing evolution of the business with the aim to always guarantee the best service and support possible, ad hoc, for their customers, specialists and locksmiths, ensuring them to be always up-to-date by steadily proposing improved and new ideas.

**"WE CANNOT SOLVE OUR PROBLEMS WITH THE SAME  
THINKING WE USED WHEN WE CREATED THEM"**

from "The world as I see it" - A. Einstein (1931)



## CONDIZIONI GENERALI DI VENDITA

**SPEDIZIONI:** la merce viaggia a rischio e pericolo del committente.

Le consegne avverranno tramite corriere espresso o, previo accordi, con corriere convenzionato con il cliente.

**ORDINI:** tutti gli ordini devono pervenire attraverso i nostri agenti di zona utilizzando codici e descrizioni corrette.

Eventuali ordini inviati direttamente in sede sono accettati solo se trasmessi tramite fax o mail e completi di codici e descrizioni corretti.

Tutti gli ordini, in ogni caso, sono subordinati all'approvazione della Casa.

**TERMINI DI CONSEGNA:** il termine di consegna e di spedizione, anche se confermato, costituisce una semplice previsione e ha, perciò, un valore indicativo, quindi non comporta nessuna garanzia e nessun indennizzo, è dovuto per la mancata consegna nel termine previsto.

**RESI:** non si accettano resi di merce se non espressamente autorizzati dalla Casa.

Le contestazioni devono essere fatte entro 8 giorni dal ricevimento della merce e devono pervenire a mezzo fax o mail.

Qualsiasi reso pervenuto senza preavviso e autorizzazione verrà respinto al mittente.

Per prodotti speciali approntati a richiesta non si accettano resi per alcun motivo.

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## GENERAL SELLING TERMS AND CONDITIONS

**SHIPMENT:** All goods shipment is under the customer's responsibility.

Shipment will be delivered by courier service or, upon previous agreement, by the client's freight forwarder.

**ORDERS:** All orders shall be only submitted to our area agents together with the proper codes and descriptions of each product.

The orders received directly to our premises shall be accepted only by fax or email.

The approval of each order is, at any rate, subjected to the Office decisions.

**DELIVERY TERMS AND CONDITIONS:** The shipment and delivery deadlines, included the ones of confirmed orders, are a simple projection, and therefore, shall not be considered as a guarantee for the actual delivery. Hence, no refund is owed to the client in case of delay in relation to the deadline projection submitted.

**RETURNS:** No returns will be accepted without previous Office permission. All objections shall be notified within 8 (eight) days from the receipt of the goods and forwarded by fax or email.

Any return delivered without previous notification and authorization shall be rejected and returned to sender. Special products primed on request shall not, on no accounts, be accepted as returns.

Il materiale fotografico, le descrizioni e i dati tecnici presenti su questo catalogo sono stati acquisiti dal materiale ufficiale delle stesse ditte.

## FINITURE (COATINGS)

Una serie di finiture applicate dal nostro partner svizzero, leader mondiale nello sviluppo e nell'applicazione di finiture per utensili.

*A range of coatings are applied by our Swiss partner who is a world leader in the development and application of tool coatings.*

TiN (ORO)



Coefficiente d'attrito  
Friction coefficient  
**0.4**

Temperatura max. operativa  
Max. operating temp.  
**500°C**

Durezza [Pa]  
Hardness [Pa]  
**2800**

Utilizzo consigliato  
Coating usage  
**HSS**  
**M35 / M42**



TiCN (BLU-GRIGIO)

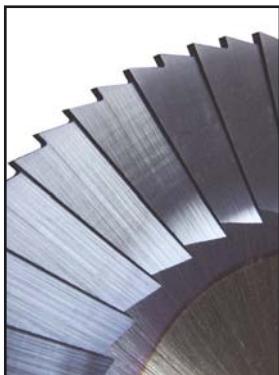


Coefficiente d'attrito  
Friction coefficient  
**0.2**

Temperatura max. operativa  
Max. operating temp.  
**400°C**

Durezza [Pa]  
Hardness [Pa]  
**3700**

Utilizzo consigliato  
Coating usage  
**HSS M35 / M42**  
**Carburo Carbide**



TiAlN (VIOLA-NERO)



Coefficiente d'attrito  
Friction coefficient  
**0.6**

Temperatura max. operativa  
Max. operating temp.  
**700°C**

Durezza [Pa]  
Hardness [Pa]  
**2800**

Utilizzo consigliato  
Coating usage  
**HSS M35 / M42**  
**Carburo Carbide**



TiAlCN (ROSA-VIOLA)

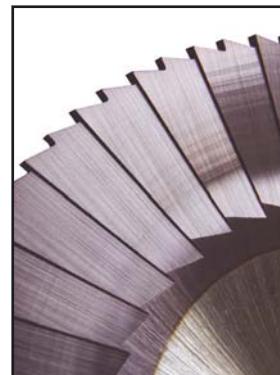


Coefficiente d'attrito  
Friction coefficient  
**0.3**

Temperatura max. operativa  
Max. operating temp.  
**500°C**

Durezza [Pa]  
Hardness [Pa]  
**3300**

Utilizzo consigliato  
Coating usage  
**Carburo Carbide**



Le nostre frese rivestite garantiscono performance ideali:

- Riducono la superficie di attrito
- Resistenza termica costante

- Miglior asportazione del truciolo
- Vita dell'utensile più lunga

*Our coated milling cutters ensure ideal performance:*

- Reduced surface friction
- Enhanced thermal resistance

- Better chip removal
- Extended service life

## COME ORDINARE (HOW TO ORDER)



**Fresa senza trattamento**  
(End milling cutter without coating)

33.210.C00

**Fresa con trattamento**  
(End milling cutter coated)

- |              |        |
|--------------|--------|
| 33.210.C00.J | TiN    |
| 33.210.C00.B | TiCN   |
| 33.210.C00.N | TiAIN  |
| 33.210.C00.V | TiAlCN |

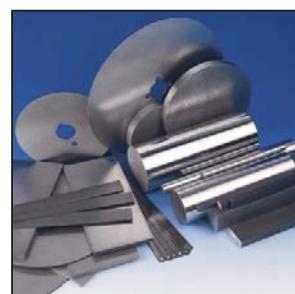
## MATERIALI (RAW MATERIALS)

Le nostre materie prime sono selezionate con la massima cura. Tutti i nostri acciai e carburi provengono dai migliori produttori europei. I nostri fornitori sono i principali produttori mondiali di acciai ad alta velocità. Offrono la più ampia gamma di prodotti e qualità sul mercato.

I nostri fornitori offrono prodotti riconosciuti in tutto il mondo e, grazie a una rete di vendita internazionale, raggiungono i produttori di utensili in tutte le parti del mondo.

*Our raw materials are selected with the utmost care. All our steels and carbides come from the finest European producers. Our suppliers are the world's leading producers of High Speed Steels. They offer the widest range of products and grades on the market.*

*Our suppliers offer products which are acknowledged worldwide and, thanks to an international sales network, they reach toolmakers in all parts of the world.*



## PREZZO NETTO DEI TRATTAMENTI (PRICES OF COATINGS)

TiN

TiAIN

TiCN

TiAICN

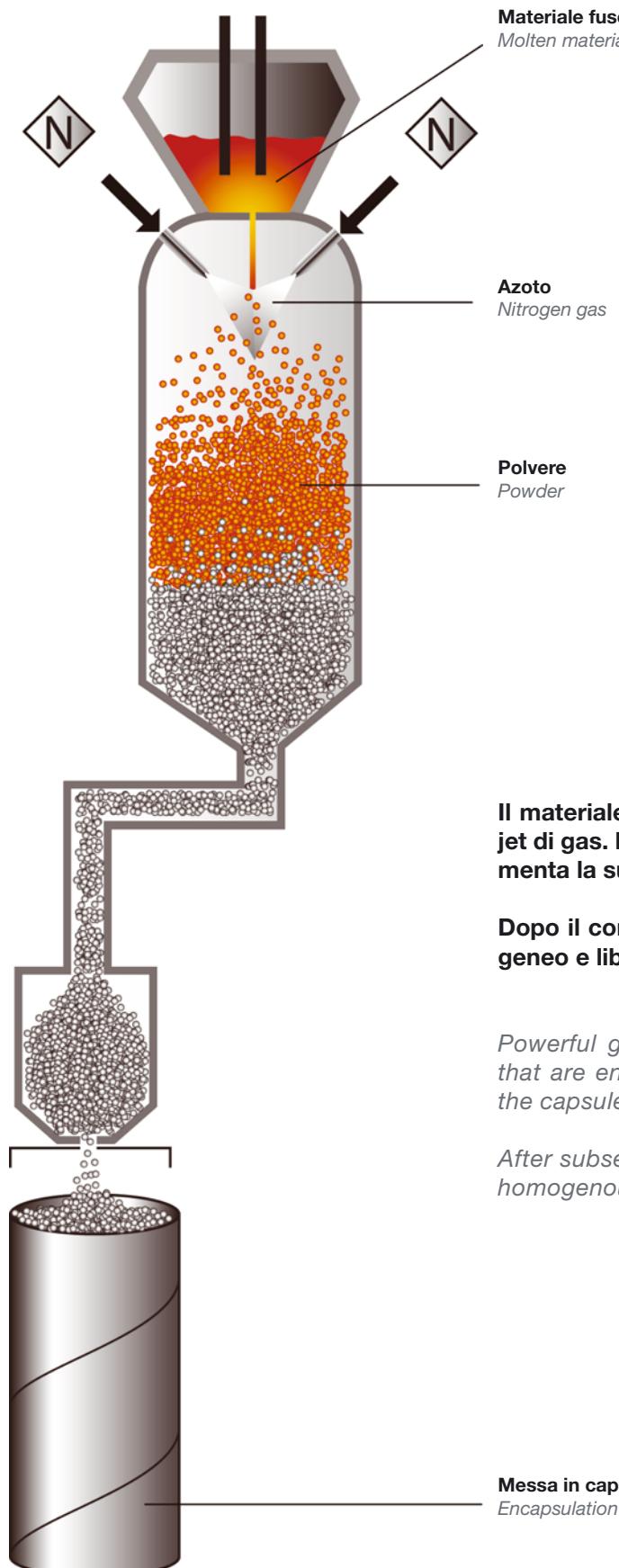
<b>Frese bi-coniche</b> <i>Milling Cutter</i>	14,85 Euro
<b>Fresa piatta con intagli laterali</b> <i>Face and side milling cutter</i>	14,85 Euro
<b>Fresa piatta</b> <i>Flat slotter</i>	14,85 Euro
<b>Fresa cilindrica</b> <i>End milling cutter</i>	9,45 Euro
<b>Fresa a coda di rondine</b> <i>Dovetail cutter</i>	14,85 Euro

**Prezzi netti non soggetti ad ulteriore sconto**

*Net prices not subject to further discount*

## METALLURGIA DELLA POLVERE

### POWDER METALLURGY



La metallurgia della polvere, dove ERASTEEL è il leader, è utilizzata per la produzione del carbonio e alcuni acciai speciali HSS come ASP®.

La metallurgia della polvere dà all'acciaio una struttura uniforme dove le particelle del carbonio sono distribuite uniformemente.

Il materiale ottenuto dalla metallurgia della polvere garantisce un'elevata resistenza all'usura ed una elevata durezza.

*Powder metallurgy - a technology spearheaded - produces carbide and grades of special High Speed Steels like ASP®.*

*Powder metallurgy gives the steel a uniform structure with an even distribution of the carbide particles.*

*The material obtained by powder metallurgy gives excellent wear resistance and hardness.*

**Il materiale in fusione è polverizzato per l'iniezione di potenti jet di gas. L'iniziale compattamento a freddo nella capsula aumenta la superficie di contatto del materiale.**

**Dopo il compattamento ad alta pressione il materiale è omogeneo e libero da porosità.**

*Powerful gas jets atomize the molten material solid granules that are encapsulated in a cylinder. Initial cold compaction of the capsule increases the contact area of the material particles.*

*After subsequent high pressure hot compaction the material is homogenous and free of porosity.*

## MATERIA PRIMA: CARBONIO RAW MATERIALS : CARBIDE

Usiamo solo la migliore qualità di materia prima. Il carbonio occupa un posto di privilegio nella valutazione della scelta rigorosa della materia. Il nostro fornitore è CERATIZIT, uno dei principali produttori di carbonio al mondo.

Grazie alla perfetta conoscenza della tecnologia della metallurgia della polvere, **le nostre frese in carbonio assicurano eccellenti performance:**

- La resistenza all'usura permette una conservazione della geometria dell'utensile
- La tenacità e la durezza sono ottimizzate grazie all'avanzata tecnologia ottimizzata
- La perfetta conoscenza e familiarità degli sviluppi recenti nei materiali consolidano il nostro know how.



*We use only raw materials of the finest quality. Carbide holds a privileged position in the evaluation of rigorously selected grades. Our supplier is one of the world's leading producer of carbide.*

*Thanks to perfect mastery of the powder metallurgy technique, our carbide cutters assure excellent performance:*

- Resistance to wear enables the cutting edge geometry to be maintained
- Tenacity and hardness are optimized thanks to technological breakthroughs. Our expertise is backed by perfect familiarity with recent developments in materials science



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## SILCA



### **Frese bi-coniche**

*Milling Cutter*

12



### **Fresa piatta con intagli laterali**

*Face and side milling cutter*

17



### **Fresa piatta**

*Flat slotter*

18



### **Fresa a cappello**

*Top hat cutter*

20



### **Fresa cilindrica**

*End milling cutter*

21



### **Tastatore**

*Tracer point*

46



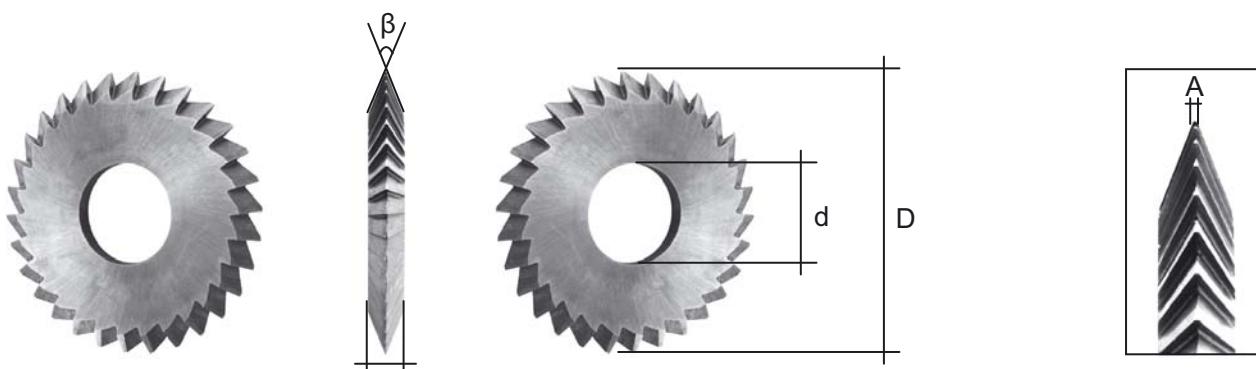
### **Fresa a coda di rondine**

*Dovetail cutter*

52

**Fresa bi-conica**

Milling cutter



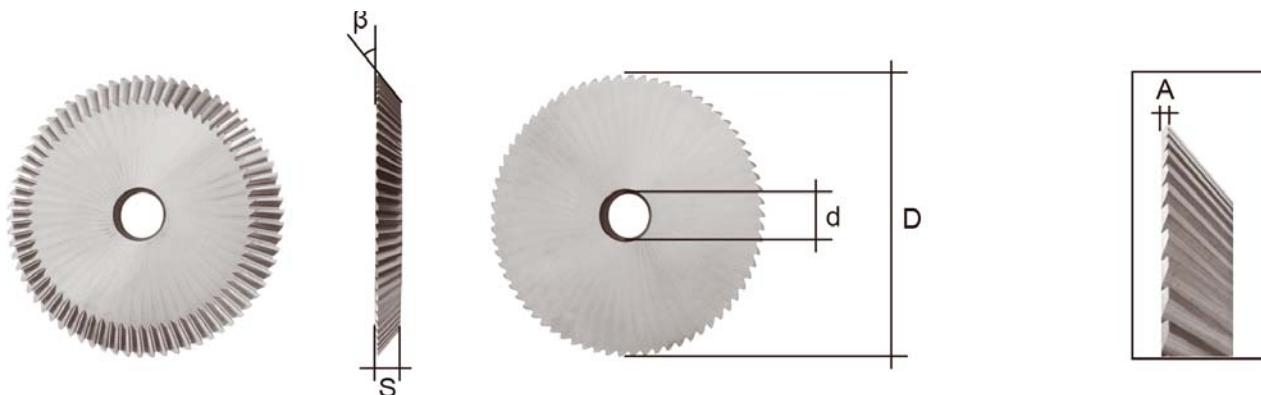
ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	A (mm)	B	DENTI	LISTINO €
14.506.C00	F17-CA	Carbide	45.00	3.50	16.00	0.20	36/15°	30	185,42
14.507.C00	F18-CA	Carbide	45.00	3.50	16.00	0.20	15/36°	30	185,42
14.508.C00	F19-CA	Carbide	45.00	3.50	16.00	0.40	72°	30	185,42
14.509.C00	F20-CA	Carbide	45.00	4.00	16.00	0.10	90°	30	185,42
14.510.C00	F21-CA	Carbide	45.00	3.50	16.00	0.15	32/14°	30	185,42
14.511.C00	F22-CA	Carbide	45.00	3.50	16.00	0.15	14/32°	30	185,42
14.512.C00	F23-CA	Carbide	45.00	3.50	16.00	0.15	64°	30	185,42
14.513.C00	F27A-CA	Carbide	45.00	1.20	16.00	0.84	4°	30	185,42
14.514.C00	F28-CA	Carbide	45.00	2.00	16.00	0.64	30°	30	185,42
14.515.C00	F29-CA	Carbide	45.00	2.00	16.00	0.65	13/17°	30	185,42
14.516.C00	F30-CA	Carbide	45.00	2.00	16.00	0.40	26°	30	185,42
14.517.C00	F31-CA	Carbide	45.00	2.00	16.00	0.80	10/20°	30	185,42
14.518.C00	F32-CA	Carbide	45.00	2.50	16.00	0.95	6/30°	30	185,42
14.519.C00	F33-CA	Carbide	45.00	2.00	16.00	0.95	16°	30	185,42
14.520.C00	F34-CA	Carbide	45.00	2.50	16.00	0.95	30/6°	30	185,42
14.551.C00	F51-CA	Carbide	45.00	3.00	16.00	0.46	36°	30	185,42
14.552.C00	F52-CA	Carbide	45.00	3.00	16.00	0.42	5°/32°	30°	185,42
14.523.C00	F53-CA	Carbide	45.00	3.00	16.00	0.94	40°	30	185,42
14.554.C00	F54-CA	Carbide	45.00	3.00	16.00	0.45	10°/26°	30	185,42
14.555.C00	F55-CA	Carbide	45.00	3.00	16.00	0.45	26°/10°	30	185,42
14.556.C00	F56-CA	Carbide	45.00	2.00	16.00	0.70	30°	30	185,42
14.560.C00	F60-CA	Carbide	45.00	2.00	16.00	0.70	60°	30	185,42
14.561.C00	F61-CA	Carbide	45.00	2.00	16.00	0.55	30°	30	185,42
14.562.C00	F62-CA	Carbide	45.00	2.50	16.00	0.78	30/45°	30	185,42
14.563.C00	F63-CA	Carbide	45.00	2.50	16.00	0.78	45/30°	30	185,42
14.564.C00	F64-CA	Carbide	45.00	2.00	16.00	0.80	10°	30	185,42
14.053.C00	53W - C53	Carbide	45.00	3.00	16.00	0.35	80°/64°	28	185,42

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

**TO IMPROVE THE PERFORMANCE OF YOUR TOOLS**, all of these tools could be coated adding the code **J B N V** as explained on page 5 and 6. Check the net extra cost on page 7

**Fresa bi-conica**

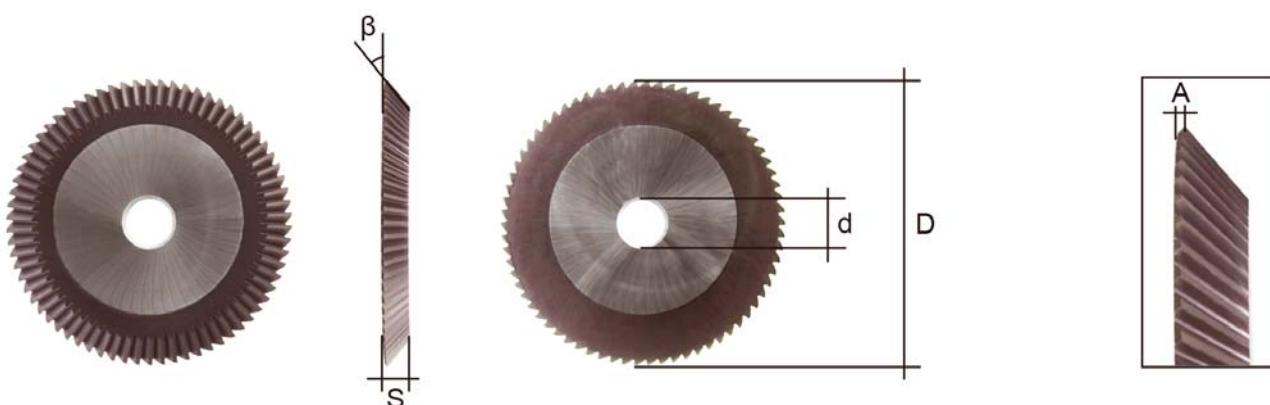
Milling cutter



ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	S (mm)	d (mm)	A (mm)	$\beta$	DENTI	LISTINO €
6.033.H30	D911868ZR	P21	HSS M35	60.40	5.25	9.53	0.50	84°	70	69,49
6.020.H30	D716549ZB	U01	HSS M35	60.40	5.25	9.53	0.50	80°	70	69,49
6.220.H10		AT - U01	HSS M42	60.40	5.25	9.53	0.50	80°	100	99,20
6.504.C00	D705933ZB D746012ZB	U01 W	Carbide	60.40	5.25	9.53	0.50	80°	70	322,56
6.220.C00	D734910ZB	AT - U01	Carbide	60.40	5.25	9.53	0.50	80°	100	333,27
9.040.C00	D736145ZB	P40	Carbide	130.00	5.25	16.00	0.50	80°	194	770,88
9.041.C00	D744659ZB	P43	Carbide	130.00	5.25	16.00	0.50	80°	64	770,88
6.008.H30.A	D745810ZB	P44 - With coating	HSS M35	60.40	5.00	12.70	-	-	72	84,92

**Fresa bi-conica + trattamento TiAlN**

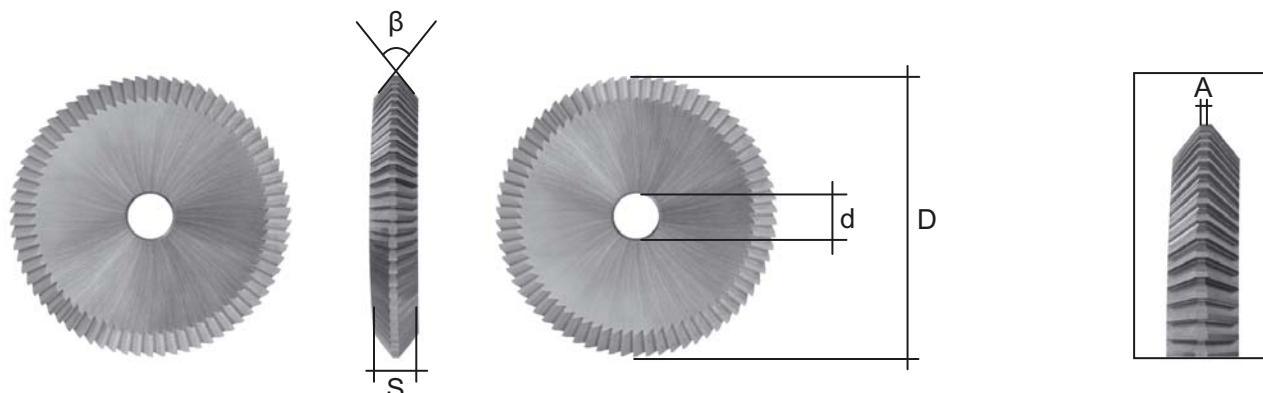
Milling cutter + TiAlN coating



ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	A (mm)	$\beta$	DENTI	LISTINO €
16.504.C00.N	U01 W + TiAlN	Carbide	60.40	5.25	9.53	0.50	80°	70	336,36

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**Fresa bi-conica***Milling cutter*

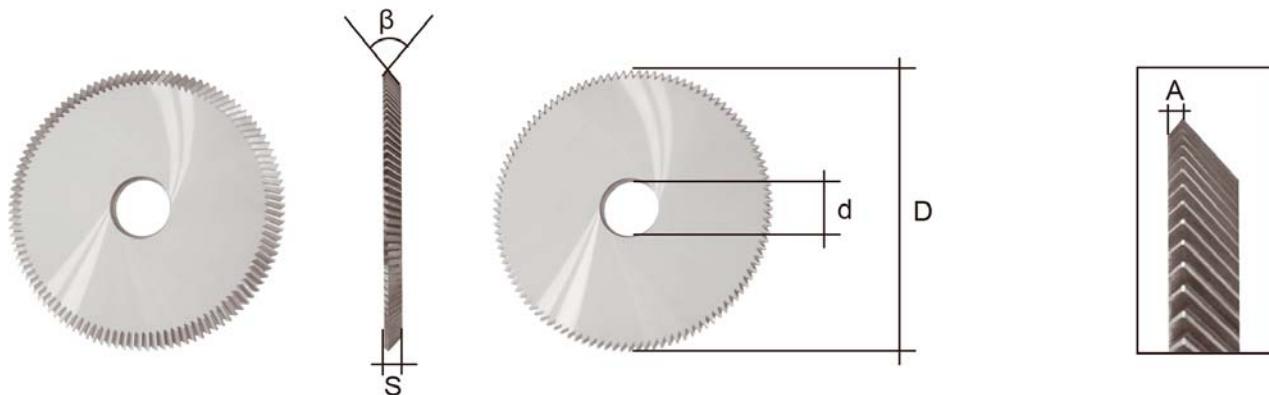
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	S (mm)	d (mm)	A (mm)	β	DENTI	LISTINO €
12.150.H30	D410106ZZ	Punta	HSS M35	20.00	10.00	10.00	0.00	110°	48	44,70
12.350.H30	D401866ZZ	Punta	HSS M35	25.00	10.00	10.00	0.00	110°	60	44,70
16.021.H30	D702844ZB	01	HSS M35	60.40	7.20	9.53	0.00	100°	80	99,20
16.022.H30	D702845ZB	02	HSS M35	60.40	7.60	9.53	1.00	100°	80	99,20
16.023.H30	D702846ZB	03	HSS M35	60.40	6.90	9.53	1.00	100°	80	99,20
16.024.H30	D702847ZB	04	HSS M35	60.40	7.20	9.53	1.00	85°	80	99,20
16.026.H30	D702221ZB	A2	HSS M35	60.40	8.95	9.53	0.80	90°	80	99,20
16.027.H30	D702222ZB	A3	HSS M35	60.40	9.50	9.53	1.50	90°	80	99,20
16.040.H30	D705691ZB	A4	HSS M35	60.40	8.90	9.53	0.55	110°	80	99,20
16.041.H30	D705634ZB	D1	HSS M35	60.40	7.60	9.53	0.80	100°	80	99,20
16.042.H30	D702848ZB	DK1	HSS M35	60.40	8.55	9.53	0.00	105°	80	99,20
16.043.H30	D702849ZB	DK2	HSS M35	60.40	8.55	9.53	0.70	105°	80	99,20
16.044.H30	D704246ZB	NL1	HSS M35	60.40	8.25	9.53	0.00	113°	80	99,20
16.303.H30		CW-1012	HSS M42	60.32	9.53	9.53	0.00	86°	54	99,20
16.308.H30	D702851ZB	CW-1012	HSS M35	60.40	9.53	9.53	0.00	85°	80	99,20
16.303.COO		CW-1012	Carbide	60.32	9.53	9.53	0.00	86°	54	99,20
16.308.COO		CW-1012	Carbide	60.40	9.53	9.53	0.00	85°	80	99,20

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## Fresa bi-conica

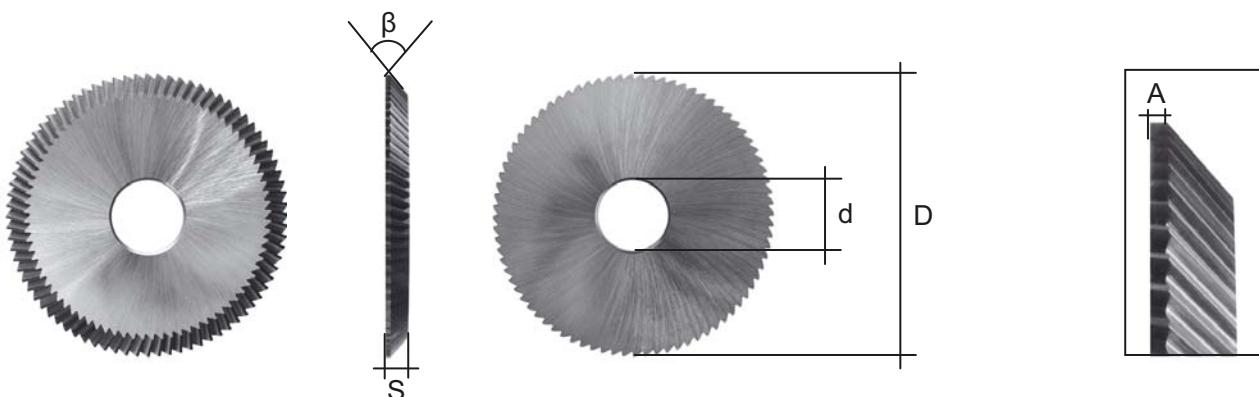
Milling cutter



ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	S (mm)	d (mm)	A (mm)	β	DENTI	LISTINO €
18.004.H30		CW 80 - P05	HSS M35	80.00	5.00	16.00	1.00	84°	110	76,94
18.050.H30	D700875ZB	P01	HSS M35	80.00	5.00	16.00	1.00	84°	110	76,94
18.051.H30	D726407ZB	P36 - P01/120	HSS M35	80.00	5.00	16.00	1.00	84°	120	76,94
18.053.H30	D401642ZZ	P03	HSS M35	80.00	7.00	16.00	1.00	100°	100	94,48
18.500.C00	D704861ZB	P01W / W-MAX	Carbide	80.00	5.00	16.00	1.00	84°	80	306,66
18.501.C00	D704861ZB	P01W	Carbide	80.00	5.00	16.00	1.00	84°	110	306,66
18.041.H10.J	D746382ZB	Prismatic with coating	HSS M42	80.00	5.00	16.00	-	-	100	99,11

## Fresa bi-conica

Milling cutter



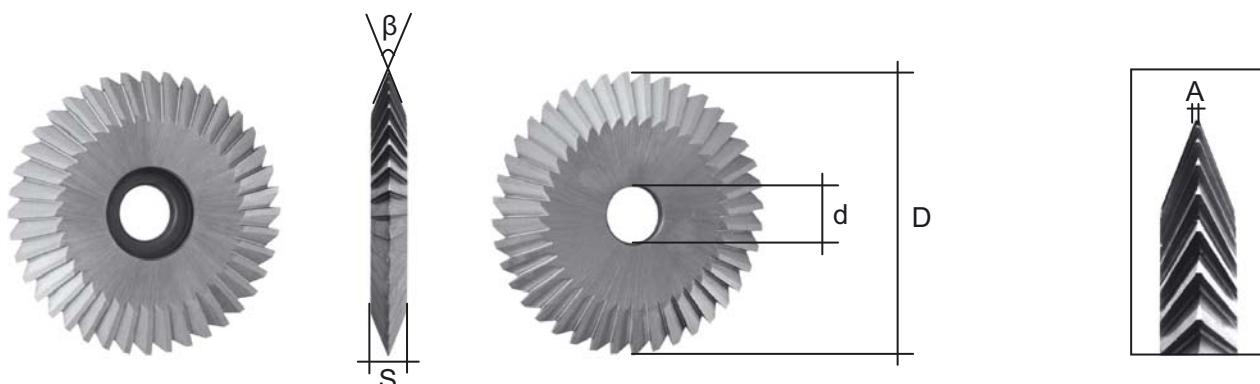
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	S (mm)	d (mm)	A (mm)	β	DENTI	LISTINO €
18.052.H30	D706599ZB	P02	HSS M35	80.00	5.00	16.00	1.00	42°	110	76,94

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato

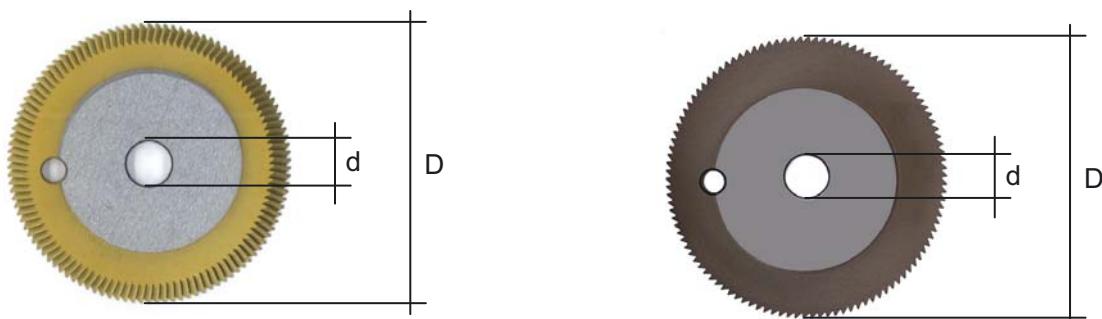
aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

**TO IMPROVE THE PERFORMANCE OF YOUR TOOLS**, all of these tools could be coated adding the code

*J B N V as explained on page 5 and 6. Check the net extra cost on page 7*

**Fresa bi-conica***Milling cutter*

ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	S (mm)	d (mm)	A (mm)	B	DENTI	LISTINO €
14.100.H30	D700719ZB	BLITZ	HSS M35	40.00	5.00	8.00	0,10	42°	40	74,58

**Fresa bi-conica + Trattamento TiN***Milling cutter + TiN coating*

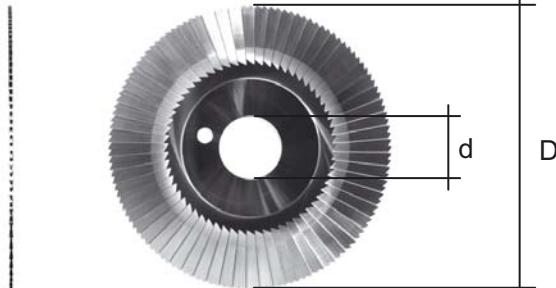
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	S (mm)	d (mm)	B	DENTI	LISTINO €
16.001.H30.J	D742607ZB	01F - with TiN	HSS M35	60.40	3.10	9.53	80°	110	79,24
16.001.H30.V	D747276ZB	01F - with TiAIN	HSS M35	60.40	3.10	9.53	80°	110	79,24

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

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## Fresa piatta con intagli laterali

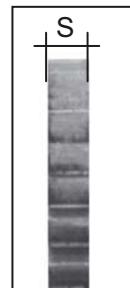
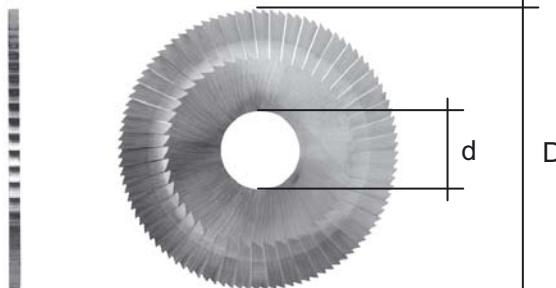
Face and side milling cutter



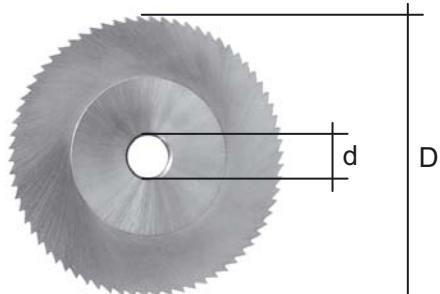
ARTICOLO	REF. SILCA	TIPO	D (mm)	S (mm)	d (mm)	DENTI	LISTINO €
21.503.C00	PL1.25	Carbide	100.00	1.25	22.00	100	363,30

## Fresa piatta con intagli laterali

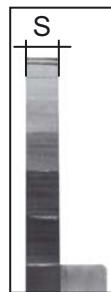
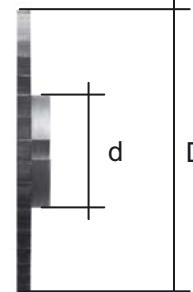
Face and side milling cutter



ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	S (mm)	d (mm)	DENTI	LISTINO €
26.801.H10.J	D749066ZB	SG33	HSS M42 + coating	60.00	0.76	16.00	100	71,88
26.802.H10.J	D749067ZB	SG33	HSS M42 + coating	60.00	1.14	16.00	100	71,88
28.810.H10.J	D749068ZB	Speed 046	HSS M42 + coating	80.00	0.76	22.00	100	71,88
28.811.H10.J	D749069ZB	Speed 046	HSS M42 + coating	80.00	1.14	22.00	100	71,88
28.003.H10		SG2	HSS M42	80.00	1.50	22.00	100	71,88
28.002.H10	D700204ZB	SG6	HSS M42	80.00	1.30	22.00	100	71,88
28.005.H10		Rekord AY	HSS M42	80.00	2.50	22.00	100	92,38
26.506.H10	D913645ZR	SG18	HSS M42	64.60	2.40	9.53	40	73,90
26.519.H10	D714448ZB	SG19	HSS M42	64.60	1.5	9.53	40	73,90
26.507.C00		Y2K	Carbide	63.00	1.35	16.00	80	207,68
26.506.C00		SG18W	Carbide	64.60	2.40	9.53	40	218,31
26.510.C00		-	Carbide	80.00	1.25	22.00	100	218,31
28.512.C00		SG1W	Carbide	80.00	1.30	22.00	100	218,31
28.513.C00		SG2W	Carbide	80.00	1.50	22.00	100	218,31
28.514.C00		FSCL 4-CA	Carbide	80.00	1.80	22.00	100	218,31

**Fresa piatta***Flat slotter*

ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	S (mm)	d (mm)	DENTI	LISTINO €
56.015.H10	D705690ZB	GB1	HSS M42	60.40	1.70	9.53	66	54,68
56.013.H10	D702837ZB	05	HSS M42	60.40	1.80	9.53	68	54,68
56.180.H10	D913646ZR	SG17	HSS M42	64.60	1.80	9.53	70	54,68
56.016.H10		SG13	HSS M42	64.60	2.00	9.53	70	54,68
56.014.H10	D705040ZB	06	HSS M42	64.60	2.40	9.53	70	54,68
56.114.C00	D712505ZB	SG14	Carbide	60.32	1.14	9.53	80	166
56.570.C00	D705633ZB	05W	Carbide	60.40	1.80	9.53	68	166
56.507.C00		CU-15C	Carbide	63.00	1.50	16.00	80	166
56.575.C00	D706128ZB	06W	Carbide	64.60	2.40	9.53	70	166
56.016.C00	D723158ZB	SG13W	Carbide	64.60	2.00	9.53	70	166

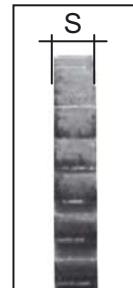
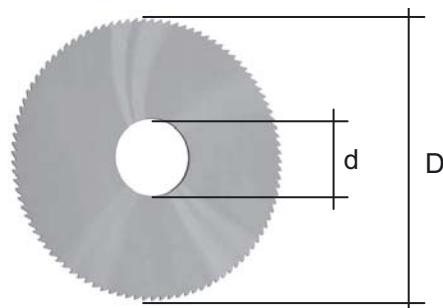
**Fresa piatta***Flat slotter*

ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	S (mm)	d (mm)	DENTI	LISTINO €
52.524.H10	01648	Lancer	HSS M42	25.00	1.25	10.10	40	51,00

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato

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**Fresa piatta***Flat slotter*

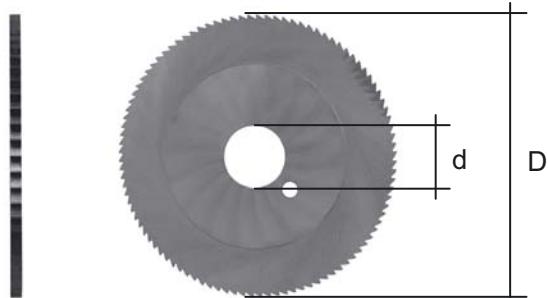
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	S (mm)	d (mm)	DENTI	LISTINO €
58.502.H10	D700080ZB	SG1	HSS M42	80.00	1.50	22.00	100	51,98
58.525.H10	D700078ZB	SG3	HSS M42	80.00	1.00	22.00	100	51,98
58.520.H10	D700079ZB D734963ZB	SG4	HSS M42	80.00	1.25	22.00	100	51,98
58.934.H10	D705374ZB	SG5	HSS M42	80.00	1.30	22.00	100	51,98
58.521.H10	D703222ZB	SG7	HSS M42	80.00	1.40	22.00	100	51,98
58.522.H10	D702863ZB	SG8	HSS M42	80.00	1.75	22.00	100	51,98
58.003.H10	D700081ZB	SG10	HSS M42	80.00	2.00	22.00	100	51,98
58.526.H10	D702089ZB	SG11	HSS M42	80.00	2.30	22.00	100	51,98
58.004.H10	D701652ZB	SG12 - FP26	HSS M42	80.00	2.50	22.00	100	51,98
58.400.H10			HSS M42	80.00	4.00	22.00	100	51,98
58.580.C00	D704784ZB	SG1W	Carbide	80.00	1.50	22.00	100	203,46
58.513.C00	D711025ZB	SG3W	Carbide	80.00	1.00	22.00	80	203,46
58.518.C00			Carbide	80.00	1.30	22.00	100	203,46
58.514.C00		SG10W	Carbide	80.00	2.00	22.00	80	203,46
59.028.C00	D744775ZB	SG28W	Carbide	140.00	2.00	16.00	64	642,60

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

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## Fresa piatta

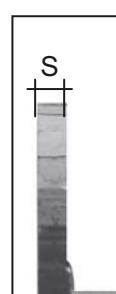
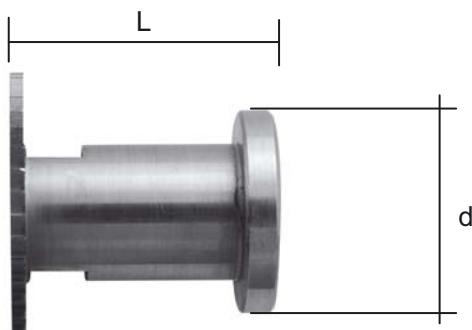
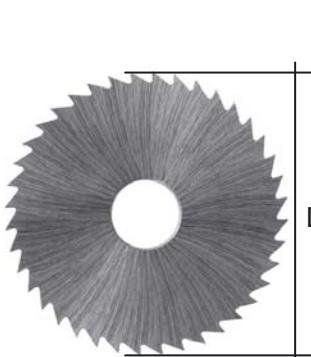
*Flat slotter*



ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	S (mm)	d (mm)	DENTI	LISTINO €
51.502.H30		PL1	HSS M35	100	1.00	22.00	128	136,32
51.503.H30		PL1.25	HSS M35	100	1.25	22.00	128	136,32
51.504.H30		PL1.5	HSS M35	100	1.50	22.00	128	136,32
51.502.C00	D710036ZB	PL1	Carbide	100	1.00	22.00	128	297,60
51.503.C00	D726023ZB	PL1.25	Carbide	100	1.25	22.00	128	297,60
51.504.C00	D709696ZB	PL1.5	Carbide	100	1.50	22.00	128	297,60
51.507.C00	D723584ZB	PL1.7	Carbide	100	1.70	22.00	128	297,60

## Fresa a cappello

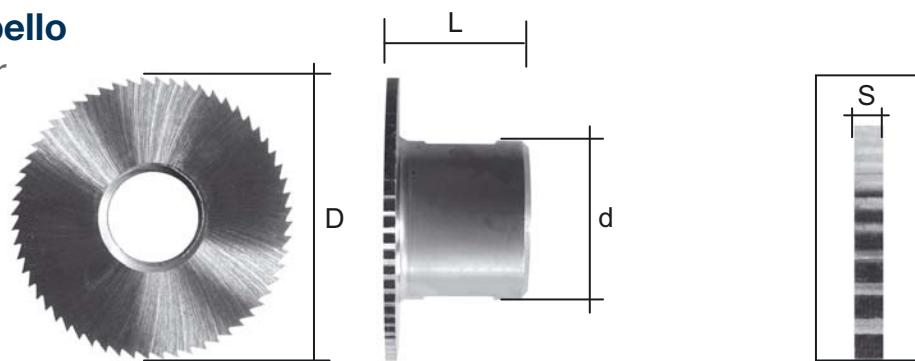
*Top hat cutter*



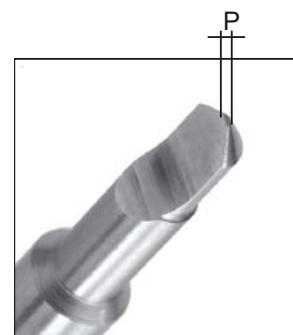
ARTICOLO	REF. SILCA	TIPO	MAT.	M	D (mm)	S (mm)	d (mm)	L (mm)	DENTI	LISTINO €
40.005.H30	D703144ZB	Lancer - TOC400W	HSS M35	M8	25.00	1.25	18.00	23.00	40	70,14

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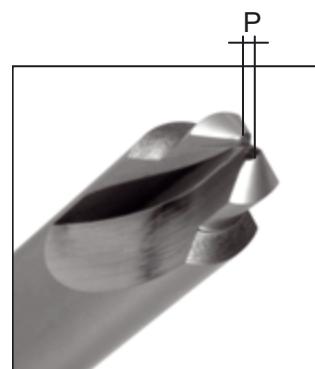
**TO IMPROVE THE PERFORMANCE OF YOUR TOOLS**, all of these tools could be coated adding the code J B N V as explained on page 5 and 6. Check the net extra cost on page 7

**Fresa a cappello***Top hat cutter*

ARTICOLO	TIPO	MAT.	M	D (mm)	S (mm)	d (mm)	L (mm)	DENTI	LISTINO €
40.002.H30	Mizar	HSS M35	M12	32.10	1.35	18.00	16.00	60	57,02

**Fresa cilindrica 1 dente, 2 diametri***End milling cutter 1 tooth, 2 diameters*

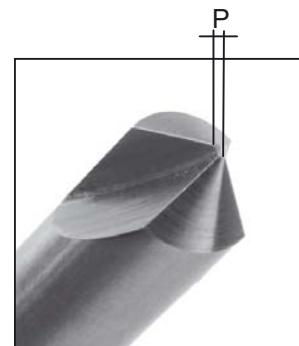
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	I (mm)	β	DENTI	LISTINO €
33.018.C00	D748741ZB	18DW	Carbide	6.00	30.00	8.00	90°	1	63,97

**Fresa cilindrica 2 denti***End milling cutter, 2 teeth*

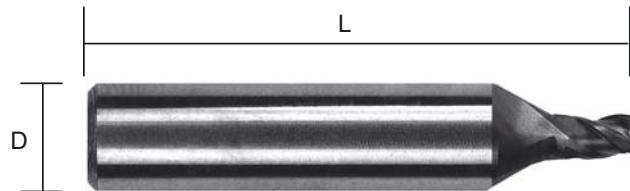
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	d (mm)	L (mm)	β	DENTI	LISTINO €
32.406.H30	D743674ZB	06D	HSS M35	6.00	3.00	30.00	55°	2	55,70
32.409.H30	D744508ZB	09D	HSS M35	6.00	2.20	30.00	88°	2	55,70
32.009.H30	D746736ZB	10D	HSS M35	6.00	4.00	30.00	90°	2	55,70
32.211.H30	D744510ZB	11D	HSS M35	6.00	2.20	30.00		2	55,70
32.416.H30	D748701ZB	16D	HSS M35	6.00	2.20	30.00		2	55,70
32.410.C00	D744629ZB	13DW	Carbure	6.00		30.00		2	66,26

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**Fresa cilindrica, 2 denti***End milling cutter, 2 teeth*

ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	DENTI	LISTINO €
32.004.H30	D742867ZB	01D	HSS M35	6.00	30.00	2	44,88
32.005.H30	D743673ZB	02D	HSS M35	6.00	30.00	2	44,88
32.003.H30	D743674ZB	03D	HSS M35	6.00	30.00	2	44,88
32.006.H30	D743746ZB	04D	HSS M35	6.00	30.00	2	44,88
32.007.H30	D744355ZB	07D	HSS M35	6.00	30.00	2	44,88
32.008.H30	D747004ZB	14D	HSS M35	6.00	30.00	2	44,88
32.010.H30	D749060ZB	19D	HSS M35	6.00	30.00	2	44,88

**Fresa cilindrica, 3 denti***End milling cutter, 3 teeth*

ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	I (mm)	DENTI	LISTINO €
33.012.H30	D749946ZB	12L	HSS M35	6.00	30.00	8.00	3	51,33

**Fresa cilindrica, 1 dente, 2 diametri***End milling cutter, 1 tooth, 2 diameters*

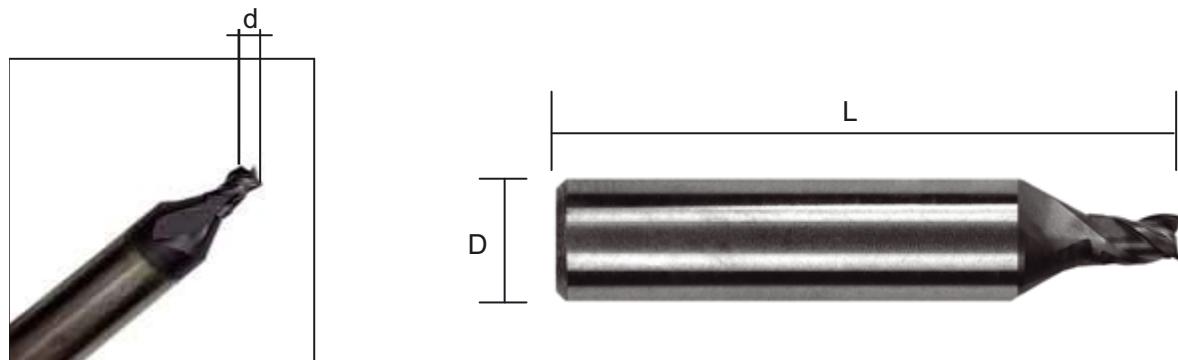
ARTICOLO	REF. SILCA	MAT.	D (mm)	L (mm)	B	DENTI	LISTINO €
39.001.DIA	D735938ZB	HSS M35	6.00	40.00	90°	1	420

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## Fresa cilindrica, 3 denti

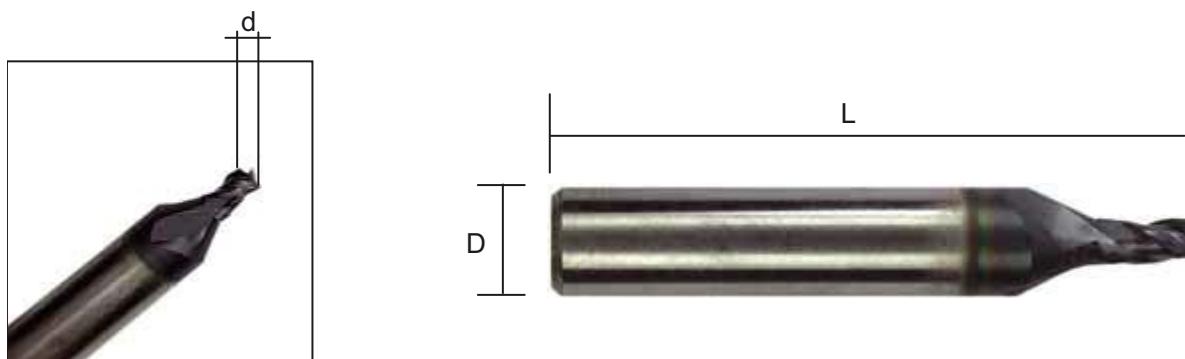
End milling cutter, 3 teeth



ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	d (mm)	L (mm)	DENTI	LISTINO €
33.108.H30	D744514ZB	08L	HSS M35	6.00	-	30.00	3	54,00
33.112.H30	D749946ZB	12L	HSS M35	6.00	2.00	30.00	3	54,00
33.113.C00	D751861ZB	11LW	Carbide	6.00	1.90	30.00	3	63,00

## Fresa cilindrica, 3 denti + trattamento

End milling cutter, 3 teeth + coating



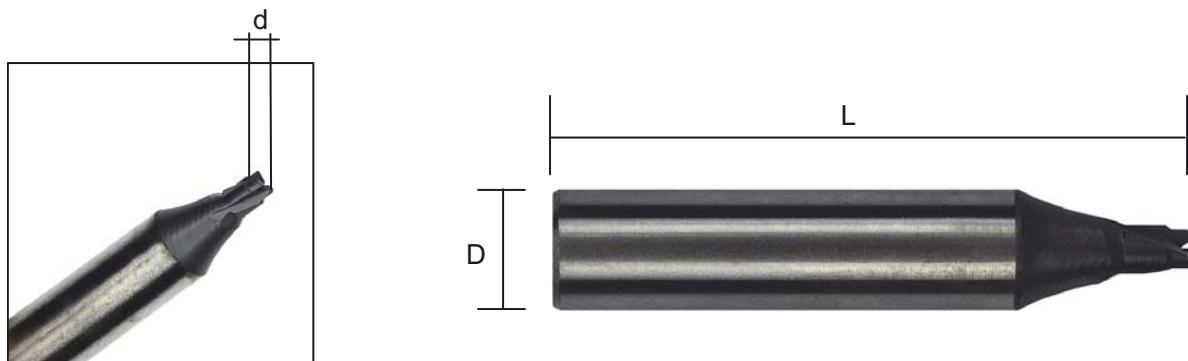
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	d (mm)	L (mm)	DENTI	LISTINO €
33.001.H30.A	D742606ZB	01L	HSS M35	6.00	2.50	30.00	3	54,00
33.002.H30.A	D743671ZB	02L	HSS M35	6.00	2.00	30.00	3	54,00
33.006.H30.A	D743672ZB	03L	HSS M35	6.00	5.00	30.00	3	54,00
33.005.H30.A	D743745ZB	04L	HSS M35	6.00	1.30	30.00	3	58,80
33.008.H30.A	D743744ZB	05L	HSS M35	6.00	1.10	30.00	3	54,00
33.009.H30.A	D751336ZB	09L	HSS M35	6.00	4.00	30.00	3	54,00
33.001.C00.AC	D747838ZB	01LW	Carbide	6.00	2.50	30.00	3	70,00
33.002.C00.AC	D747839ZB	02LW	Carbide	6.00	2.00	30.00	3	70,00

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato

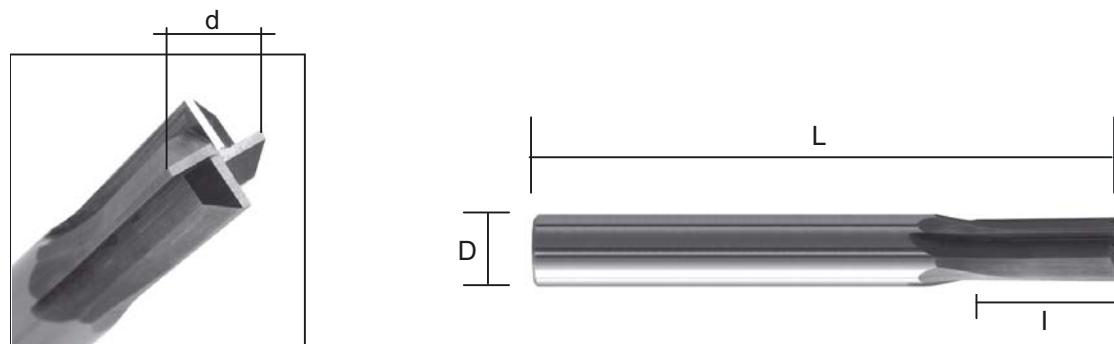
aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

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*J B N V as explained on page 5 and 6. Check the net extra cost on page 7*

**Fresa cilindrica, 3 denti + trattamento***End milling cutter, 4 teeth + coating*

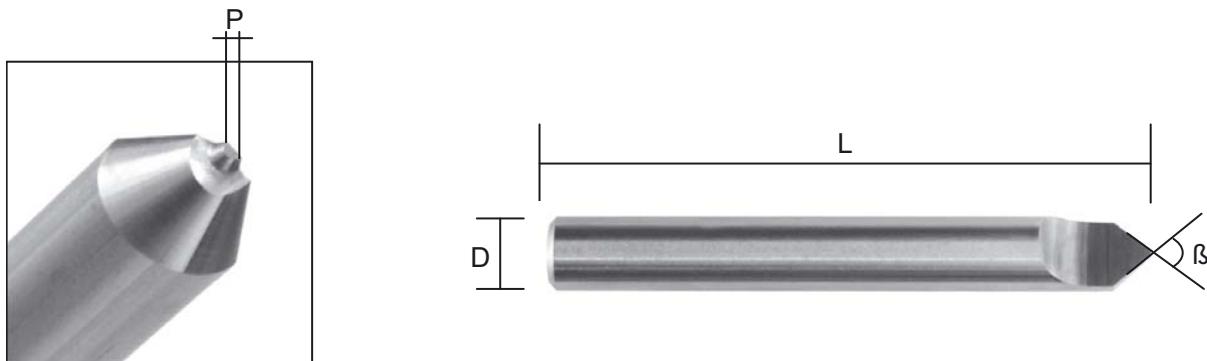
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	DENTI	LISTINO €
33.007.H30.A	D743954ZB	06L	HSS M35	6.00	2.00/2.30	30	3	106,90
33.007.C00.AC	D747840ZB	06LW	Carbure	6.00	2.60/2.20	30	3	88,00

**Fresa cilindrica, 4 denti***End milling cutter, 4 teeth*

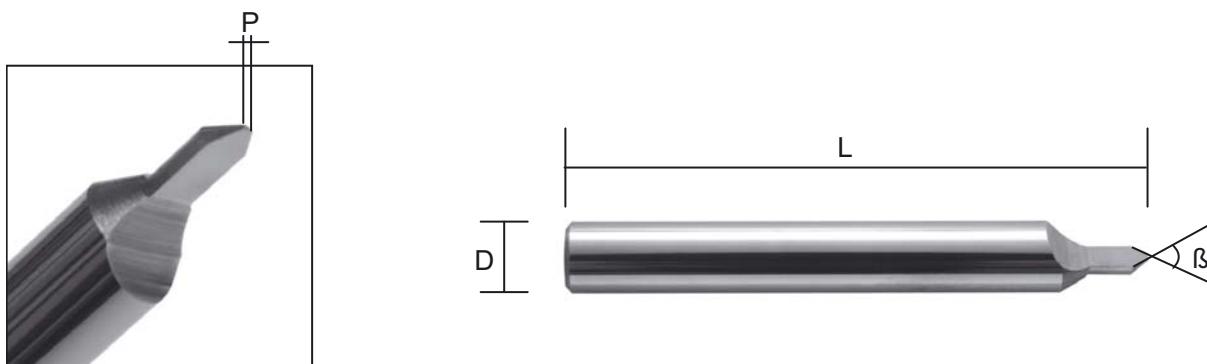
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	DENTI	LISTINO €
34.027.H30	D700077ZB	Tubulaire	HSS M35	6.00	5.95	48.00	12.00	4	29,70
34.027.C00		Tubulaire	Carbide	6.00	6.00	48.00	12.00	4	47,24
33.922.H10	D704541ZB	Vigie Picard	HSS M42	6.00	3.00	40.00	13.00	4	44,88

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**Fresa cilindrica F, 1 dente***End milling cutter F, 1 tooth*

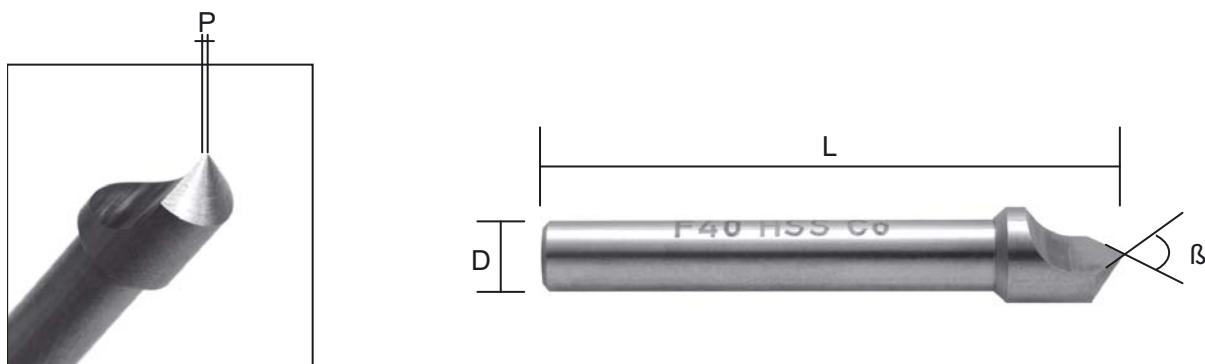
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	B	DENTI	LISTINO €
30.027.H30	D705657ZB	F27	HSS M35	6.00	48.00	2.40	60°	1	48,90
30.027.C00		F27-CA	Carbide	6.00	48.00	2.40	60°	1	86,00

**Fresa cilindrica F, 1 dente***End milling cutter F, 1 tooth*

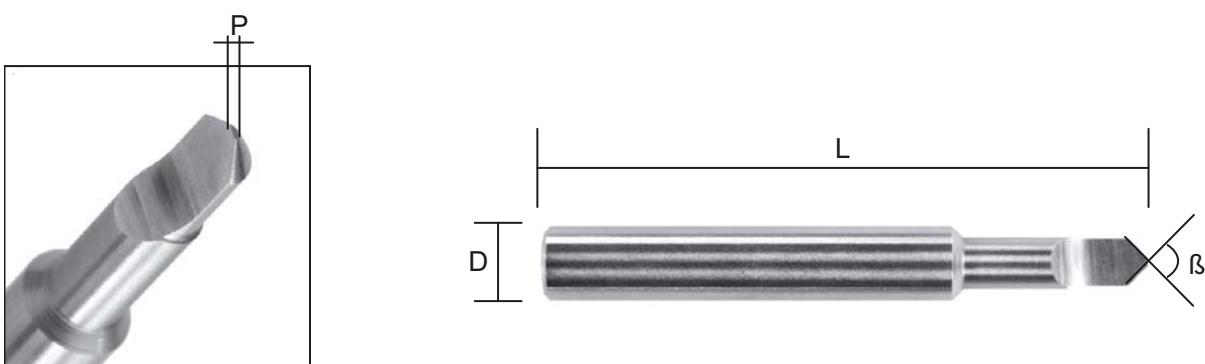
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	B	DENTI	LISTINO €
30.039.H30	D705050ZB	F19	HSS M35	6.00	48	0.60	90°	1	34,80
30.040.H30	D705114ZB	F21	HSS M35	6.00	48	0.80	85°	1	39,82
30.045.H30	D708988ZB	F43	HSS M35	6.00	48	1.00	90°	1	34,80
30.163.H30	D726402ZB	F63	HSS M35	6.00	48	1.50	80°	1	39,82
30.165.H30	D729459ZB	F65	HSS M35	6.00	48	1.05	90°	1	51,98
30.041.C00	DZCL1123W	F21-CA	Carbide	6.00	48	0.80	85°	1	62,08

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

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**Fresa cilindrica F, 1 dente***End milling cutter F, 1 tooth*

ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	β	DENTI	LISTINO €
30.043.H30	D707165ZB	F40	HSS M35	6.00	48.00	0.40	110°	1	34,76

**Fresa cilindrica F, 1 dente, 2 diametri***End milling cutter F, 1 tooth, 2 diameters*

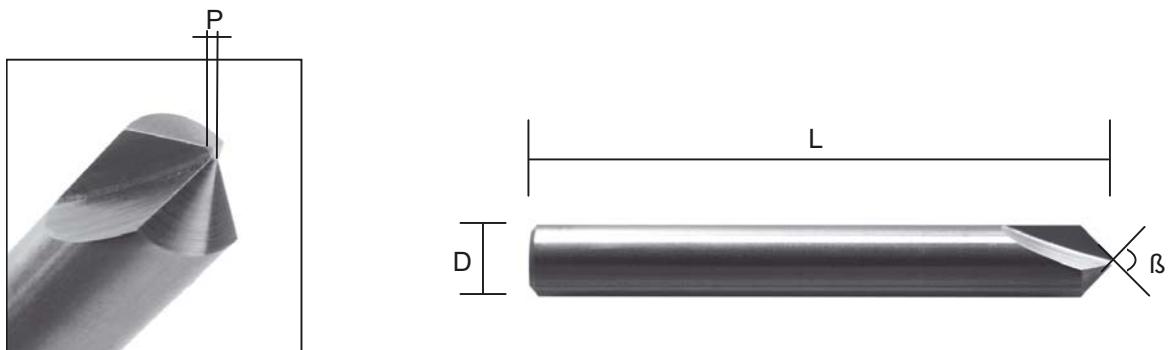
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	β	DENTI	LISTINO €
30.035.H30	D701079ZB	F5	HSS M35	6.00	48.00	0.90	90°	1	34,76
30.036.H30	D701081ZB	F6	HSS M35	6.00	48.00	1.00	106°	1	34,76
30.013.H30	D702099ZB	F13	HSS M35	6.00	48.00	0.77	90°	1	34,76

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## Fresa cilindrica F, 2 denti

*End milling cutter F, 2 teeth*



ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	$\beta$	DENTI	LISTINO €
32.101.H30	D701071ZB	F1	HSS M35	6.00	48.00	0.70	90°	2	34,76
32.200.H30	D701156ZB	F20	HSS M35	6.00	48.00	0.45	90°	2	34,76
32.339.H30	D706659ZB	F39	HSS M35	6.00	48.00	0.60	90°	2	42,18
32.159.H30	D712775ZB	F59	HSS M35	6.00	48.00	0.80	90°	2	34,76
32.029.C00	D740418ZB	F1W	Carbide	6.00	48.00	0.80	90°	2	53,30

## Fresa cilindrica F, 2 denti

*End milling cutter F, 2 teeth*



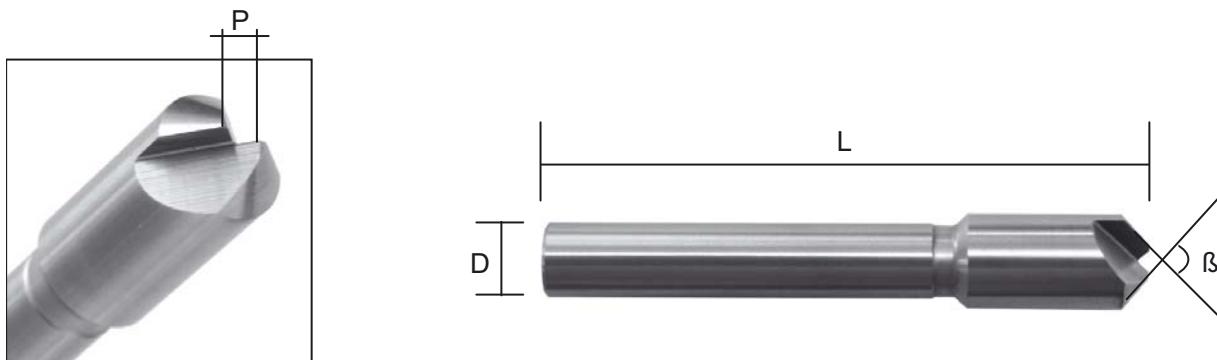
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	$\beta$	DENTI	LISTINO €
32.101.H3R	D739971ZB	F1	HSS M35	6.00	48.00	0.70	90°	2	39,90
32.034.H3R	D740444ZB	F4	HSS M35	6.00	48.00	0.40	90°	2	39,90
32.167.HR3	D740473ZB	F67	HSS M35	6.00	48.00			2	39,90
32.170.H3R	D740483ZB	F70	HSS M35	6.00	48.00			2	39,90

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## Fresa cilindrica F, 2 denti

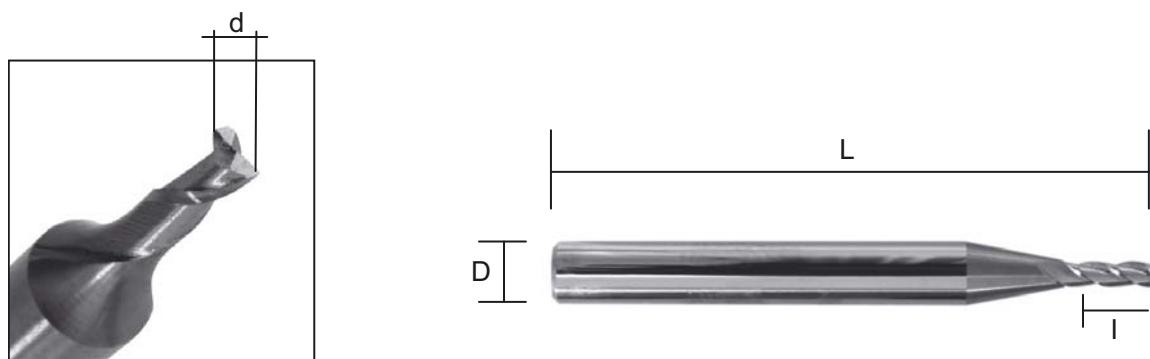
*End milling cutter F, 2 teeth*



ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	B	DENTI	LISTINO €
32.037.H30	D701083ZB	F7	HSS M35	6.00	48.00	0.80	72°	2	34,80
32.021.H30	D701093ZB	F12B	HSS M35	6.00	48.00	1.80	90°	2	39,48

## Fresa cilindrica F, 2 denti

*End milling cutter F, 2 teeth*



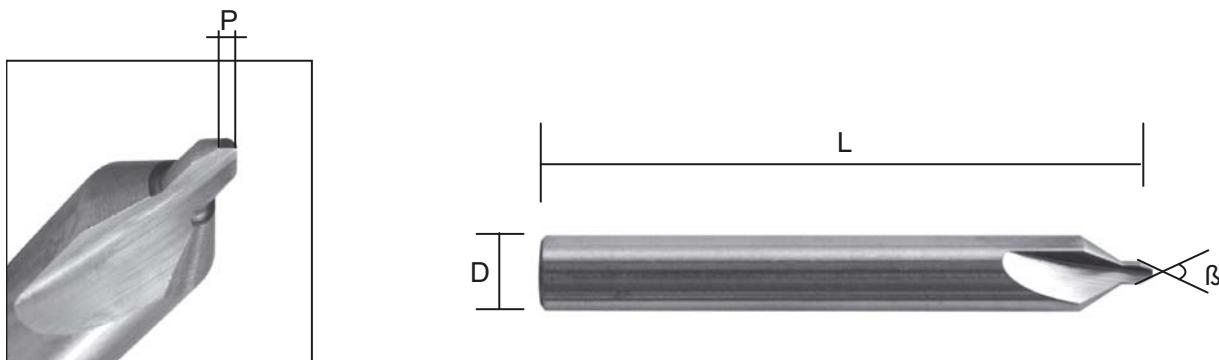
ARTICOLO	TIPO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	DENTI	LISTINO €
32.022.H10	F30	HSS M42	6.00	3.00	48.00	6.00	2	44,34

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## Fresa cilindrica F, 2 denti

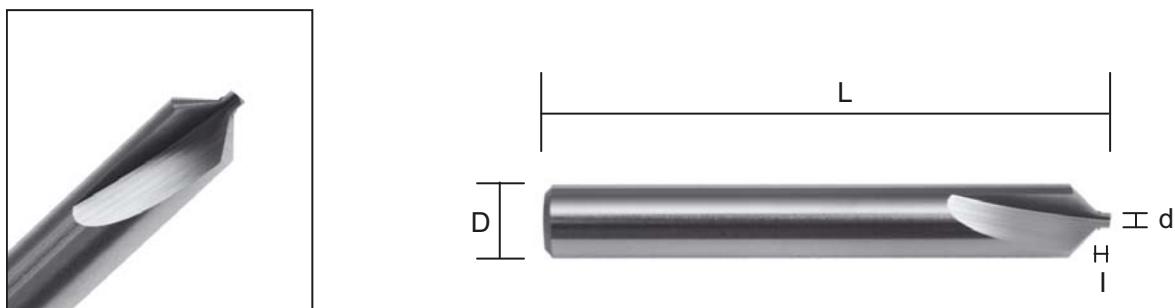
End milling cutter F, 2 teeth



ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	B	DENTI	LISTINO €
32.452.H30	D711433ZB	F52	HSS M35	6.00	48.00	0.86	54°	2	62,08

## Fresa cilindrica F, 2 denti

End milling cutter F, 2 teeth



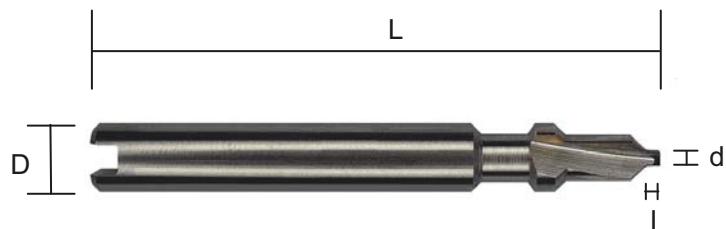
ARTICOLO	TIPO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	DENTI	LISTINO €
32.300.H30	F3	HSS M35	6.00	1.50	48.00	2.00	2	62,08
32.300.C00	F3-CA	Carbide	6.00	1.50	48.00	2.00	2	94,78

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## Fresa cilindrica F, 2 denti

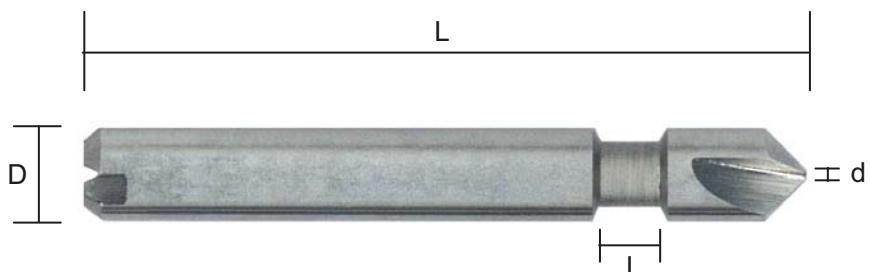
*End milling cutter F, 2 teeth*



ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	DENTI	LISTINO €
32.300.H3R	D740433ZB	F3	HSS M35	6.00	1,50	48,00	2,00	2	62,20

## Fresa cilindrica F, 2 denti

*End milling cutter F, 2 teeth*

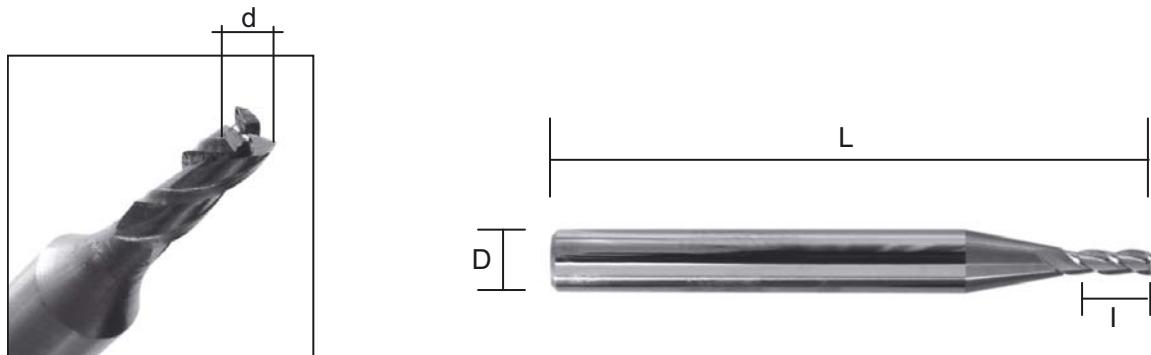


ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	B	DENTI	LISTINO €
32.049.H10	D740453ZB	F49	HSS 42	6.00	48,00	0,86	54°	2	42,46

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## Fresa cilindrica F, 3 denti

*End milling cutter F, 3 teeth*

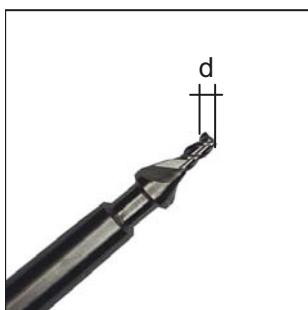


ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	DENTI	LISTINO €
33.018.H10	D701075ZB	F3	HSS M42	6.00	1.50	48.00	2.00	3	51,98
33.018.H10.S		F3	HSS M42	6.00	1.50	40.00	5.00	3	51,98
33.023.H10	D701085ZB	F8	HSS M42	6.00	4.00	48.00	13.00	3	40,84
33.011.H10	D701195ZB	F8C	HSS M42	6.00	4.00	45.00	12.00	3	40,84
33.019.H10	D701089ZB	F11	HSS M42	6.00	2.50	48.00	7.00	3	40,84
33.040.H10	D701192ZB	F11C	HSS M42	6.00	2.50	26.00	7.00	3	40,84
33.013.H10	D705488ZB	F22	HSS M42	6.00	2.50	42.00	6.00	3	40,84
33.022.H10	D701160ZB	F30	HSS M42	6.00	3.00	48.00	6.00	3	40,84
33.421.H10	D709148ZB	F44	HSS M42	6.00	2.00	40.00	6.00	3	40,84
33.721.H10		F44-B	HSS M42	6.00	2.00	48.00	6.00	3	43,54
33.027.H10	D723451ZB	FCH42-3-13	HSS M42	6.00	3.00	42.00	13.00	3	44,34
33.518.H10		FCH45-15	HSS M42	6.00	1.50	45.00	2.00	3	51,98
33.350.H10		FCH45-50	HSS M42	6.00	5.00	45.00	8.00	3	43,54
33.360.H10		FCH45-60	HSS M42	6.00	6.00	45.00	8.00	3	43,54
33.250.H10		AXA	HSS M42	6.00	1.80	45.00	5.00	3	43,54
33.019.C00		F11-CA	Carbide	6.00	2.50	48.00	7.00	3	91,78
33.013.C00	DZCL1087W	F22-CA	Carbide	6.00	2.50	42.00	6.00	3	79,30
33.230.C00	D740435ZB	F30W	Carbide	6.00	3.00	48.00	6.00	3	91,78

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## Fresa cilindrica F, 3 denti

*End milling cutter F, 3 teeth*



ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	DENTI	LISTINO €
33.018.H1R	D701075ZB	F3	HSS M42	6.00	1.50	48.00		3	63,45
33.023.H1R	D740479ZB	F8	HSS M42	6.00	2.00	48.00		3	50,38
33.012.H1R	D739973ZB	F22	HSS M42	6.00	2.50	48.00		3	47,11
33.123.H1R	D705491ZB D740424ZB	F23	HSS M42	6.00	1.50	48.00	2.00	3	63,31
33.022.H1R	D701160ZB	F30	HSS M42	6.00	3.00	48.00	6.00	3	49,90
33.721.H1R	D740448ZB	F44-B	HSS M42	6.00	2.00	48.00		3	49,90
33.075.H3R	D7A1725ZB	F75	HSS M42	6.00	1.70	48.00		3	63,31

## Fresa cilindrica F, 2 denti

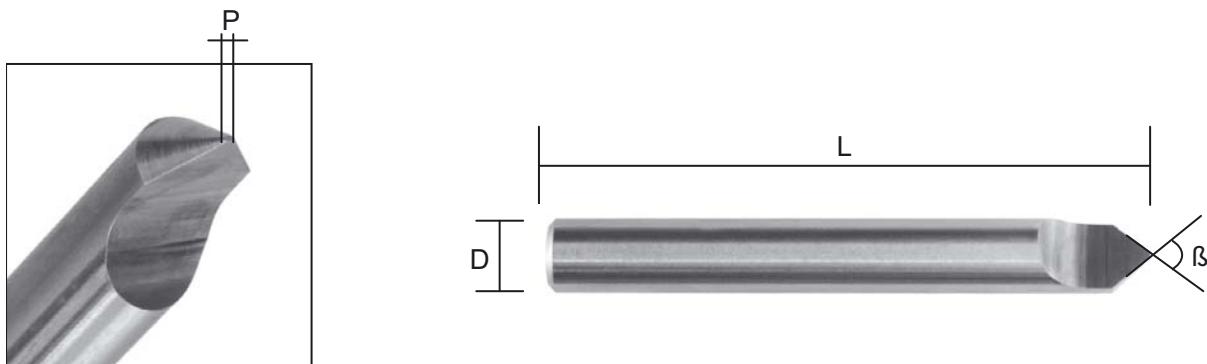
*End milling cutter F, 2 teeth*



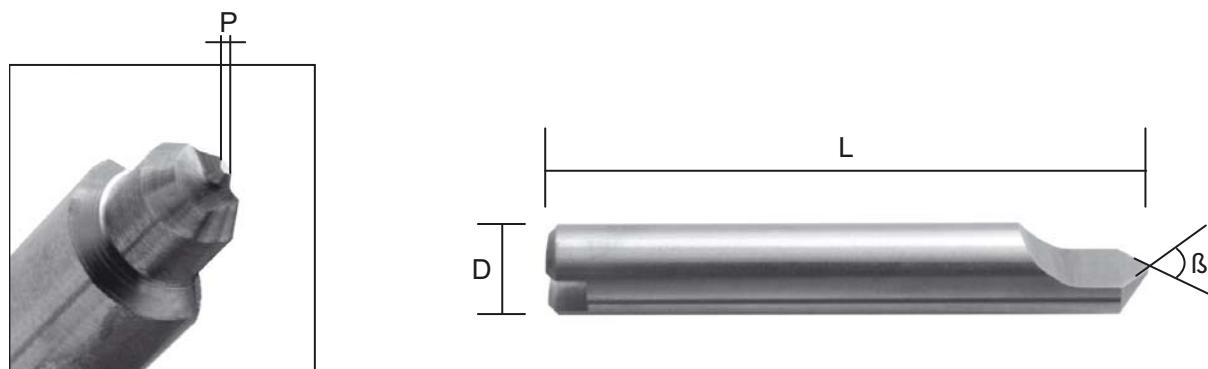
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	B	DENTI	LISTINO €
32.037.H30	D701083ZB	F7	HSS M35	6.00	48.00	0.80	72°	2	40,00
32.021.H30	D701093ZB	F12B	HSS M35	6.00	48.00	1.80	90°	2	44,00

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**Fresa cilindrica H, 1 dente***End milling cutter H, 1 tooth*

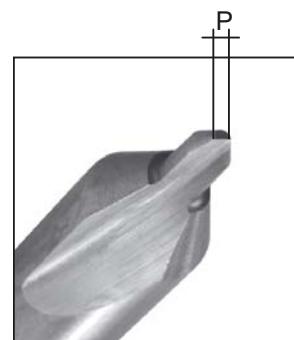
ARTICOLO	TIPO	MAT.	D (mm)	L (mm)	P (mm)	$\beta$	DENTI	LISTINO €
30.319.H30	H119B	HSS M35	6.00	48.00	0.30	85°	1	34,76
30.320.H30	H119C	HSS M35	6.00	48.00	0.30	90°	1	34,76

**Fresa cilindrica H, 1 dente, con tacca***End milling cutter H, 1 tooth, with slot*

ARTICOLO	TIPO	MAT.	D (mm)	L (mm)	P (mm)	$\beta$	DENTI	LISTINO €
30.132.H30	H132	HSS M35	6.00	40.00	2.00	60°	1	53,30
30.136.H30	H136	HSS M35	6.00	40.00	2.23	76°	1	53,30

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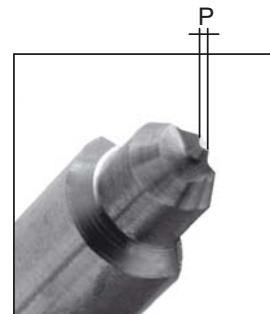
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**Fresa cilindrica W, 1 dente, con tacca***End milling cutter W, 1 tooth, with slot*

ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	$\beta$	DENTI	LISTINO €
30.515.COO	D709512ZB	W115	Carbide	6.00	40.00	0.86	54°	1	74,58
30.528.COO	D711124ZB	W128	Carbide	6.00	48.00	0.75	90°	1	74,58
31.300.COO	D736794ZB	W300	Carbide	6.00	40.00	1.20	104°/60°	1	74,58

**Fresa cilindrica, 2 denti, Protech***End milling cutter, 2 teeth, Protech*

ARTICOLO	TIPO	MAT.	d (mm)	L (mm)	$\beta$	DENTI	LISTINO €
32.325.COO	W325	Carbide	4.00	40.00	10°	2	79,00

**Fresa cilindrica W, 1 dente, con tacca***End milling cutter W, 1 tooth, with slot*

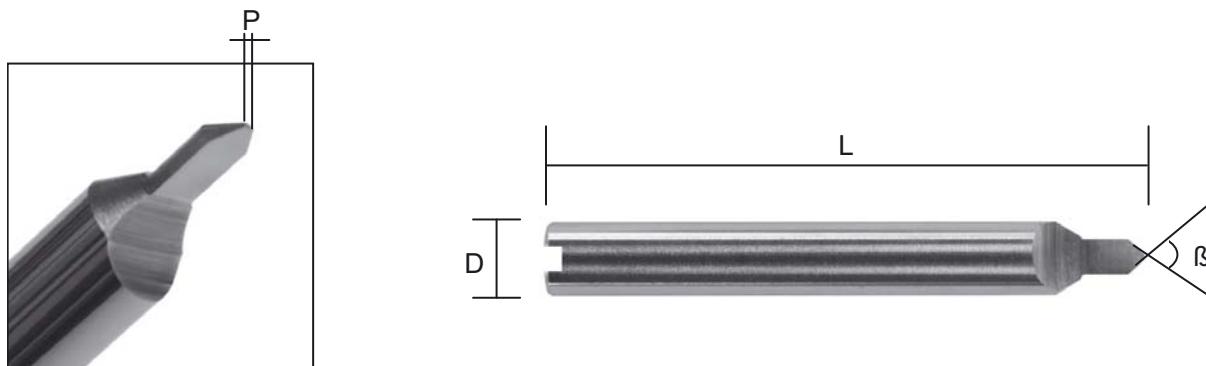
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	$\beta$	DENTI	LISTINO €
30.532.COO	D712737ZB	W132	Carbide	6.00	40.00	2.00	60°	1	74,58
30.536.COO	D722178ZB	W136	Carbide	6.00	40.00	2.23	76°	1	74,58

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## Fresa cilindrica W, 1 dente, con tacca

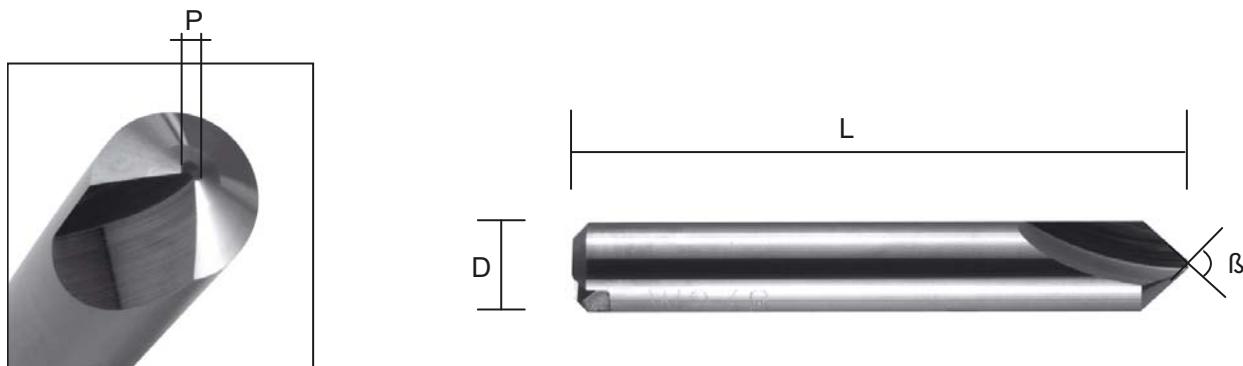
End milling cutter W, 1 tooth, with slot



ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	β	DENTI	LISTINO €
30.143.C00	D729491ZB	W143	Carbide	6.00	48.00	0.56	90°	1	74,58
30.144.C00	D729493ZB	W144	Carbide	6.00	48.00	0.50	90°	1	74,58
30.156.C00	D740515ZB	W156	Carbide	6.00	40.00	0.60	90°	1	74,58
30.537.C00	D740516ZB	W157	Carbide	6.00	40.00	0.50	90°	1	74,58

## Fresa cilindrica W, 1 dente, con tacca

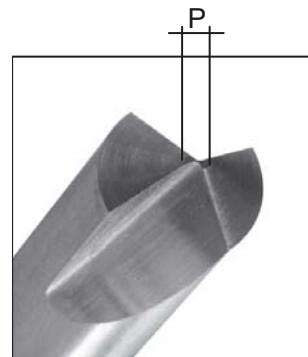
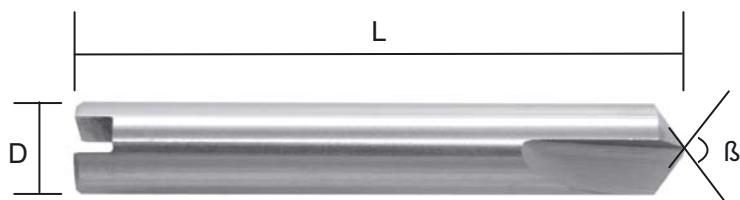
End milling cutter W, 1 tooth, with slot



ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	β	DENTI	LISTINO €
30.238.C00	D714285ZB	W238	Carbide	6.00	40.00	0.80	90°	1	55,66

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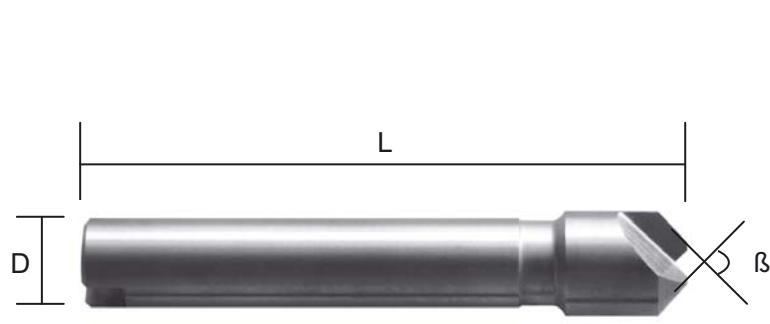
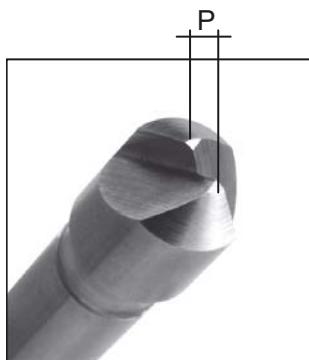
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**Fresa cilindrica W, 2 denti, con tacca***End milling cutter W, 2 teeth, with slot*

ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	B	DENTI	LISTINO €
32.502.C00	D709239ZB	W102	Carbide	6.00	40.00	1	106°	2	66,80
32.503.C00	D709240ZB	W103	Carbide	6.00	40.00	0.8	90°	2	66,80
32.504.C00	D709241ZB	W104	Carbide	6.00	40.00	1.20	90°	2	66,80
32.505.C00	D709242ZB	W105	Carbide	6.00	40.00	0.70	90°	2	66,80
32.506.C00	D709243ZB	W106	Carbide	6.00	40.00	0.60	90°	2	66,80
32.507.C00	D709244ZB	W107	Carbide	6.00	40.00	0.90	90°	2	66,80
32.508.C00	D709245ZB	W108	Carbide	6.00	40.00	0.90	82°	2	66,80
32.509.C00	D709246ZB	W109	Carbide	6.00	40.00	0.40	110°	2	66,80
32.510.C00	D709247ZB	W110	Carbide	6.00	40.00	0.60	100°	2	66,80
32.513.C00	D709250ZB	W113	Carbide	6.00	40.00	0.76	100°	2	66,80
32.516.C00	D709792ZB	W116	Carbide	6.00	40.00	1.00	90°	2	66,80
32.518.C00	D710018ZB	W118	Carbide	6.00	40.00	0.60	120°	2	66,80
32.519.C00	D710158ZB	W119	Carbide	6.00	40.00	0.30	85°	2	66,80
32.522.C00	D710242ZB	W122	Carbide	6.00	40.00	0.55	90°	2	66,80
32.523.C00	D710438ZB	W123	Carbide	6.00	40.00	0.90	76°	2	66,80
32.130.C00	D712391ZB	W130	Carbide	6.00	40.00	1.40	90°	2	66,80
32.138.C00	D722580ZB	W138	Carbide	6.00	40.00	0.65	81°	2	66,80
32.140.C00	D727335ZB	W140	Carbide	6.00	40.00	0.70	80°	2	66,80
32.142.C00	D728783ZB	W142	Carbide	6.00	40.00	1.20	100°	2	66,80
32.147.C00	D734848ZB	W147	Carbide	6.00	40.00	1.50	90°	2	66,80
32.152.C00	D738003ZB	W152	Carbide	6.00	40.00	0.60	100°	2	66,80
32.555.C00	D738801ZB	W155	Carbide	6.00	40.00	0.80	83°	2	66,80
32.173.C00	D747823ZB	W173	Carbide	6.00	40.00	1.15	78°	2	66,80
32.203.C00	D709643ZB	W203	Carbide	6.00	48.00	0.85	100°	2	66,80
32.205.C00	D710776ZB	W205	Carbide	6.00	48.00	0.20	90°	2	66,80
32.234.C00	D713999ZB	W241	Carbide	6.00	40.00	0.75	96°	2	66,80
32.240.C00	D713286ZB	W247	Carbide	6.00	40.00	0.95	96°	2	66,80
32.241.C00	D713287ZB	W274	Carbide	6.00	40.00			2	66,80
32.274.C00	D726050ZB	W286	Carbide	6.00	40.00	1.15	104°	2	66,80
32.283.C00	D729319ZB	W289	Carbide	6.00	40.00			2	66,80
32.286.C00	D730617ZB	W297	Carbide	6.00	40.00	0.80	96°	2	66,80
32.289.C00	D713447ZB	W301	Carbide	6.00	40.00			2	66,80
32.297.C00	D735955ZB	W308	Carbide	6.00	40.00	1.05	100°	2	66,80
32.301.C00	D737183ZB	W328	Carbide	6.00	40.00			2	66,80
32.308.C00	D738765ZB	W500	Carbide	6.00	40.00	1.05	90°	2	66,80

## Fresa cilindrica W, 2 denti, con tacca

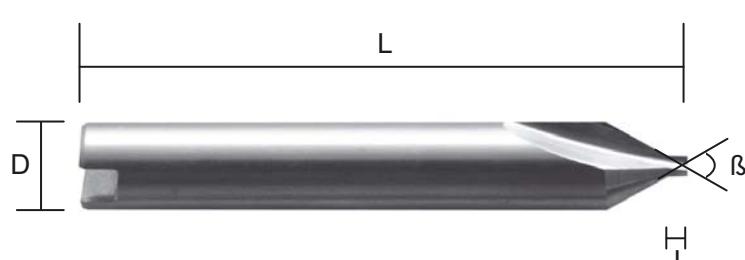
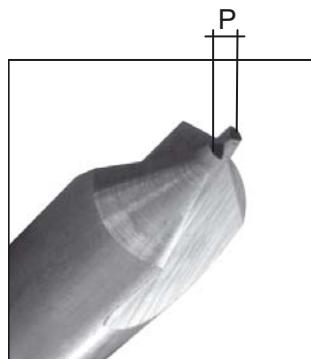
End milling cutter W, 2 teeth, with slot



ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	$\beta$	DENTI	LISTINO €
32.511.C00	D709248ZB	W111	Carbide	6.00	40.00	2.75	96°	2	74,58

## Fresa cilindrica W, 1 dente, con tacca

End milling cutter W, 1 tooth, with slot



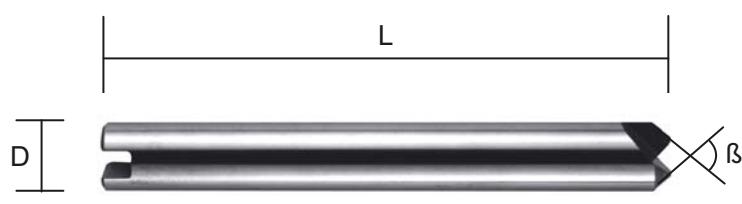
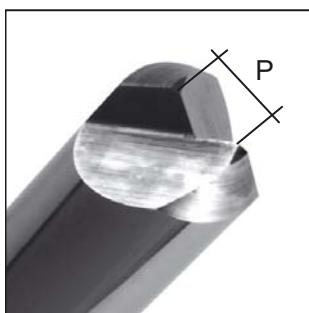
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	I (mm)	$\beta$	DENTI	LISTINO €
32.512.C00	D709249ZB	W112	Carbide	6.00	40.00	1.50	1.30	60°	2	70,52
32.810.C00		W324	Carbide	6.00	40.00	1.50	-	-	2	100,82

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

**TO IMPROVE THE PERFORMANCE OF YOUR TOOLS**, all of these tools could be coated adding the code **J B N V** as explained on page 5 and 6. Check the net extra cost on page 7

**Fresa cilindrica W, 2 denti, con tacca***End milling cutter W, 2 dents, with slot*

ARTICOLO	REF. SILCA	TIPO	D (mm)	L (mm)	B	DENTI	LISTINO €
32.124.C00	D710569ZB	W124	8.00-6.00	40.00	90°	2	220,00
32.225.C00	D712802ZB	W225	8.00-6.00	40.00		2	133,28
32.278.C00	D728514ZB	W278	8.00-6.00	40.00		2	138,00

**Fresa cilindrica W, 2 denti, con tacca***End milling cutter W, 2 teeth, with slot*

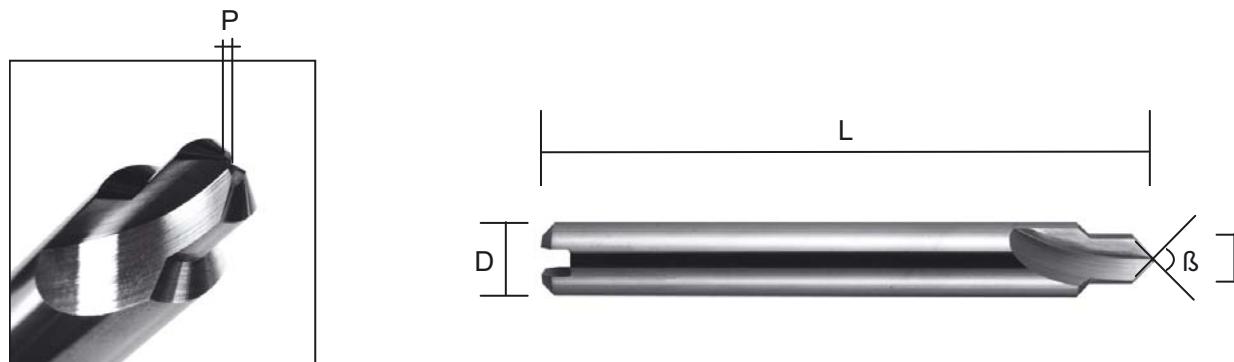
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	B	DENTI	LISTINO €
32.526.C00	D711129ZB	W126	Carbide	6.00	48.00	3.30	80°	2	66,80
32.527.C00	D711127ZB	W127	Carbide	6.00	48.00	2.10	80°	2	66,80

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

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## Fresa cilindrica W, 2 denti, con tacca

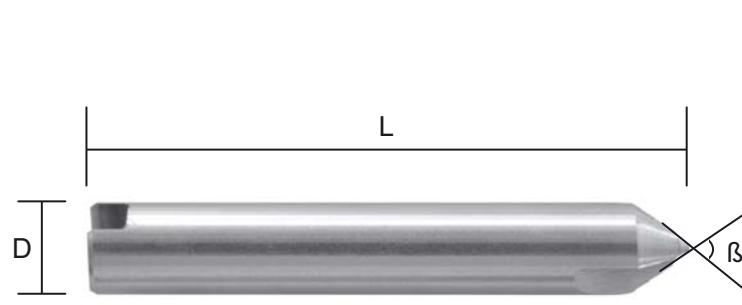
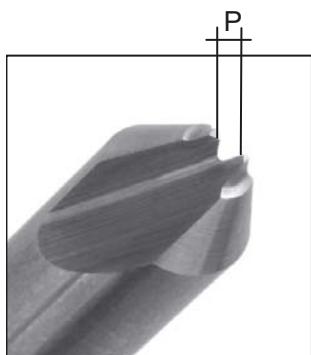
*End milling cutter W, 2 dents, with slot*



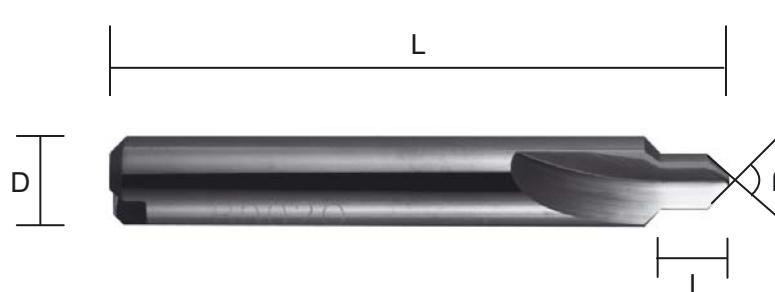
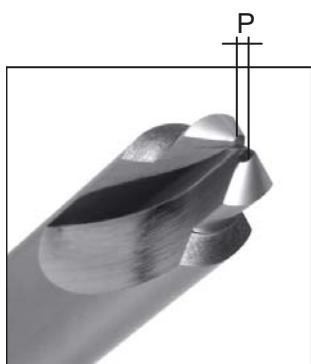
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	d (mm)	L (mm)	P (mm)	B	DENTI	LISTINO €
32.135.C00	D721004ZB	W135	Carbide	6.00	4.00	48.00	0.55	90°	2	81,22
32.545.C00	D729494ZB	W145	Carbide	6.00	3.20	48.00	0.80	90°	2	81,22
32.149.C00	D735457ZB	W149	Carbide	6.00	1.70	48.00			2	83,90
32.151.C00	D737951ZB	W151	Carbide	6.00	4.00	40.00	0.50	90°	2	81,22
32.153.C00	D738415ZB	W153	Carbide	6.00	-	40.00	0.75	90°	2	81,22
32.154.C00	D738523ZB	W154	Carbide	6.00		40.00			2	81,22
32.179.C00	D741034ZB	W159	Carbide	6.00		40.00			2	99.00
32.160.C00	D741451ZB	W160	Carbide	6.00		40.00			2	81,22
32.169.C00	D746405ZB	W169	Carbide	6.00		40.00			2	98,38
32.185.C00	D752538ZB	W185	Carbide	6.00		40.00			2	83,90
32.255.C00	D717065ZB	W255	Carbide	6.00	4.00	40.00	0.70	60/90°	2	81,22
32.277.C00	D728170ZB	W277	Carbide	6.00	3.70	48.00	1.05	82°	2	81,22
32.296.C00	D735973ZB	W296	Carbide	6.00	4.00	40.00	0.70	90°	2	81,22
32.299.C00	D736503ZB	W299	Carbide	6.00	2.70	40.00	0.80	90°	2	81,22
32.010.C00	D745840ZB	W332	Carbide	6.00	2.65	40.00	0.60	97°	2	81,22

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

**TO IMPROVE THE PERFORMANCE OF YOUR TOOLS**, all of these tools could be coated adding the code **J B N V** as explained on page 5 and 6. Check the net extra cost on page 7

**Fresa cilindrica W, 2 denti, con tacca***End milling cutter W, 2 dents, with slot*

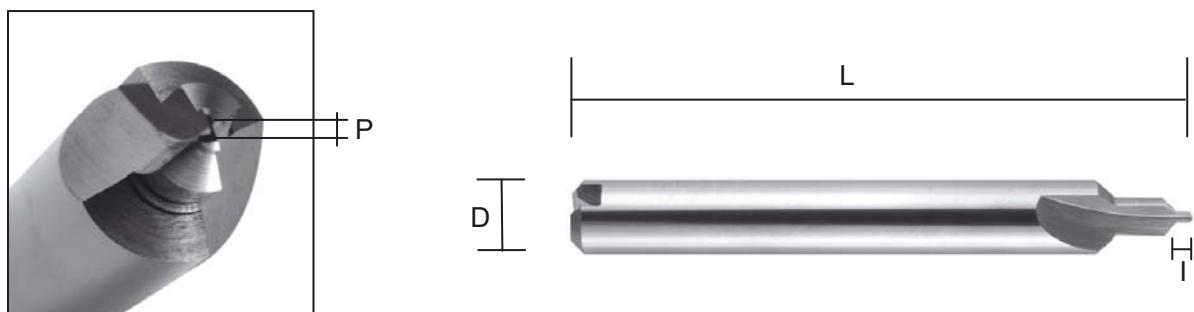
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	B	DENTI	LISTINO €
32.139.C00	D724961ZB	W139	Carbide	6.00	40.00	0.90	60°/50°	2	83,00

**Fresa cilindrica W, 2 denti, con tacca***End milling cutter W, 2 dents, with slot*

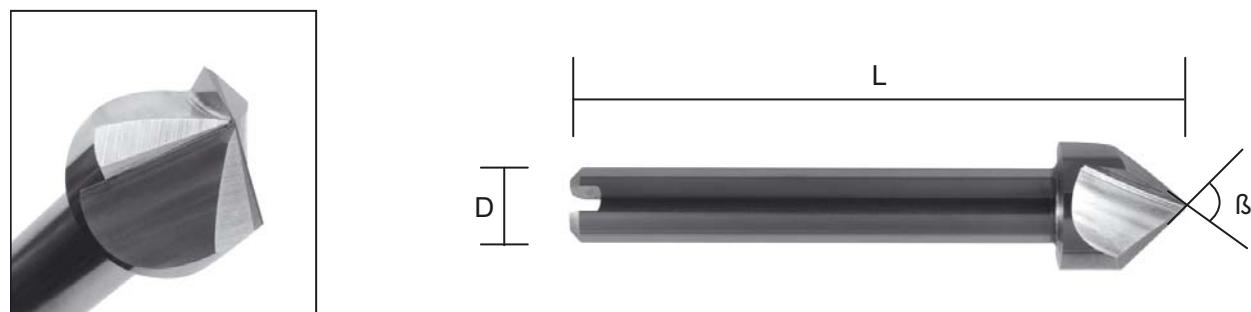
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	d (mm)	L (mm)	P (mm)	I (mm)	B	DENTI	LISTINO €
32.213.C00	D711542ZB	W213	Carbide	6.00	4.00	40.00	0.95	5.00	90°	2	102,92
32.315.C00	D742300ZB	W315	Carbide	6.00	3.00	40.00	0.65	4.50	90°	2	80,20
32.320.C00	D743675ZB	W320	Carbide	6.00	3.00	40.00	0.65	5.00	120°	2	102,92

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

**TO IMPROVE THE PERFORMANCE OF YOUR TOOLS**, all of these tools could be coated adding the code **J B N V** as explained on page 5 and 6. Check the net extra cost on page 7

**Fresa cilindrica W, 2 denti, con tacca***End milling cutter W, 2 dents, with slot*

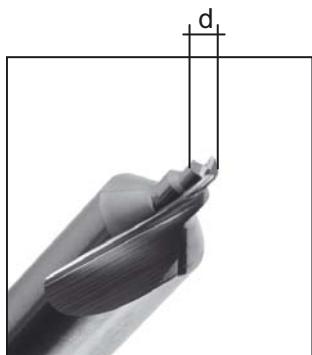
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	I (mm)	DENTI	LISTINO €
32.261.C00	D721116ZB	W261	Carbide	6.00	48.00	1.50	1.10	2	102,92

**Fresa cilindrica W, 3 denti, con tacca***End milling cutter W, 3 dents, with slot*

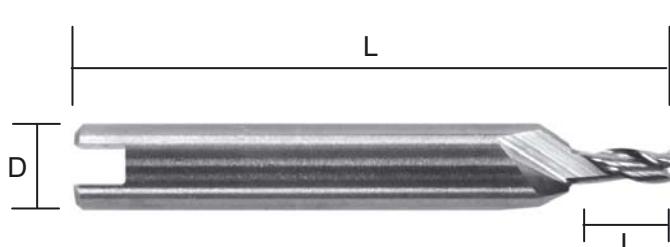
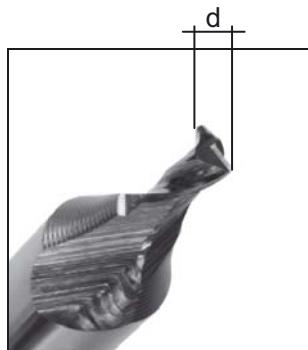
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	β	DENTI	LISTINO €
33.121.C00	D710177ZB	W121	Carbide	6.00	48.00	86°	3	138,00

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

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**Fresa cilindrica W, 2 denti, con tacca***End milling cutter W, 2 dents, with slot*

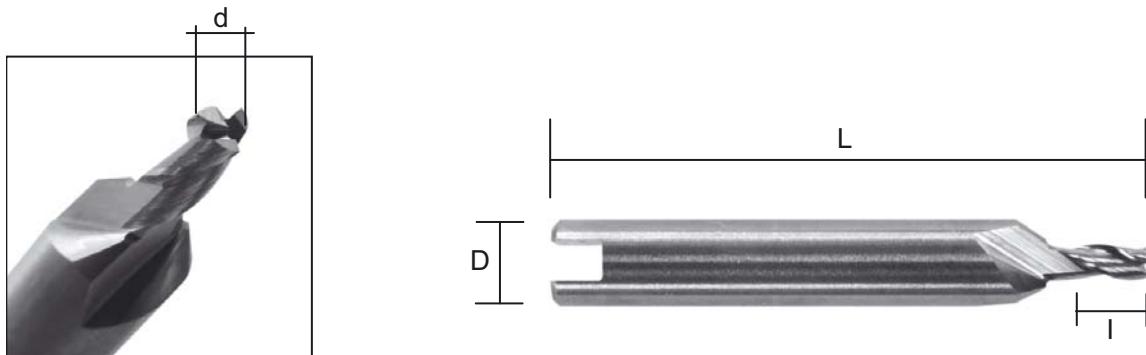
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	DENTI	LISTINO €
32.265.C00	D722000ZB	W265	Carbide	6.00	2.00	40.00	3.00	2	74,38
32.306.C00	D738450ZB	W306	Carbide	6.00	2.60	40.00	3.00	2	74,38

**Fresa cilindrica W, 2 denti, con tacca***End milling cutter W, 2 dents, with slot*

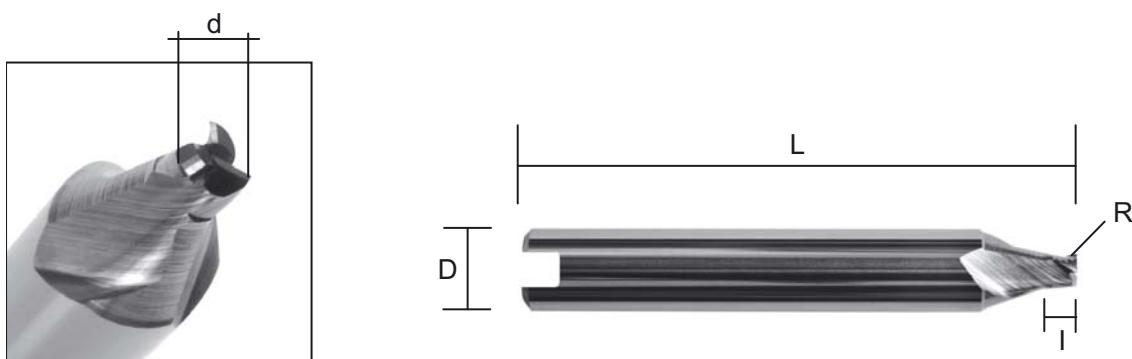
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	DENTI	LISTINO €
32.148.C00	D735439ZB	W148	Carbide	6.00	1.52	40.00	1.50	2	79,24
33.050.C00	D712374ZB	W219	Carbide	6.00	1.28	40.00	2.00	2	79,24
32.268.C00	D717483ZB	W268	Carbide	6.00	1.50	40.00	3.00	2	79,24
32.285.C00	D729942ZB	W285	Carbide	6.00	2.30	40.00	3.00	2	79,24
32.305.C00	D738391ZB	W305	Carbide	6.00	1.30	40.00	3.00	2	79,24

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

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**Fresa cilindrica W, 3 denti, con tacca***End milling cutter W, 3 dents, with slot*

ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	DENTI	LISTINO €
33.014.C00	D709238ZB	W101	Carbide	6.00	2.50	40.00	6.00	3	79,30
33.016.C00	D709482ZB	W114	Carbide	6.00	2.00	40.00	6.00	3	79,30
33.015.C00	D711604ZB	W129	Carbide	6.00	3.00	40.00	6.00	3	79,30
33.017.C00	D712633ZB	W131	Carbide	6.00	6.00	40.00	5.00	3	79,30
33.134.C00	D723062ZB	W134	Carbide	6.00	4.00	40.00	7.00	3	79,30
33.186.C00	D7A0775ZB	W186	Carbide	6.00	4.00	42.00	6.00	3	78,50
33.202.C00	D709362ZB	W202	Carbide	6.00	3.50	48.00	6.00	3	79,30
33.051.C00	D714087ZB	W235	Carbide	6.00	1.10	40.00	2.00	3	79,30
33.260.C00	D717658ZB	W260	Carbide	6.00	4.00	48.00	15.00	3	79,30
33.292.C00	D734217ZB	W292	Carbide	6.00	4.90	40.00	5.00	3	106,20
33.313.C00	D741452ZB	W313	Carbide	6.00	2.90	48.00	2.00	3	106,20
33.334.C00	D747909ZB	W334	Carbide	6.00	0.80	40.00	3.00	3	84,22

**Fresa cilindrica W, 3 denti, con tacca e raggi***End milling cutter W, 3 teeth, with slot & radius*

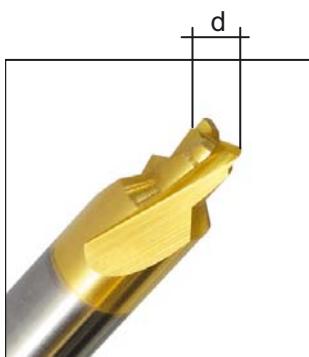
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	d (mm)	L (mm)	R (mm)	I (mm)	DENTI	LISTINO €
33.133.C00	D715168ZB	W133	Carbide	6.00	1.50	40.00	1.00	2.00	3	86,62

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

**TO IMPROVE THE PERFORMANCE OF YOUR TOOLS**, all of these tools could be coated adding the code **J B N V** as explained on page 5 and 6. Check the net extra cost on page 7

**Fresa cilindrica W, 3 denti, con tacca***End milling cutter W, 3 dents, with slot*

ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	DENTI	LISTINO €
33.177.C00	D751043ZB	W177	Carbide	6.00	1.87	40.00	3.12	3	160,48
33.210.C00	D711023ZB	W210 - W326	Carbide	6.00	3.10, 3.60	40.00	5.00	3	111,70
33.271.C00	D755076ZB	W271	Carbide	6.00	3.00	40.00	4.00	3	150,52
33.272.C00	D725622ZB	W272	Carbide	6.00	2.75-3.80	40.00	6.00	3	111,70
33.273.C00	D726008ZB	W273	Carbide	6.00	3.00	40.00	3.20	3	138,60
33.282.C00	D729141ZB	W282	Carbide	6.00	2.70	40.00	4.00	3	150,52
32.302.C00	D737688ZB	W302	Carbide	6.00	2.00	40.00	3.50	2	111,70

**Fresa cilindrica W, 3 denti, con tacca + trattamento TiN***End milling cutter W, 3 teeth, with slot + TiN coat.*

ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	DENTI	LISTINO €
33.210.C00.J	D711023ZB	W326	Carbide	6.00	1,28	40.00	2.00	3	131,57

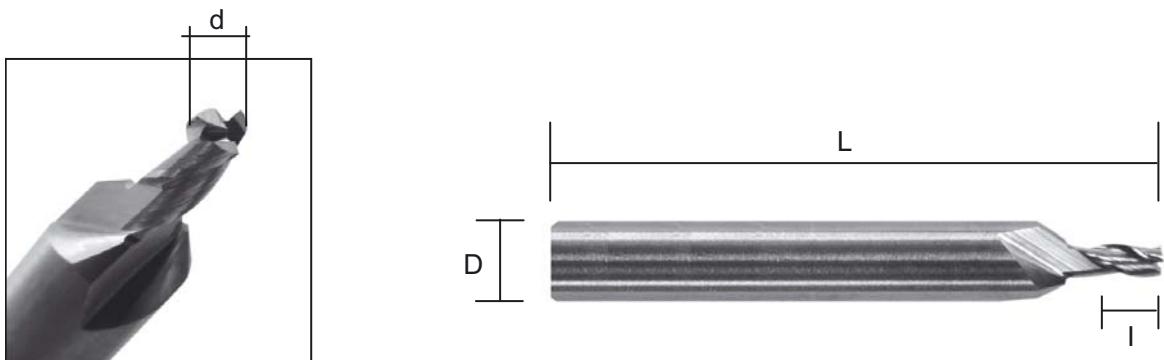
**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato

aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

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## Fresa cilindrica W, 3 denti

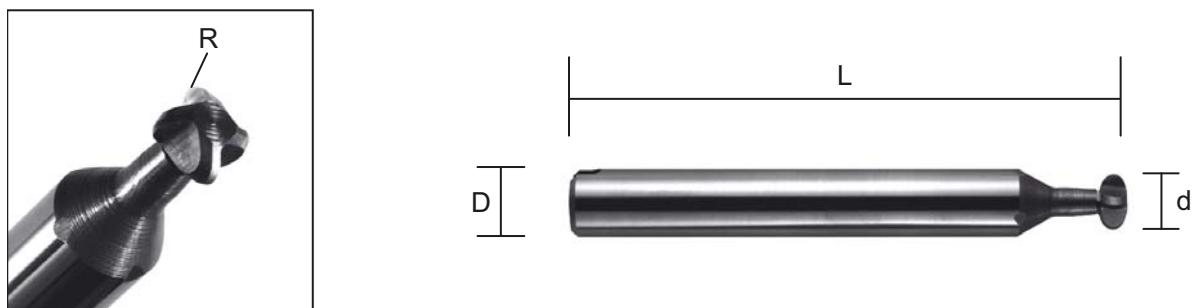
*End milling cutter W, 3 teeth*



ARTICOLO	REF. SILCA	TIPO	TIPO	D (mm)	d (mm)	L (mm)	I (mm)	DENTI	LISTINO €
33.207.C00	D710838ZB	W207	Carbide	6.00	1.60	48.00	2	3	78,54

## Fresa cilindrica W, 4 denti, con tacca

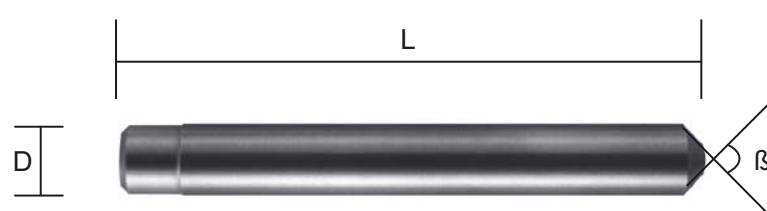
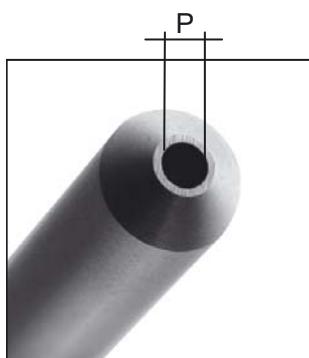
*End milling cutter W, 4 dents, with slot*



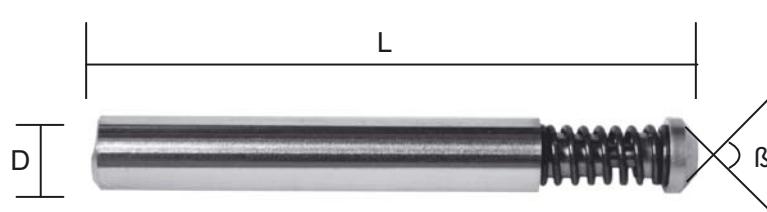
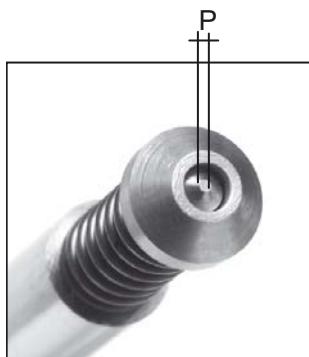
ARTICOLO	REF. SILCA	TIPO	D (mm)	d (mm)	L (mm)	R (mm)	DENTI	LISTINO €
34.117.C00	D710042ZB	W117	6.00	3.10, 3.60	40.00	5.00	3	304,74

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

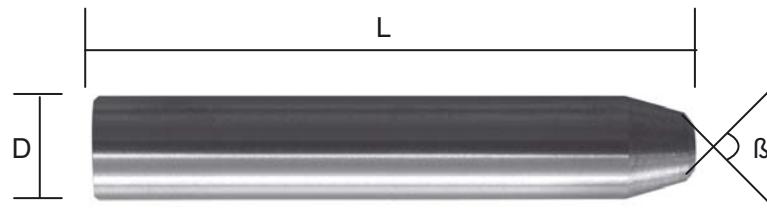
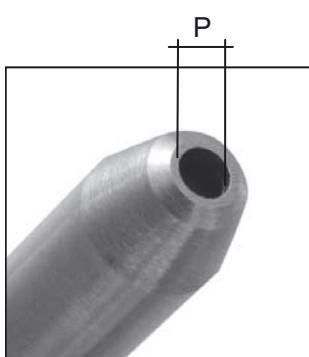
**TO IMPROVE THE PERFORMANCE OF YOUR TOOLS**, all of these tools could be coated adding the code **J B N V** as explained on page 5 and 6. Check the net extra cost on page 7

**Tastatore***Tracer point*

ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	B	LISTINO €
60.107.H30	D401082RA	T7	HSS M35	6.00	4.00	48.00	0.80	70°	32,84

**Tastatore***Tracer point*

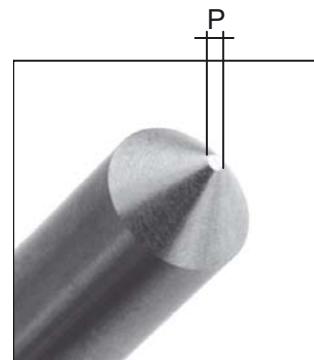
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	B	LISTINO €
60.120.H30	D501090ZM	T12A	HSS M35	6.00	48.00	0.55	98°	45,00

**Tastatore***Tracer point*

ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	B	LISTINO €
60.121.H30	D401092RA	T12B	HSS M35	6.00	48.00	2.00	98°	32,84

## Tastatore

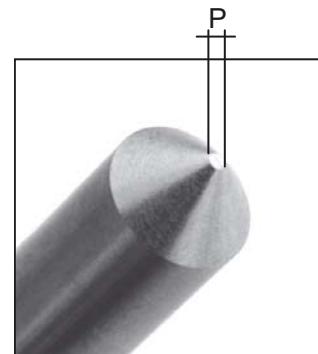
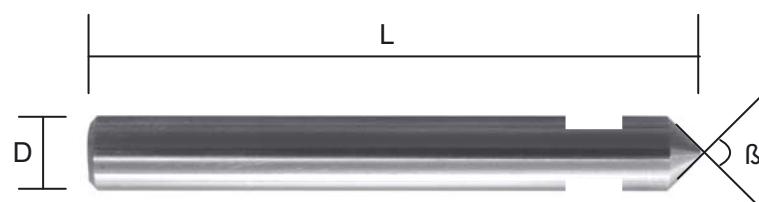
Tracer point



ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	B	LISTINO €
60.100.H30	D401070RA	T1	HSS M35	6.00	48.00	0.65	88°	39.90
60.140.H30	D740343ZB	T14	HSS M35	6.00	48.00	0.45	88°	39.90
60.200.H30	D401155RA	T20	HSS M35	6.00	48.00	0.45	88°	39.90
60.240.H30	D740353ZB	T24	HSS M35	6.00	48.00	0.80	100°	39.90
60.206.H30	D905654ZR	T26	HSS M35	6.00	48.00	0.80	80°	39.90
60.227.H30	D905656ZR	T27	HSS M35	6.00	48.00	0.80	60°	39.90
60.280.H30	D740357ZB	T28	HSS M35	6.00	48.00	0.76	74°	39.90
60.333.H30		T33	HSS M35	6.00	48.00	1.40	48°	39.90
60.334.H30		T34	HSS M35	6.00	48.00	1.40	48°	39.90
60.439.H30	D740367ZB	T39	HSS M35	6.00	48.00	1.00	90°	39.90
60.400.H30	D740369ZB	T40	HSS M35	6.00	48.00	0.40	108°	39.90
60.420.H30	D908799ZR	T42	HSS M35	6.00	48.00	0.70	98°	39.90
60.159.H30	D740388ZB	T59	HSS M35	6.00	48.00	0.80	90°	39.90

## Tastatore

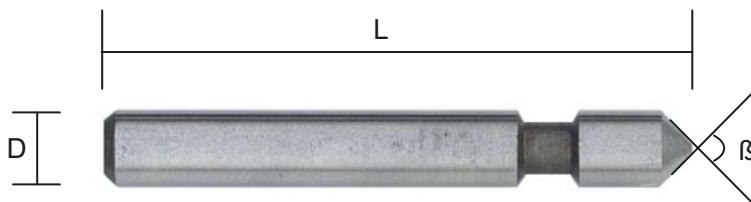
Tracer point



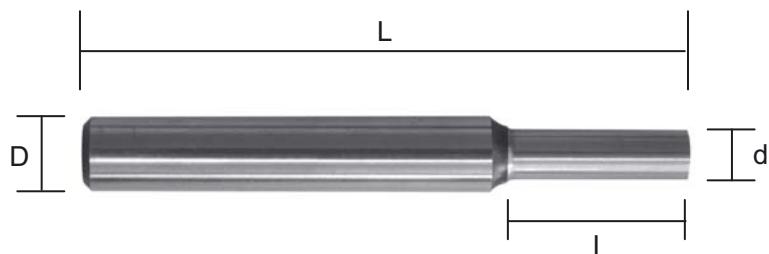
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	B	LISTINO €
60.104.H3R	D740368ZB	T4	HSS M35	6.00	48.00	0.40	88°	39.90
60.105.H3R	D740378ZB	T5	HSS M35	6.00	48.00	0.90	86°	39.90
60.106.H3R	D740389ZB	T6	HSS M35	6.00	48.00	1.00	104°	39.90
60.420.H3R	D740370ZB	T42	HSS M35	6.00	48.00	0.70	98°	39.90

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

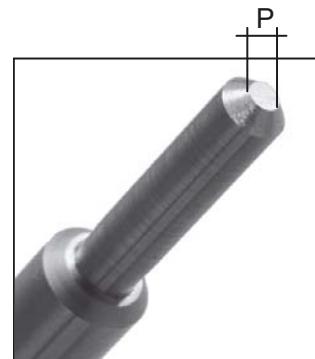
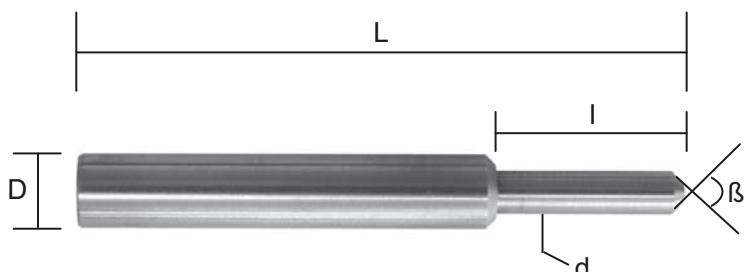
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**Tastatore***Tracer point*

ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	β	LISTINO €
60.150.H30	D740344ZB	T15	HSS M35	6.00	48.00	0.80	88°	31,00
60.290.H30	D740431ZB	T29	HSS 35	6.00	48.00	0.76	76°	31,00
60.340.H30	D740665ZB	T34	HSS M35	6.00	48.00	1.50	48°	31,00
60.467.H30	D740396ZB	T67	HSS M35	6.00	48.00			31,00
60.447.H30	D740375ZB	T47	HSS M35	6.00	48.00	0.50	86°	31,00
60.449.H30	D740377ZB	T49	HSS M35	6.00	48.00	0.75	93°	31,00
60.170.H30	D740342ZB	T70	HSS M35	6.00	48.00			31,00

**Tastatore con 2 diametri***Tracer point with 2 diameters*

ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	LISTINO €
60.303.H30	D943910ZR	O3T	HSS M35	6.00	1.00	30.00	6.00	32,84
61.080.H30		SPE125	HSS M35	6.00	1.25	48.00	3.00	32,84
60.103.H30	D401074RA	T3	HSS M35	6.00	1.50	48.00	3.00	32,84
60.108.H30	D401084RA	T8	HSS M35	6.00	4.00	48.00	12.00	32,84
60.111.H30	D401088RA	T11	HSS M35	6.00	2.50	48.00	6.00	32,84
60.122.H30	D405487RA	T22	HSS M35	6.00	2.50	42.00	6.00	32,84
60.130.H30	D401159RA	T30	HSS M35	6.00	3.00	48.00	10.00	32,84
60.131.H30		T30-45	HSS M35	6.00	3.00	45.00	10.00	32,84
60.202.H30	D409147RA	T44	HSS M35	6.00	2.00	48.00	8.00	32,84
60.203.H30		T44-45	HSS M35	6.00	2.00	45.00	8.00	32,84
60.322.H30		T101	HSS M35	6.00	2.50	40.00	6.00	32,84
60.330.H30		T129	HSS M35	6.00	3.00	40.00	10.00	32,84
60.332.H30		T219	HSS M35	6.00	1.22	40.00	2.00	32,84
60.414.C00	D740991ZB	U113	Carbide	6.00	1.00	39.55	6.00	32,84
60.413.C00	D740815ZB	U113DC	Carbide	4.00	1.00	21.00	6.00	32,84

**Tastatore con 2 diametri***Tracer point with 2 diameters*

ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	d (mm)	L (mm)	P (mm)	I (mm)	B	LISTINO €
60.102.H30	D401072RA	T2	HSS M35	6.00	3.50	48.00	1.60	5.00	88°	32,84
60.104.H30	D401076RA	T4	HSS M35	6.00	4.00	48.00	0.40	15.00	88°	32,84
60.105.H30	D401078RA	T5	HSS M35	6.00	4.00	48.00	0.90	15.00	86°	32,84
60.106.H30	D401080RA	T6	HSS M35	6.00	4.00	48.00	1.00	15.00	104°	32,84
60.113.H30	D402098RA	T13	HSS M35	6.00	4.00	48.00	0.77	15.00	86°	32,84
60.119.H30	D740348ZB	T19	HSS M35	6.00	2.20	48.00	0.60	6.00	88°	32,84
60.221.H30	D405113RA	T21	HSS M35	6.00	3.20	48.00	0.80	6.00	83°	32,84
60.125.H30	D401157RA	T25	HSS M35	6.00	3.50	48.00	0.65	10.00	88°	32,84
60.430.H30	D908987ZR	T43	HSS M35	6.00	2.30	48.00	1.00	6.00	88°	32,84
60.452.H30	D711434ZB	T52	HSS M35	6.00	2.00	48.00	0.75	4.00	52°	32,84
60.163.H30	D726403ZB	T63	HSS M35	6.00	3.00	48.00	0.50	4.00	78°	32,84
60.165.H30	D729460ZB	T65	HSS M35	6.00	0.00	48.00	1.05	5.00	90°	32,84
60.101.H30	D942565ZB - D942565ZR	01T	HSS M35	4.00	1.00	20.00	1.00	7.00	90°	32,84
60.099.H30	D742566ZB - D942866ZB	02T	HSS M35	6.00	1.00	30.00	0.20	6.00	90°	32,84
60.094.H30	D946383ZR	04TT	HSS M35	6.00	1.00	26.00	0.20	7.00	90°	30,00
60.095.H30	D745913ZB	05T	HSS M35	6.00	0.60	30.00	0.20	2.50	90°	32,84
60.306.H30	D953489ZR	06T	HSS M35	6.00	0.20	30.00	0.20	7.50	90°	30,00
60.307.H30	D953488ZR	07T	HSS M35	4.00	0.20	21.00	0.20	7.50	90°	30,00

**Tastatore***Tracer point*

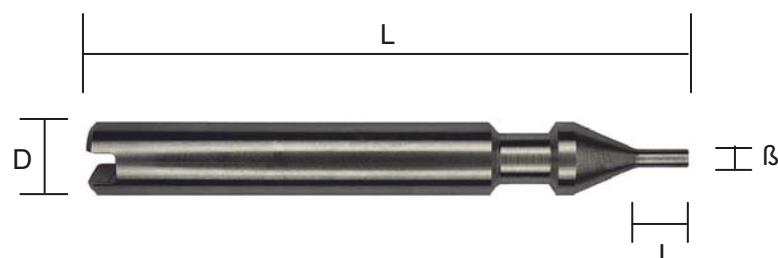
ARTICOLO	REF. SILCA	TIPO	D (mm)	d (mm)	L (mm)	LISTINO €
60.126.H30	D740352ZB	HSS M35	6.00	1.50	48.00	31,00

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

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## Tastatore con 2 diametri

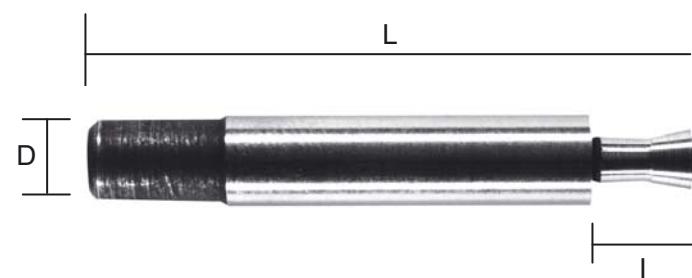
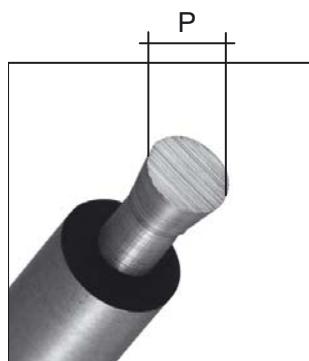
Tracer point with 2 diameters



ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	LISTINO €
60.103.H3R	D740359ZB	T3	HSS M35	6.00	1.50	48.00	3.00	29,90

## Tastatore con 2 diametri

Tracer point with 2 diameters



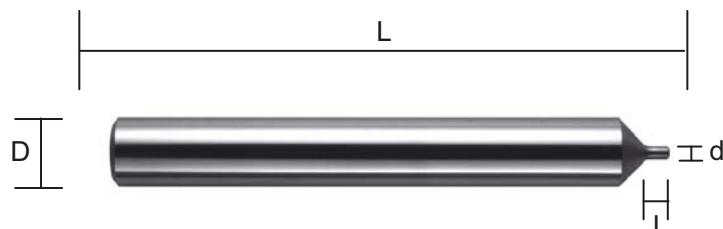
ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	L (mm)	P (mm)	I (mm)	LISTINO €
60.054.H30	D911366ZB	T54	HSS M35	6.00	40.00	4.00	6.5	36,76

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## Tastatore con 2 diametri

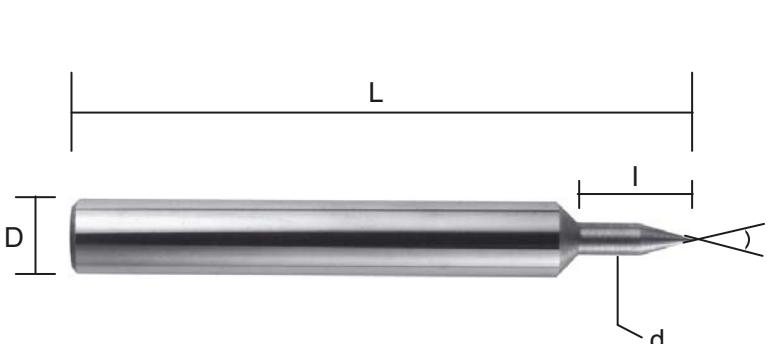
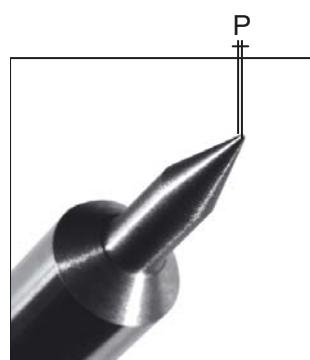
Tracer point with 2 diameters



ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	LISTINO €
60.140.COO	D909076ZR	U101	Carbide	6.00	1.20	48.00	3.00	39,90
60.139.COO	D735284ZB - D7221057B	U101L U110-A	Carbide	6.00	1.20	43.00	6.00	39,90
60.143.COO		U103	Carbide	6.00	1.00	48.00	3.00	39,90
60.603.COO			Carbide	6.00	0.50	40.00	3.00	39,90
60.454.COO	D929921ZR	U111	Carbide	6.00	1.00	40.00	2.20	39,90
60.455.COO	D917259ZR	U103TT	Carbide	4.00	1.00	21.00	3.00	39,90

## Tastatore con 2 diametri

Tracer point with 2 diameters

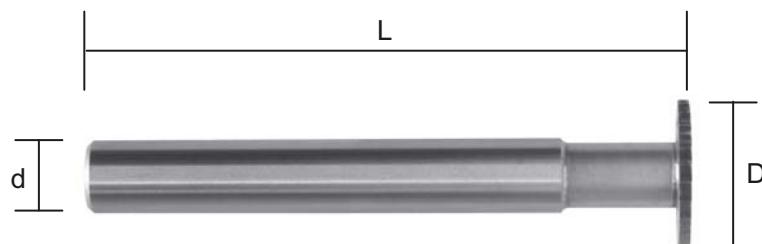


ARTICOLO	REF. SILCA	TIPO	MAT.	D (mm)	d (mm)	L (mm)	P (mm)	I (mm)	B	LISTINO €
60.141.COO	D908994ZR	U102	Carbide	6.00	2.60	48.00	0.20	9.00	30°	39,80
60.142.COO	D917260ZR	U102TT	Carbide	4.00	2.00	26.00	0.20	6.00	30°	39,80
60.144.COO	D736166ZB	U112	Carbide	6.00	2.60	40.00	0.20	9.00	30°	39,80

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato

aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

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**Fresa a coda di rondine***Dovetail cutter*

<b>ARTICOLO</b>	<b>REF. SILCA</b>	<b>TIPO</b>	<b>MAT.</b>	<b>D (mm)</b>	<b>d (mm)</b>	<b>L (mm)</b>	<b>DENTI</b>	<b>LISTINO €</b>
<b>90.024.H30</b>	<b>D701087ZB</b>	<b>F10</b>	HSS M35	10.00	6.00	48.00	24	44,56
<b>90.025.H30</b>	<b>D706270ZB</b>	<b>F36</b>	HSS M35	12.00	6.00	48.00	24	44,56
<b>90.025.C00</b>		<b>F36-CA</b>	Carbide	12.00	6.00	48.00	16	136,32

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

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# FOS-Excellence.<sup>®</sup>

The first line

## KEYLINE \*



### **Frese bi-coniche**

*Milling Cutter*

54



### **Fresa piatta con intagli laterali**

*Face and side milling cutter*

56



### **Fresa piatta**

*Flat slotter*

57



### **Fresa cilindrica**

*End milling cutter*

59



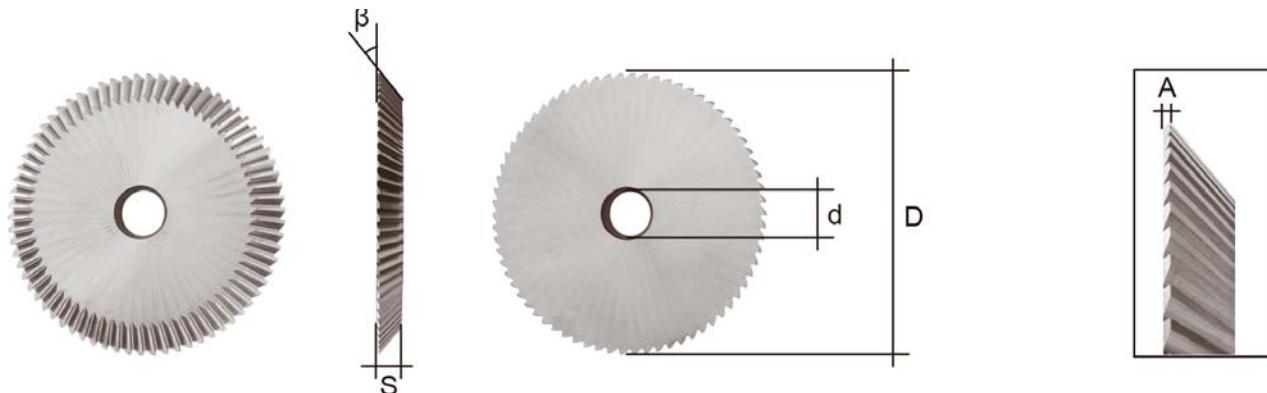
### **Tastatore**

*Tracer point*

64

## Fresa bi-conica

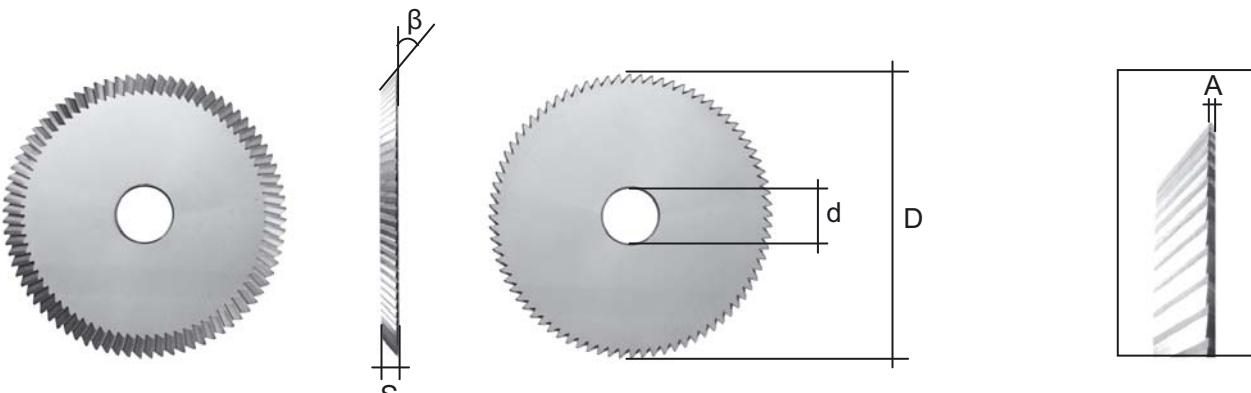
Milling cutter



ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	S (mm)	d (mm)	A (mm)	B	DENTI	LISTINO €
16.504.C00	RIC01764B	WPU01	Carbide	60.40	5.25	9.53	0.50	80°	70	332,56
16.033.H30	RIC04298B	HPP21	HSS M35	60.40	5.25	9.53	0.50	84°	70	97,88

## Fresa bi-conica

Milling cutter



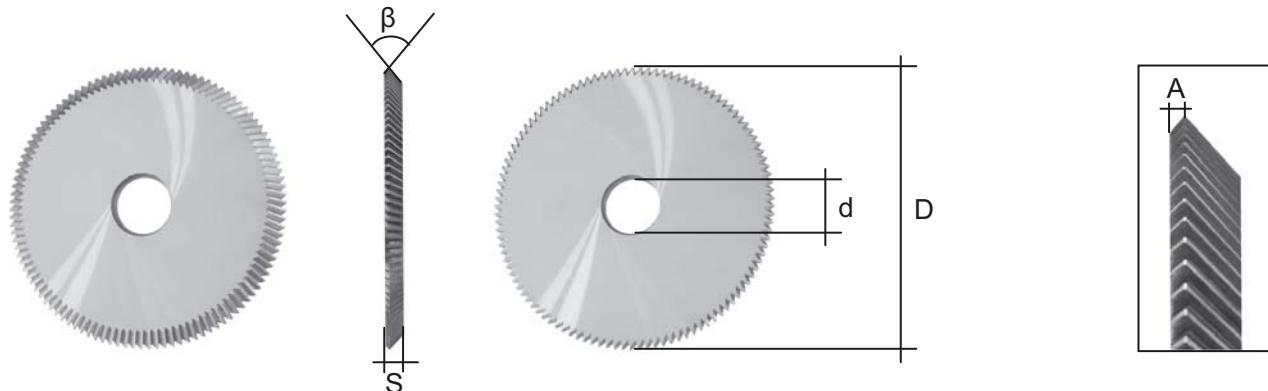
ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	S (mm)	d (mm)	B	DENTI	LISTINO €
18.504.C00	RIC08143B	F01	Carbide	80.00	5.00	16.00	80°	50	382,00
18.505.C00	RIC08213B	F02	Carbide	80.00	5.00	16.00	80°	50	382,00

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## Fresa bi-conica

Milling cutter



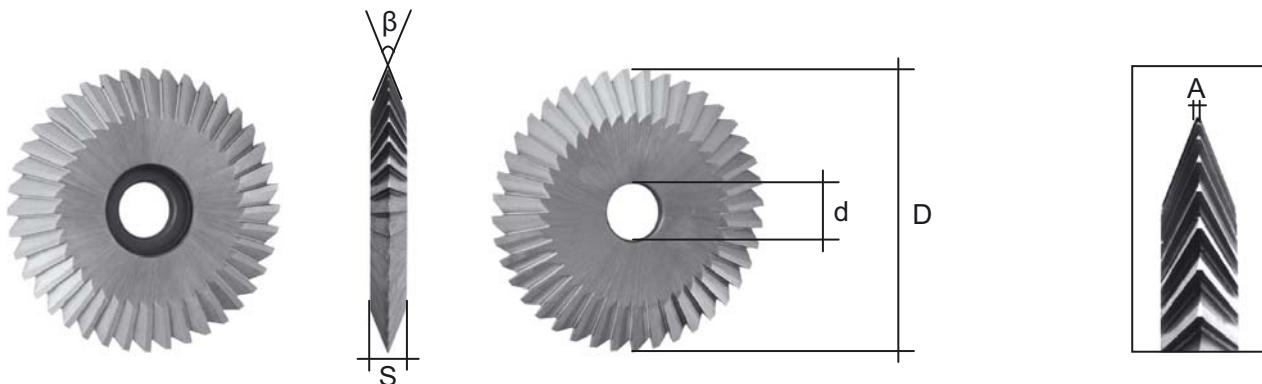
ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	S (mm)	d (mm)	A (mm)	β	DENTI	LISTINO €
16.019.H30	RIC01721B	HP005	HSS M35	63.00	5.00	16.00	1.00	84°	80	79,80
16.017.H30	RIC09167B	HP034	HSS M35	63.00	5.00	16.00	0.15	70°	80	79,80
16.018.H30	RIC02102B	HP005S	HSS M35	63.00	5.00	16.00	1.25	80°	80	79,80
17.050.H30	RIC01969B	HP031	HSS M35	75.00	5.00	10.00	1.00	84°	100	79,80
17.050.H40	RIC01969B	HP031	ASP 30	75.00	5.00	10.00	1.00	84°	110	79,80
18.070.H30	RIC01720B	HPP01	HSS M35	80.00	5.00	16.00	1.25	84°	110	79,80
18.008.H30	RIC02098B	HPP01S	HSS M35	80.00	5.00	16.00	1.00	80°	110	79,80
18.039.H30	RIC05808B	HPP032	HSS M35	80.00	5.00	16.00	0.50	80°	110	79,80
16.017.C00	RIC09168B	WP034	Carbide	63.00	5.00	16.00	0.50	70°	80	322,56
16.017.C00.Z40	RIC09234B	WP034B	Carbide	63.00	5.00	16.00	0.50	70°	40	322,56
18.038.C00	RIC05826B	WPP032	Carbide	80.00	5.00	16.00	0.50	80°	110	322,56
18.070.C00	RIC01717B	WPP01	Carbide	80.00	5.00	16.00	1.25	84°	110	322,56

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

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## Fresa bi-conica

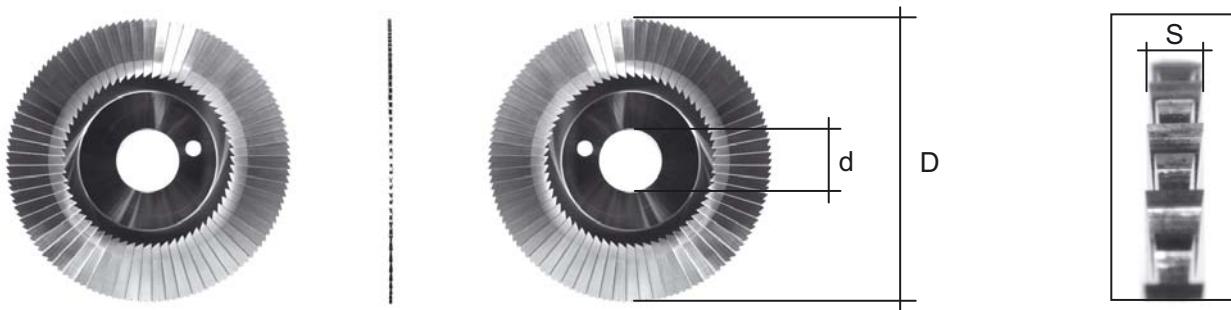
Milling cutter



ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	S (mm)	d (mm)	A (mm)	B	DENTI	LISTINO €
14.301.C00	RIC01826B	WPP24	Carbide	40.00	6.00	10.00	0.10	35/22.5°	40	159,44

## Fresa piatta con intagli laterali

Face and side milling cutter



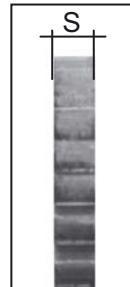
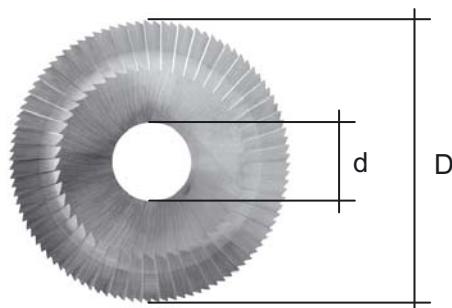
ARTICOLO	MAT.	D (mm)	S (mm)	d (mm)	DENTI	LISTINO €
21.503.C00	Carbide	100.00	1.25	22.00	100	382,12

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

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## Fresa piatta con intagli laterali

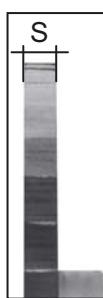
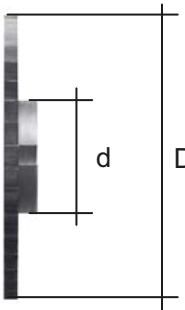
Face and side milling cutter



ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	S (mm)	d (mm)	DENTI	LISTINO €
26.035.H30	RIC02133B	HSSG35	HSS M42	63.00	1.25	16.00	80	86,06
26.140.H10	FR57041	HS020	HSS M42	63.00	1.40	16.00	80	86,06
28.701.H10.K	RIC04297B	HSSG3	HSS M42	80.00	1.00	22.00	100	86,06
28.002.H10.K	RIC01864B	HSSG6	HSS M42	80.00	1.30	22.00	100	86,06
28.103.H10.K	RIC04296B	HSSG39	HSS M42	80.00	1.25	22.00	100	86,06
28.003.H10.K	RIC01872B	HSSG2	HSS M42	80.00	1.50	22.00	100	86,06
28.103.C00			Carbide	80.00	1.25	22.00	100	227,20

## Fresa piatta

Flat slotter



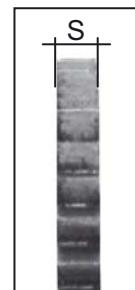
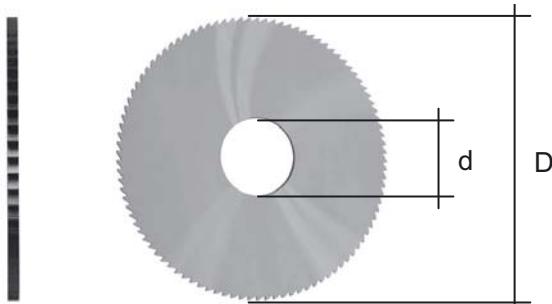
ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	S (mm)	d (mm)	DENTI	LISTINO €
52.524.H10	B401648LA	HSSG19	HSS M42	25.00	1.25	10.10	40	58,00

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

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**Fresa piatta**

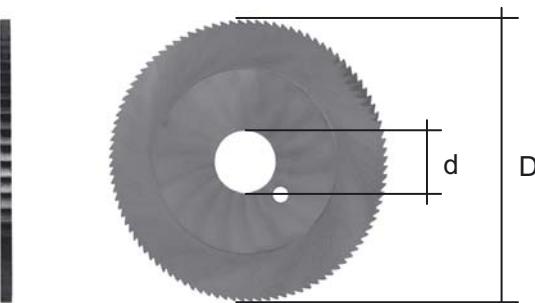
Flat slotter



ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	S (mm)	d (mm)	DENTI	LISTINO €
56.035.H10	RIC01733B	HSSG32	HSS M42	63.00	1.50	16.00	80	52,98
58.525.H10.K	RIC01857B	HSSG3	HSS M42	80.00	1.00	22.00	100	52,98
58.975.H10	RIC01866B	HSSG30	HSS M42	80.00	1.20	22.00	100	52,98
58.031.H30	RIC02663B	HSSG4	HSS M35	80.00	1.25	22.00	100	67,00
58.000.H10	RIC01858B	HSSG1	HSS M42	80.00	1.50	22.00	100	57,00
58.005.H10	RIC01868B	HSSG10	HSS M35	80.00	2.00	22.00	100	59,65
58.970.H10	RIC01870B	HSSG31	HSS M42	80.00	2.40	22.00	100	66,00
57.402.H10	RIC02961B	HSSG37	HSS M42	76.20	2.40	19.05	120	52,98
58.580.C00.K	RIC01856B	WSSG1	Carbide	80.00	1.50	22.00	100	200,00
56.100.C00	Bianchi 201		Carbide	63.00	1.00	16.00	80	166,00

**Fresa piatta**

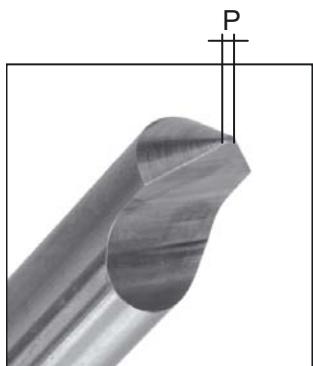
Flat slotter



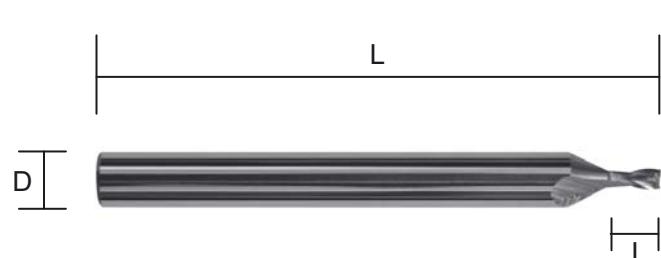
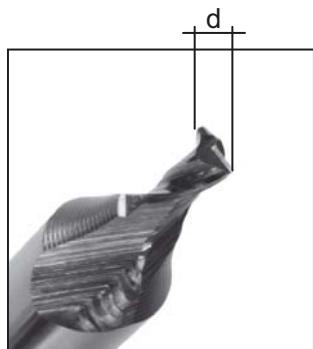
ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	S (mm)	d (mm)	DENTI	LISTINO €
51.502.C00.Z128	RIC03904B	WSPL1	Carbide	100	1.00	22.00	128	298,00
51.503.C00.Z128	RIC02865B	WSSG36	Carbide	100	1.25	22.00	128	298,00

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**Fresa cilindrica, 1 dente***End milling cutter, 1 tooth*

ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	L (mm)	P (mm)	B	LISTINO €
30.010.C00	RIC05050B	V000	Carbide	4.00	32.00	0.20	60°	71,00

**Fresa cilindrica, 2 denti***End milling cutter, 2 teeth*

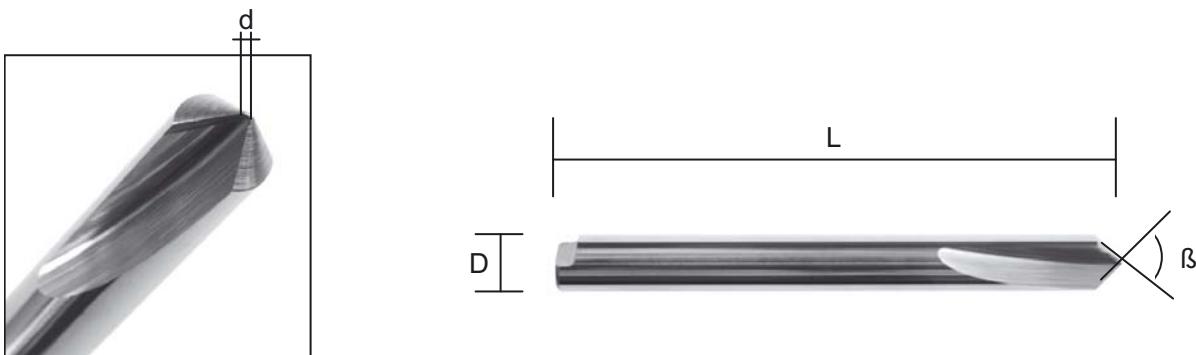
ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	DENTI	LISTINO €
32.011.H10	RIC01810B	HC011	HSS M35	6.00	2.50	45.00	5.00	2	46,60
32.330.H30	RIC08491B	HC130	HSS M35	6.00	1.30	45.00	4.00	2	54,00
32.612.C00.N	RIC05274B	V012	Carbide	4.00	1.50	33.00	3.50	2	94,44
32.620.C00	RIC06102B	V020	Carbide	4.00	1.28	32.00	2.00	2	94,44
32.635.C00.N	RIC07782B	V035	Carbide	4.00	1.10	32.00		2	128,80

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## Fresa cilindrica, 2 denti

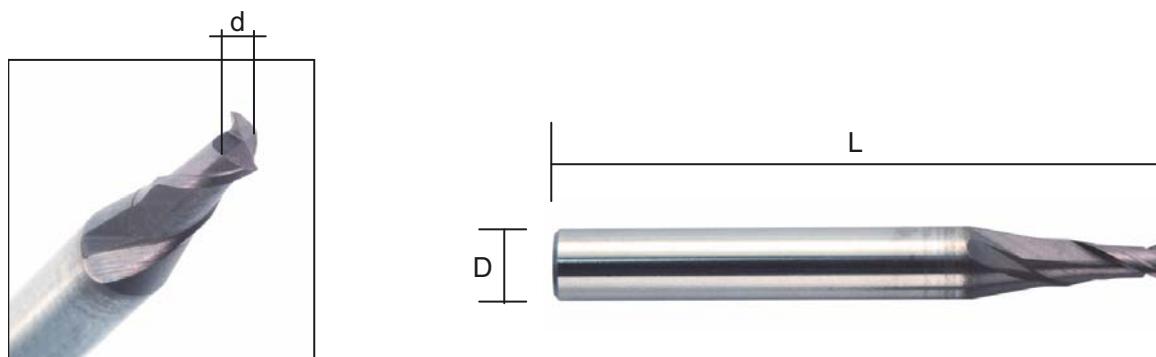
*End milling cutter, 2 teeth*



ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	d (mm)	L (mm)	$\beta$	DENTI	LISTINO €
32.601.C00	RIC05044B	V001	Carbide	4.00	0.40	32.00	90°	2	112,03
32.606.C00	RIC05262B	V006	Carbide	4.00	0.40	32.00	96°	2	112,03
32.610.C00	RIC05270B	V010	Carbide	4.00	0.30	32.00	110°	2	112,03
32.611.C00	RIC05272B	V011	Carbide	4.00		32.00		2	112,03
32.613.C00	RIC05618B	V013	Carbide	4.00	0.70	32.00	90°	2	112,03
32.629.C00	RIC06409B	V029	Carbide	4.00	-	32.00	-	2	171,10
32.630.C00	RIC06732B	V030	Carbide	4.00	-	32.00	-	2	247,94
32.052.C00	RIC06581B	V052	Carbide	4.00	0.60	32.00	90°	2	92,43
32.654.C00	Keso	V054	Carbide	4.00	-	32.00	-	2	113,06
32.811.H30	RIC01791B	HB001	HSS M35	6.00	0.70	45.00	90°	2	39,50

## Fresa cilindrica, 2 denti + trattamento

*End milling cutter, 2 teeth + coating*



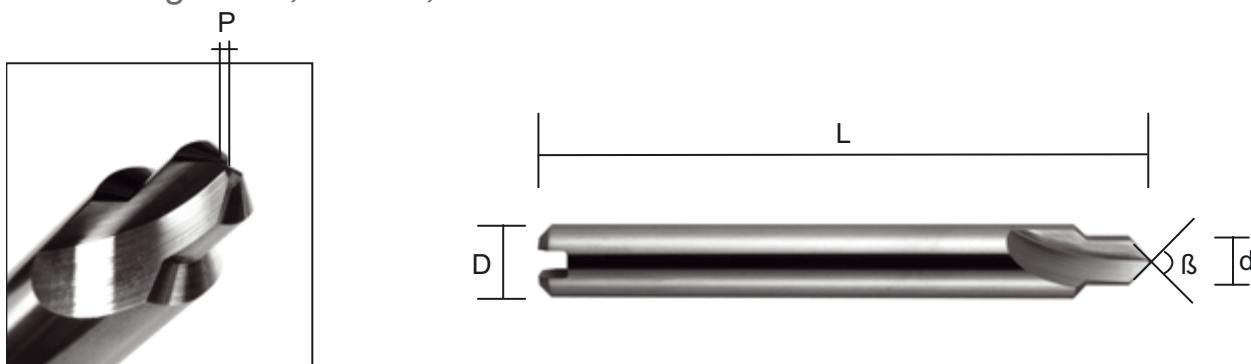
ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	d (mm)	L (mm)	DENTI	LISTINO €
32.002.C00.N	RIC05048B	V003	Carbide	4.00	2.50	32.00	2	110,26
32.637.C00.N	RIC07786B	V037	Carbide	4.00	2.00	32.10	2	110,26
32.643.C00.N	RIC09211B	V043	Carbide	4.00	1.60	32.00	2	110,26

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## Fresa cilindrica, 2 denti, 2 diametri

*End milling cutter, 2 teeth, 2 diameters*

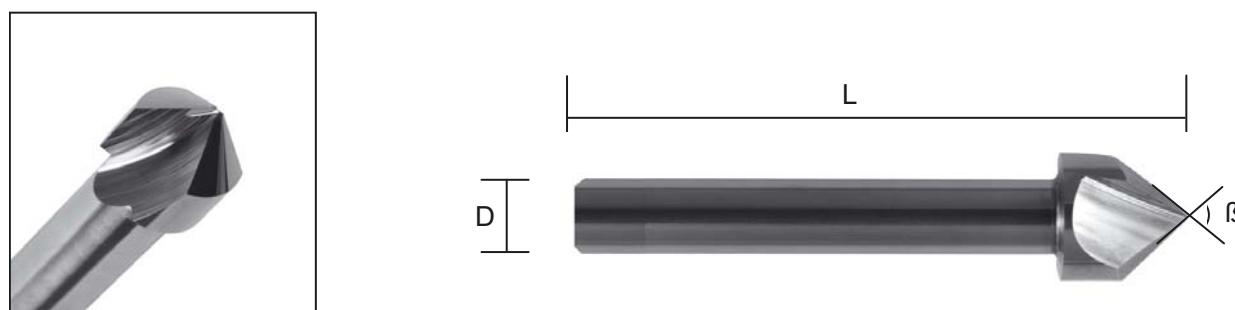


ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	d (mm)	L (mm)	β	DENTI	LISTINO €
32.604.C00	RIC05084B	V004	Carbide	4.00	3.90	32.00	82°	2	129,03
32.607.C00	RIC05264B	V007	Carbide	4.00	3.90	32.00	100°	2	129,03
32.008.C00	RIC05266B	V008	Carbide	4.00	3.90	32.00	104°	2	129,03
32.614.C00	RIC05612B	V014	Carbide	4.00	4.40	32.00	90°	2	129,03
32.621.C00	RIC06104B	V021	Carbide	4.00	3.20	32.00	90°	2	129,03
32.622.C00	RIC06368B	V022	Carbide	4.00	2.70	32.00	90°	2	129,03
32.625.C00	RIC06370B	V025	Carbide	4.00		30.00		2	129,03
32.027.C00	RIC06730B	V027	Carbide	4.00	4.00	32.50	100°	2	129,03
32.634.C00	RIC07726B	V034	Carbide	4.00	3.30	32.00	120°	2	129,03
32.636.C00	RIC07785B	V036	Carbide	4.00	3.90	32.00	90°	2	129,03
32.644.C00	RIC09442B	V044	Carbide	4.00	3.95	32.00	90°	2	129,03
32.645.C00	RIC09480B	V045	Carbide	4.00	3.20	32.00	104°	2	129,03
32.647.C00	RIC10290B	V047	Carbide	4.00	2.65	32.00	96°	2	129,03
32.653.C00	RIC10801B	V053	Carbide	4.00	-	32.00	-	2	129,03
32.770.C00	RIC11494B	V070	Carbide	4.00	-	32.00	-	2	129,03

## Fresa cilindrica, 2 denti

*End milling cutter, 2 teeth*

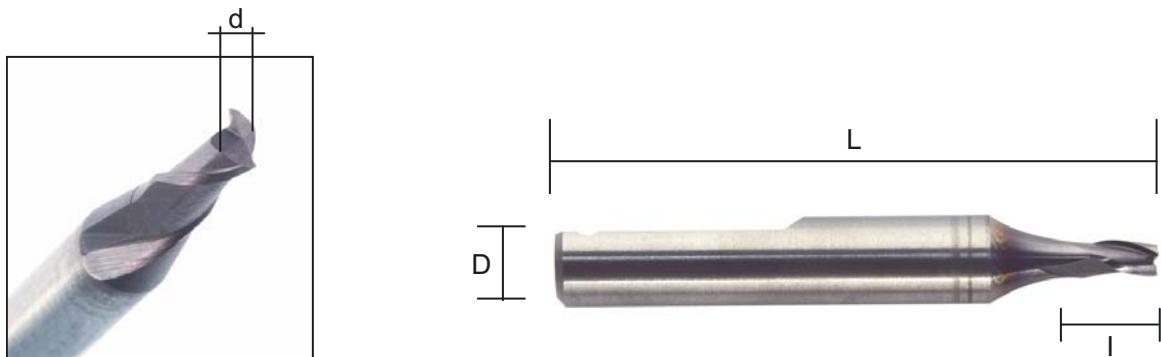
Stesso prezzo 129...



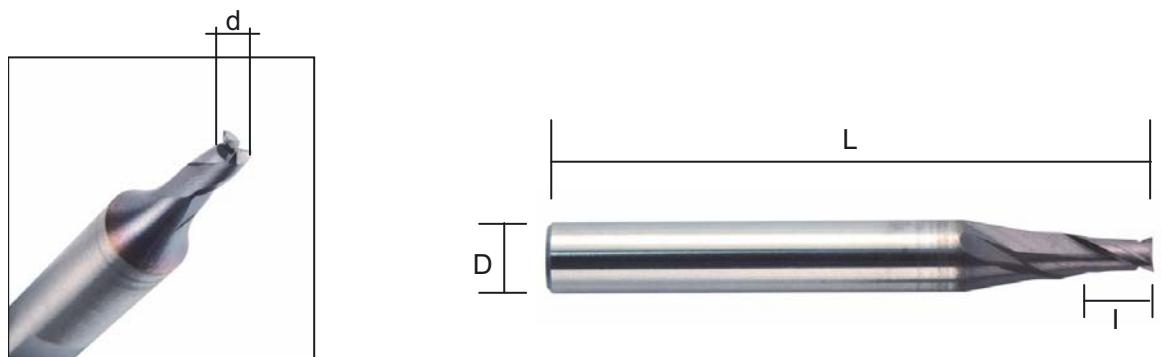
ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	L (mm)	β	DENTI	LISTINO €
32.639.C00	RIC08161B	V039	Carbide	4.00	32.00	94°	2	134,64

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**Fresa cilindrica, 2 denti + trattamento***End milling cutter, 2 teeth + coating*

ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	DENTI	LISTINO €
33.500.C00.V	03650	DC011A	Carbide	6.00	3.00	40.00	3.50	2	133,50

**Fresa cilindrica, 3 denti + trattamento***End milling cutter, 3 teeth + coating*

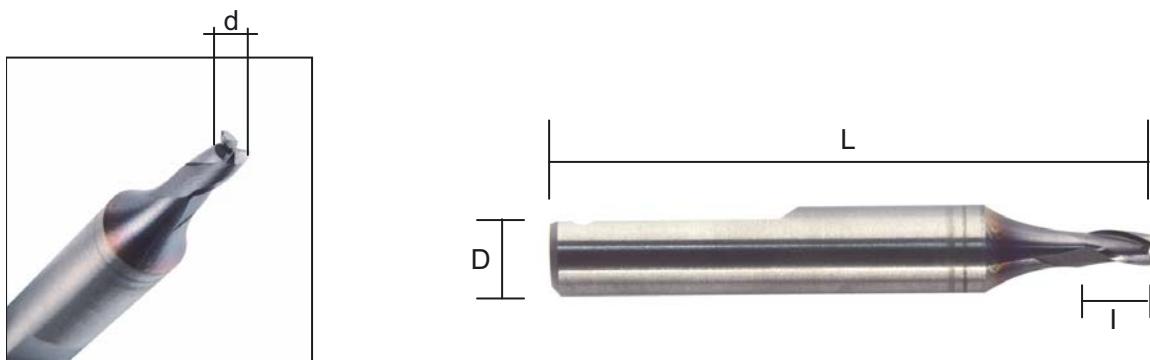
ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	d (mm)	L (mm)	DENTI	LISTINO €
32.602.C00.N	RIC05046B	V002	Carbide	4.00	3.00	32.00	3	110,26
32.617.C00.N	RIC05750B	V017	Carbide	4.00	-	33.00	3	251,38
32.631.C00.N	RIC06734B	V031	Carbide	4.00	1.85	32.00	3	91,00

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## Fresa cilindrica, 3 denti + trattamento

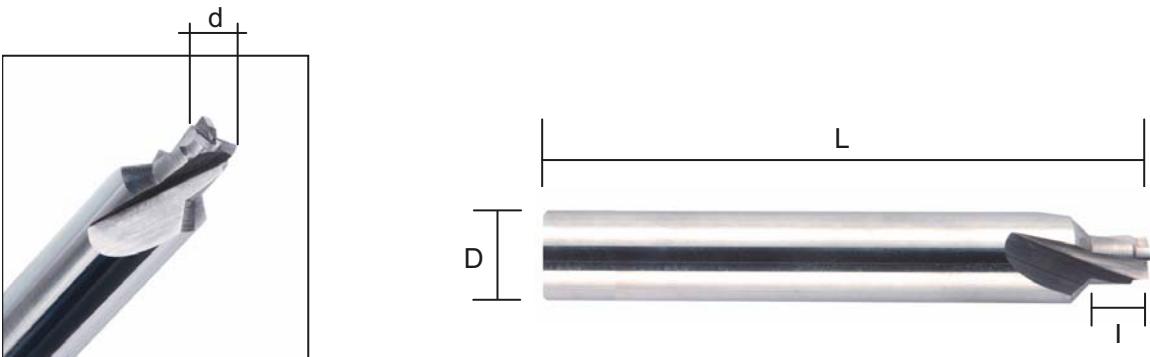
End milling cutter, 3 teeth + coating



ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	DENTI	LISTINO €
33.401.COO.V	RIC08409B	CL004 - B3403	Carbide	6.00	1.50	43.00	6.00	3	131,52
33.402.COO.B	RIC09617B	CL005 - B4403	Carbide	6.00	1.50	40.00	3.50	3	131,52
33.400.COO.V	RIC05304B	WC011A	Carbide	6.00	2.50	40.00	3.50	3	131,52

## Fresa cilindrica, 3 denti, trattamento

End milling cutter, 3 teeth, coating



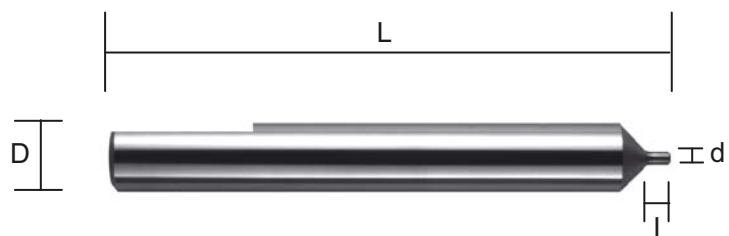
ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	d (mm)	L (mm)	DENTI	LISTINO €
33.115.COO.N	RIC05508B	V015	Carbide	4.00	3.08	32.00	3	109,67
33.160.COO.A	RIC05616B	V016	Carbide	4.00	2.30	32.00	3	109,67
33.123.COO.N	RIC06508B	V023	Carbide	4.00	2.26	32.00	3	109,67
33.633.COO.N	RIC07247B	V033	Carbide	4.00		32.00	3	138,00
34.055.COO.N	RIC11109B	V055	Carbide	4.00	2.50	32.00	4	190,00

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## Tastatore

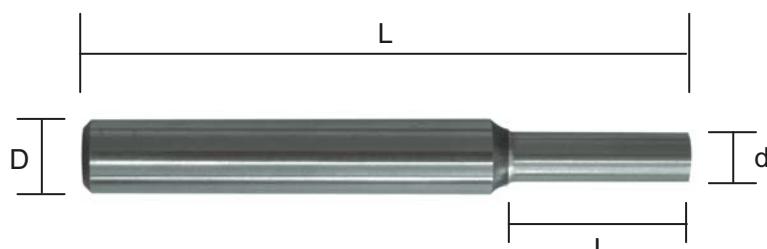
*Tracer point*



ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	LISTINO €
60.070.H30	RIC08410B	B3304	HSS M35	6.00	1.00	33.00	6.00	39,80
60.301.H30	RIC03300B	B3310	HSS M35	6.00	1.00	30.00	2.60	39,80
60.080.H30	RIC09483B	TL003	HSS M35	6.00	1.00	30.00	4.50	39,80

## Tastatore con 2 diametri

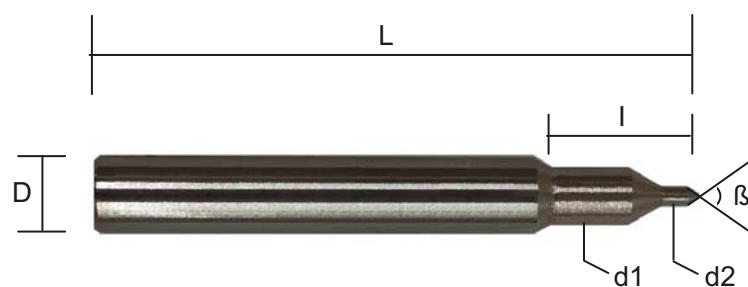
*Tracer point with 2 diameters*



ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	LISTINO €
60.906.H30	RIC05350B	T00	HSS M35	4.00	1.00	32.00	3.00	30,70
60.530.H30	RIC08492B	C130	HSS M35	6.00	1.30	45.00	3.00	30,70

## Tastatore con 2 diametri

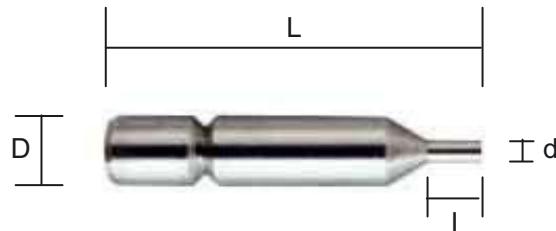
*Tracer point with 2 diameters*



ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	$\beta$	LISTINO €
60.905.H30	RIC06722B	T05	HSS M35	4.00	3.00/1.00	32.00	8.00	30°	30,70

## Tastatore

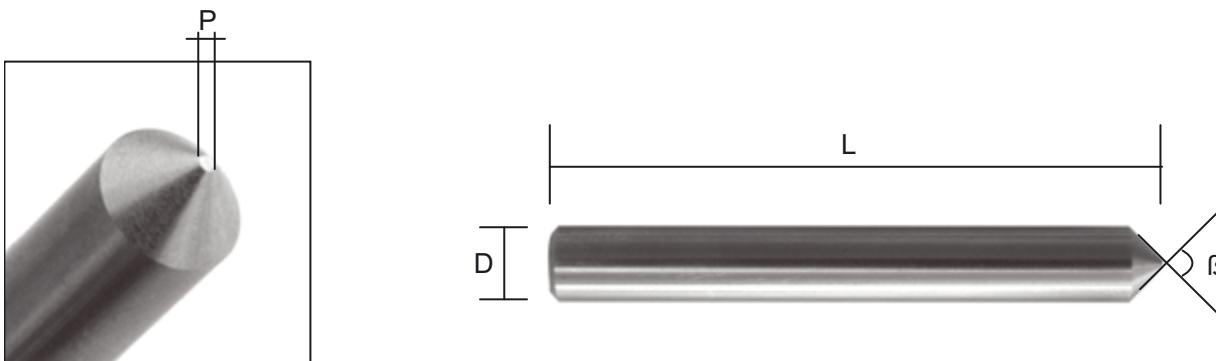
Tracer point



ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	LISTINO €
60.908.H30	RIC05348B	T01	HSS M35	3.00	1.00	15.80	2.00	42,00

## Tastatore

Tracer point



ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	d (mm)	L (mm)	P (mm)	β	LISTINO €
60.201.H30	RIC01792B	B001	HSS M35	6.00	45.00	0.70	0.70	88°	32,40

## Tastatore

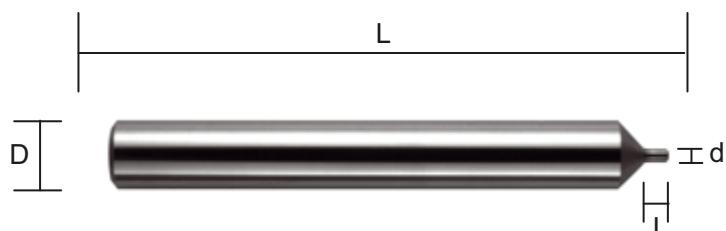
Tracer point



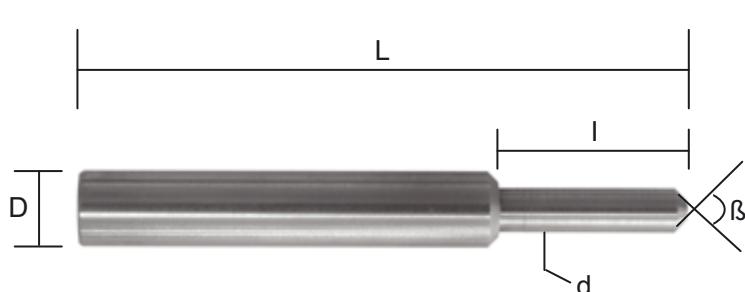
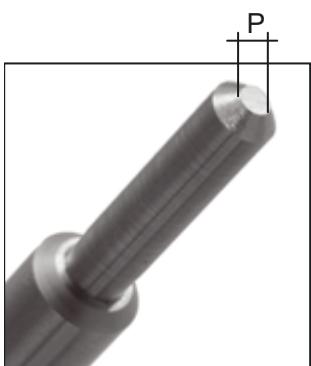
ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	LISTINO €
60.909.H30	RIC05352B	T02	HSS M35	3.00	1.00	14.60	2.00	45,00

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**Tastatore***Tracer point*

ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	d (mm)	L (mm)	P (mm)	$\beta$	LISTINO €
60.907.H30	RIC11402B	T10	HSS M35	4.00	0.60	32.00	0.20	90°	36,00

**Tastatore con 2 diametri***Tracer point with 2 diameters*

ARTICOLO	REF. KEYLINE*	TIPO	MAT.	D (mm)	d (mm)	L (mm)	P (mm)	I (mm)	$\beta$	LISTINO €
60.043.H30	RIC01823B	B043	HSS M35	6.00	2.35	45.00	0.95	6.00	88°	33,00
60.811.H30	RIC01811B	C011	HSS M35	6.00	2.50	45.00	0.20	5.00	90°	33,00
60.813.H30	RIC01817B	C044	HSS M35	6.00	2.00	45.00				33,00
60.812.H30	RIC01809B	C208	HSS M35	6.00	2.40	45.00	0.20	5.00	90°	33,00
60.904.H30	RIC11110B	T08	HSS M35	4.00	1.00	32.00		6.00		33,00

**Tastatore con 2 diametri***Tracer point with 2 diameters*

ARTICOLO	REF. KEYLINE*	TIPO	MAT.	LISTINO €
60.903.H30	RIC10714B	T07	HSS	37,00

# FOS-Excellence.<sup>®</sup>

The first line

## ILCO ORION



**Frese bi-coniche**

*Milling Cutter*

68



**Fresa piatta con intagli laterali**

*Milling cutter with flat*

69



**Fresa piatta con raggi**

*Milling cutter with radius*

69



**Fresa piatta con intagli laterali**

*Face and side milling cutter*

70



**Fresa piatta**

*Flat slotter*

71



**Fresa a cappello**

*Top hat cutter*

72



**Fresa cilindrica**

*End milling cutter*

73



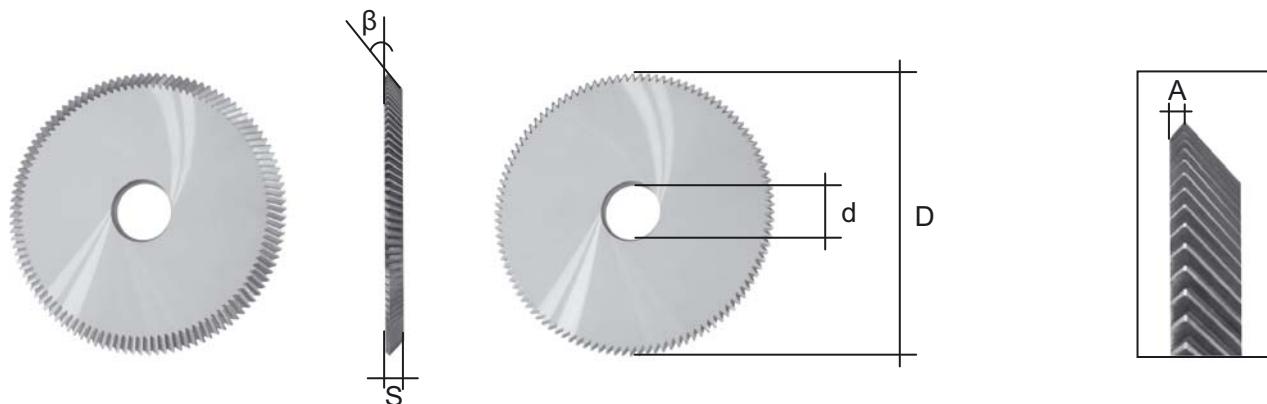
**Tastatore**

*Tracer point*

75

**Fresa bi-conica**

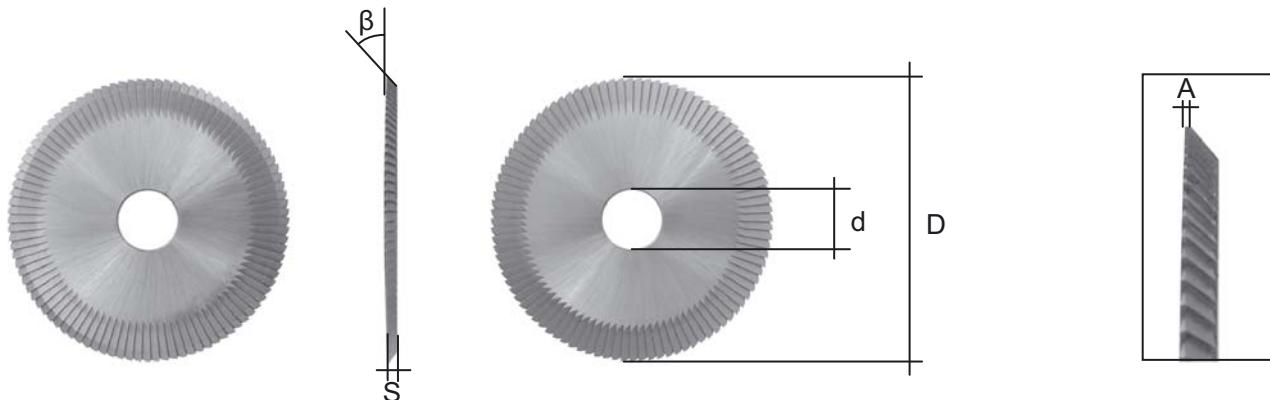
Milling cutter



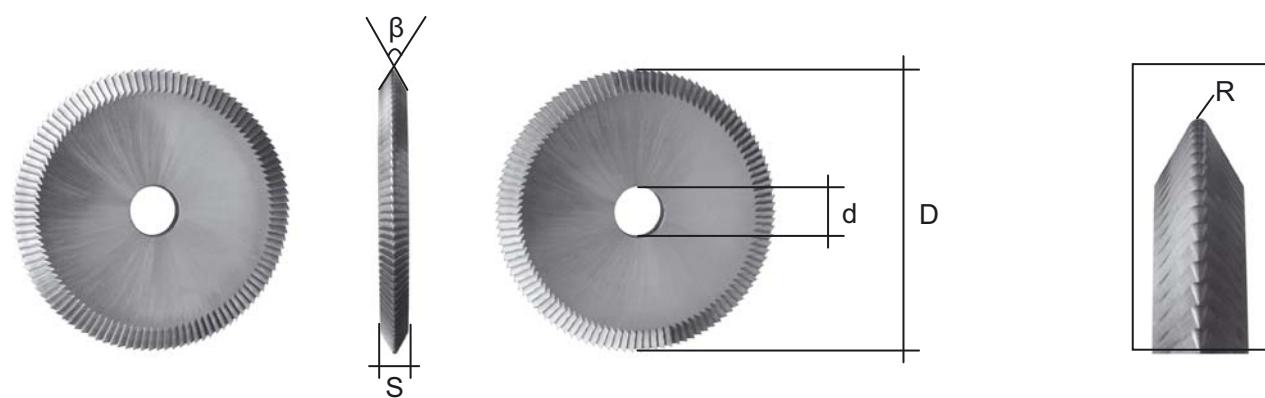
ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	A (mm)	B	DENTI	LISTINO €
16.018.H30	CU14	HSS M35	63.00	5.00	16.00	1.25	80°	80	79,80
16.016.H20	8UC	HSS M2	60.32	6.14	9.53	0.89	45°	72	79,80
16.014.H20	16MC	HSS M2	60.32	6.35	12.70	0.40	40°/5°	100	79,80
16.013.H20	11MC	HSS M2	60.32	7.11	12.70	0.40	60°	95	79,80
16.550.H30	36MC	HSS M35	60.32	9.53	9.53	0.00	90°	72	79,80
16.012.H20	10MC	HSS M2	69.85	7.10	22.22	0.40	60°	110	97,20
16.220.H10	AT - U01	HSS M42	60.40	5.25	9.53	0.50	80°	100	99,20
18.039.H30	CU50-A	HSS M35	80.00	5.00	16.00	0.50	80°	110	79,80
18.001.H30	CU100	HSS M35	80.00	5.00	16.00	1.00	80°	100	79,80
18.002.H30	CU11/26M	HSS M35	80.00	5.00	16.00	1.25	80°	100	79,80
18.000.H30	RO 6060	HSS M35	80.00	5.00	16.00	1.30	80°	110	79,80
18.005.H30	RO 7914	HSS M35	80.00	5.00	16.00	0	80°	110	79,80
18.915.H30	RO 7915	HSS M35	80.00	6.20	16.00	3.10	105°	110	79,80
18.150.H30	RO 7903	HSS M35	80.00	7.00	16.00	3.35	60°	110	79,80
16.220.C00	AT - U01	Carbide	60.40	5.25	9.53	0.50	80°	100	317,42
18.038.C00	CU50-A	Carbide	80.00	5.00	16.00	0.50	80°	110	306,67
18.000.C00	RO 6060	Carbide	80.00	5.00	16.00	1.30	80°	110	327,22

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**Fresa piatta con intagli laterali***Milling cutter with flat*

ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	A (mm)	B	DENTI	LISTINO €
75.107.H30	CU5	HSS M35	57.15	6.35	12.70	0.4	45°	90	70,00
76.056.H20	X23MC	HSS M2	60.32	2.36	12.70	0.5	45°	90	70,00

**Fresa piatta con raggi***Milling cutter with radius*

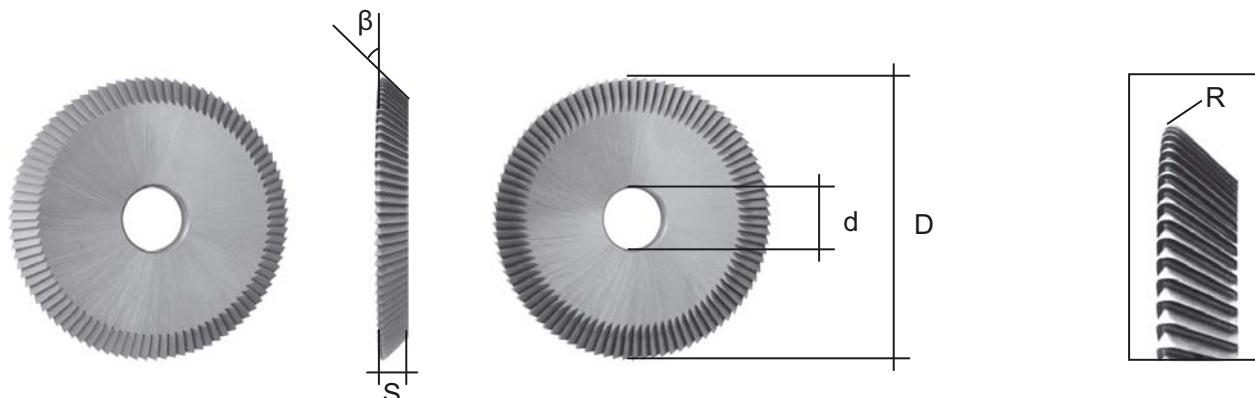
ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	R (mm)	B	DENTI	LISTINO €
77.037.H20	9MC	HSS M2	73.02	5.25	12.70	0.63	60°	100	105,04
77.035.H20	19MC	HSS M2	73.02	7.14	12.70	0.79	60°	110	105,04
77.036.H20	19SR	HSS M2	73.02	7.14	12.70	0.39	60°	110	105,04

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## Fresa piatta con raggi

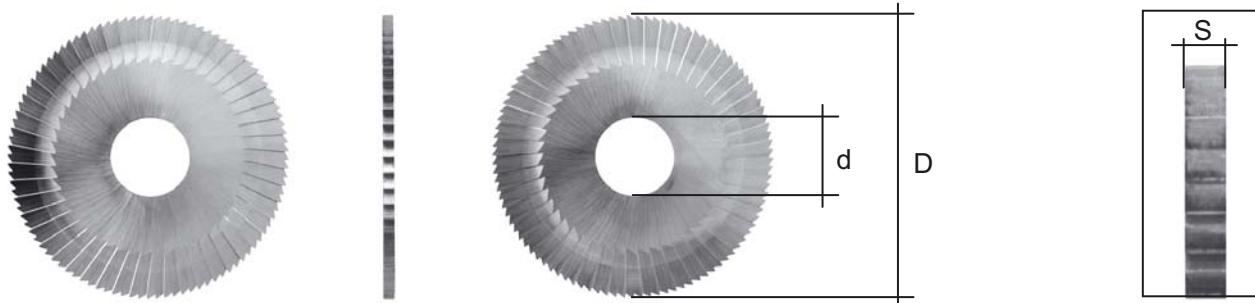
Milling cutter with radius



ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	R (mm)	B	DENTI	LISTINO €
75.005.A00	CU1	W2	57.15	6.35	12.70	0.40	45°	168	79,80
75.025.H10	CU5	HSS M2	57.15	6.35	12.70	-	45°	90	79,80
76.003.H20	CU20	HSS M2	60.32	6.32	12.70	0.79	45°	90	79,80
76.029.H20	CU29	HSS M2	60.20	9.53	12.70	-	90°	110	79,80
75.002.H20	34MC	HSS M2	57.15	6.35	12.70	0.79	45°	90	79,80
75.003.A00	CW23RM	W2	57.15	6.35	12.70	0.38	45°	168	79,80

## Fresa piatta con intagli laterali

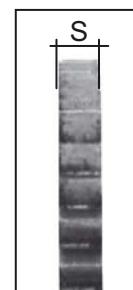
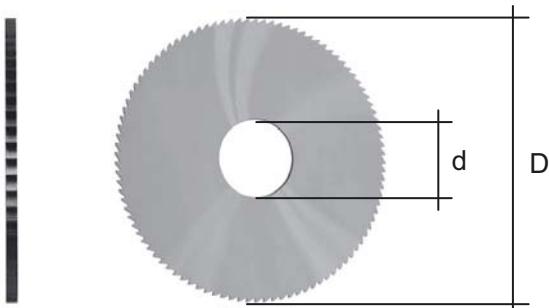
Face and side milling cutter



ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	DENTI	LISTINO €
26.005.H10	45 SMS	HSS M42	60.32	1.14	12.70	40	70,00
26.007.H10	SMS30	HSS M42	60.32	0.76	12.70	40	70,00
26.507.H10	Y2K	HSS M42	63.00	1.35	16.00	80	70,00
28.605.H10	MZR-MRK-P	HSS M42	80.00	1.50	16.00	100	70,00
28.008.H10	KD17	HSS M42	80.00	1.25	22.00	100	86,00
28.004.H10	KD17	HSS M42	80.00	1.75	22.00	100	86,00
28.516.C00	KD17W	Carbide	80.00	1.25	22.00	100	218,32

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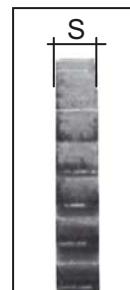
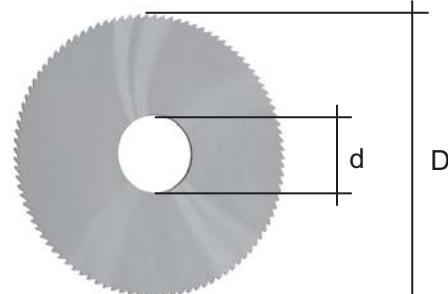
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**Fresa Piatta***Flat slotter*

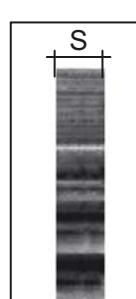
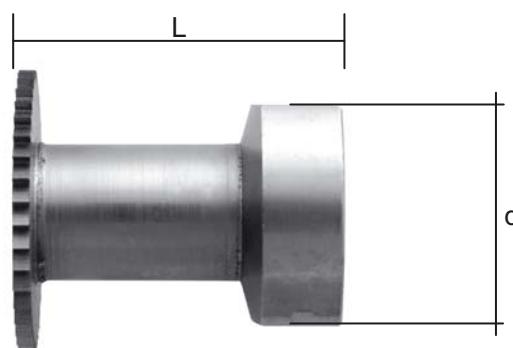
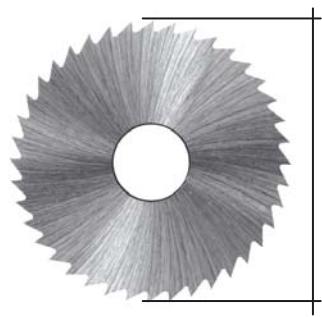
ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	DENTI	LISTINO €
56.022.H10	CU15	HSS M42	63.00	1.00	16.00	80	91,50
56.023.H10	CU15	HSS M42	63.00	1.20	16.00	80	91,50
56.029.H10	CU15	HSS M42	63.00	1.25	16.00	80	91,50
56.039.H10	CU15	HSS M42	63.00	1.35	16.00	80	91,50
56.011.H10	CU15	HSS M42	63.00	1.40	16.00	80	91,50
56.025.H10	CU15	HSS M42	63.00	1.50	16.00	80	91,50
56.037.H10	CU84	HSS M42	63.00	1.60	16.00	80	91,50
56.026.H10	CU45	HSS M42	63.00	1.80	16.00	80	91,50
56.012.H10	CU15	HSS M42	63.00	2.00	16.00	80	91,50
56.028.H10	CU15	HSS M42	63.00	2.20	16.00	80	91,50
56.031.H10	CU84	HSS M42	63.00	2.40	16.00	80	91,50
57.005.H10	CU84	HSS M42	70.00	1.00	16.00	100	93,33
57.036.H10	CU84	HSS M42	70.00	1.20	16.00	100	93,33
57.006.H10	CU84	HSS M42	70.00	1.50	16.00	100	93,33
58.001.H10	CU18-2	HSS M42	80.00	1.00	22.00	100	93,33
58.030.H10	CU18-2	HSS M42	80.00	1.25	22.00	100	93,33
58.002.H10	CU18-2	HSS M42	80.00	1.50	22.00	100	93,33
58.089.H10	CU18-2	HSS M42	80.00	2.00	22.00	100	93,33
58.032.H10	CU84	HSS M42	80.00	1.20	22.00	100	93,33
58.034.H10	CU84	HSS M42	80.00	1.30	22.00	100	93,33
58.033.H10	CU84	HSS M42	80.00	1.60	22.00	100	93,33
58.035.H10	CU84	HSS M42	80.00	1.80	22.00	100	93,33

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**Fresa Piatta***Flat slotter*

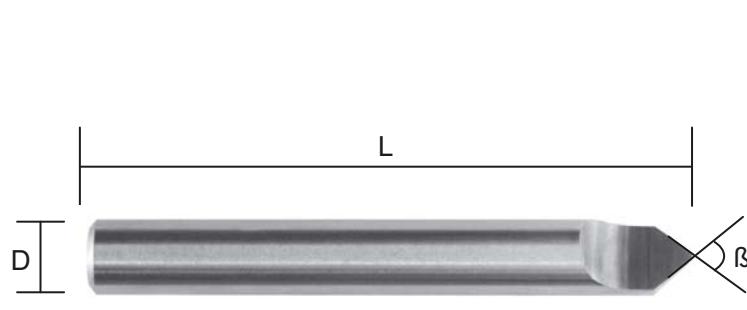
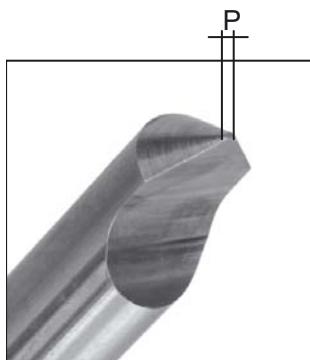
ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	DENTI	LISTINO €
56.504.C00	CU-15C	Carbide	63.00	1.00	16.00	80	166,00
56.510.C00	CU-15C	Carbide	63.00	1.25	16.00	80	166,00
56.517.C00	CU-15C	Carbide	63.00	1.35	16.00	80	166,00
56.507.C00	CU-15C	Carbide	63.00	1.50	16.00	80	166,00
56.508.C00	CU-15C	Carbide	63.00	1.80	16.00	80	166,00
56.520.C00	CU-15C	Carbide	63.00	2.00	16.00	80	166,00
56.509.C00	CU-15C	Carbide	63.00	2.20	16.00	80	166,00
56.550.C00	CU84	Carbide	63.00	2.40	16.00	80	166,00
57.555.C00	CU84	Carbide	70.00	1.20	16.00	100	203,50
57.501.C00	CU84	Carbide	70.00	1.50	16.00	100	203,50
58.100.C00	CU-18-2	Carbide	80.00	1.00	16.00	100	203,50
58.512.C00	CU-18-2	Carbide	80.00	1.25	22.00	100	203,50
58.503.C00	CU-18-2	Carbide	80.00	1.50	16.00	100	203,50

**Fresa a cappello***Top hat cutter*

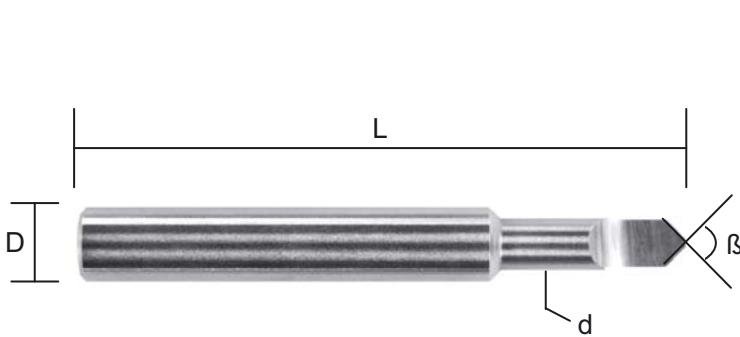
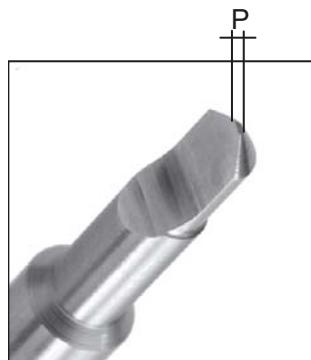
ARTICOLO	TIPO	MAT.	M	D (mm)	S (mm)	d (mm)	L (mm)	DENTI	LISTINO €
40.006.H30	Y2K	HSS M35	M8 LEFT	25.00	1.50	24.00	28.00	40	86,70
40.007.H30	Side Ward	HSS M35		25.00	1.25	11.00	9.00	40	79,30

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**Fresa cilindrica, 1 dente***End milling cutter, 1 tooth*

ARTICOLO	REF ILCO	REF ORION	MAT.	D (mm)	L (mm)	P (mm)	B	DENTI	LISTINO €
30.601.H30	CU56-043	MK260.043	HSS M35	6.00	40.00	0.65	90°	1	41,22
30.260.H30	CU56-080	MK260.080	HSS M35	6.00	40.00	0.80	90°	1	41,22

**Fresa cilindrica, 1 dente, 2 diametri***End milling cutter, 1 tooth, 2 diameters*

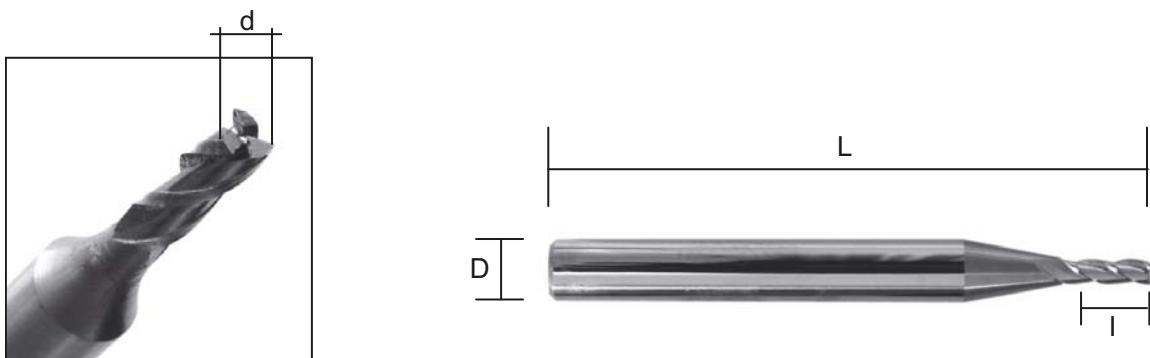
ARTICOLO	REF ILCO	REF ORION	MAT.	D (mm)	d (mm)	L (mm)	P (mm)	B	DENTI	LISTINO €
30.084.H30	CU56-087	MK260.087	HSS M35	6.00	2.30	40	0.80	90°	1	41,22
30.910.H30	CU56-110	MK260.110	HSS M35	6.00	3.20	40	0.80	90°	1	41,22
30.114.H30	CU56-114	MK260.114	HSS M35	6.00	3.00	40	0.65	90°	1	41,22
30.918.H30	CU56-118	MK260.118	HSS M35	6.00	4.00	40	0.50	70°	1	41,22

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## Fresa cilindrica, 3 denti

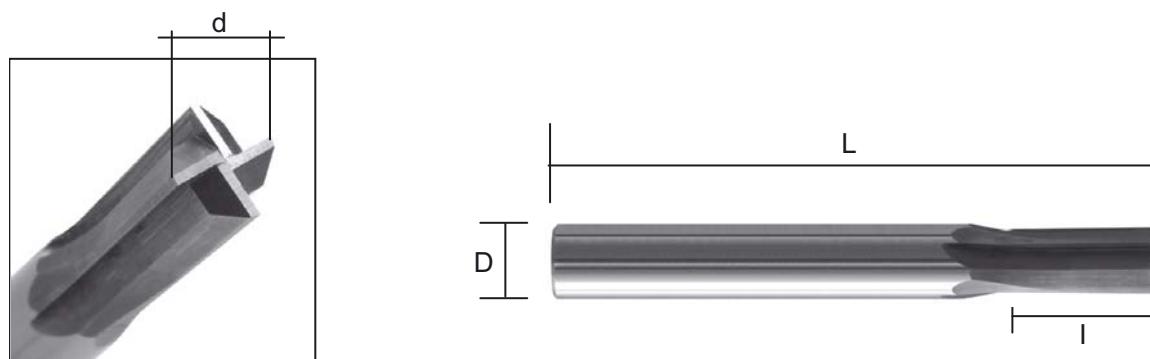
End milling cutter, 3 teeth



ARTICOLO	REF ILCO	REF ORION	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	DENTI	LISTINO €
33.041.H10	CU56-028	MK206.028	HSS M42	6.00	1.50	40	1.50	3	55,98
33.116.H10	CU56-116	MK206.116	HSS M42	6.00	2.30	40	6.00	3	55,98
33.111.H10	CU56-264	MK206.264	HSS M42	6.00	2.50	40	6.00	3	55,98
33.045.H10	CU56-048	MK206.048	HSS M42	6.00	3.00	40	12.00	3	55,98
33.050.H10	CU56-091	MK206.091	HSS M42	6.00	4.00	40	13.00	3	55,98

## Fresa cilindrica, 4 denti

End milling cutter, 4 teeth



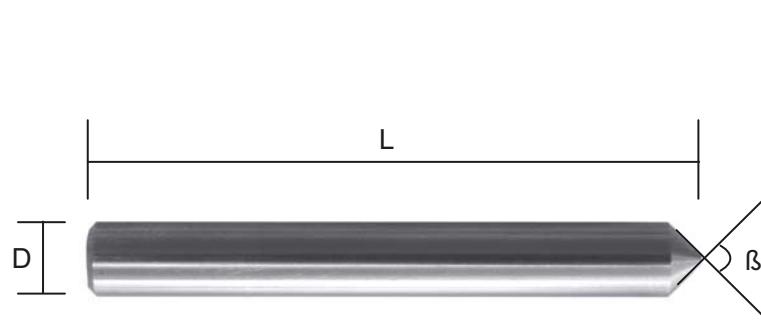
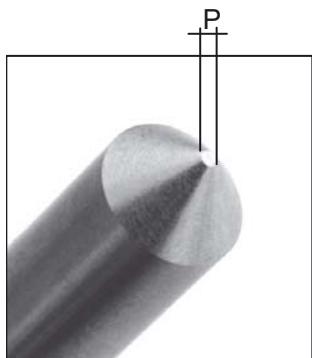
ARTICOLO	TIPO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	DENTI	LISTINO €
34.027.H30	Tubulaire	HSS M35	6.00	5.95	48,00	12,00	4	31,00

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## Tastatore

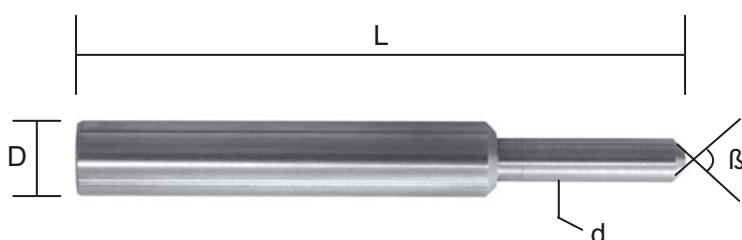
Tracer point



ARTICOLO	REF ILCO	REF ORION	MAT.	D (mm)	L (mm)	P (mm)	β	LISTINO €
60.601.H30	CU56-079	MK260 079	HSS M35	6.00	40.00	0.50	90°	30,00
60.602.H30	CU56-044	MK260 044	HSS M35	6.00	40.00	0.65	90°	30,00

## Tastatore con 2 diametri

Tracer point with 2 diameters



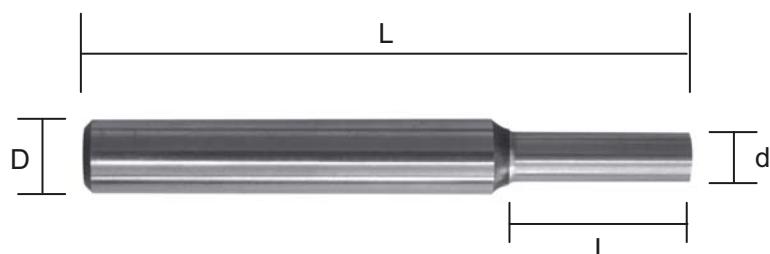
ARTICOLO	TIPO	MAT.	D (mm)	d (mm)	L (mm)	P (mm)	β	LISTINO €
60.726.H30	MK260.088	HSS M35	6.00	2,30	40.00	0.80	90°	30,00

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## Tastatore con 2 diametri

Tracer point with 2 diameters



ARTICOLO	TIPO	MAT.	D (mm)	d (mm)	L (mm)	LISTINO €
60.800.H30	KD56-047	HSS M35	6.00	3.00	40.00	30,00

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# FOS-Excellence.<sup>®</sup>

The first line

## MINIT, HK, LSA, KIS, KURT, RST



**Fresa bi-conica**

*Milling Cutter*

78



**Fresa piatta con intagli laterali**

*Milling cutter with flat*

82



**Fresa piatta con raggi**

*Milling cutter with radius*

84



**Fresa piatta con intagli laterali**

*Face and side milling cutter*

85



**Fresa piatta**

*Flat slotter*

86



**Fresa a cappello**

*Top hat cutter*

89



**Fresa cilindrica**

*End milling cutter*

90



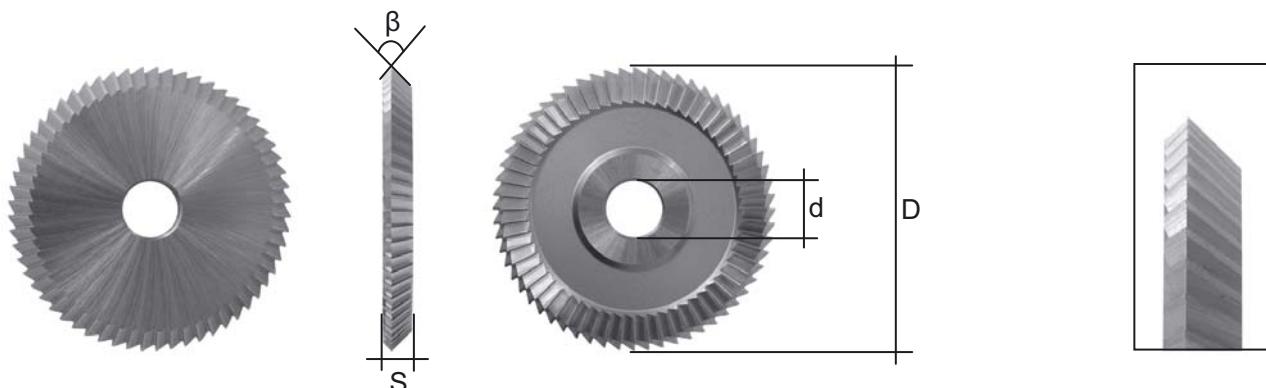
**SET MUL-T-LOCK**

*MUL-T-LOCK SET*

91

## Fresa bi-conica

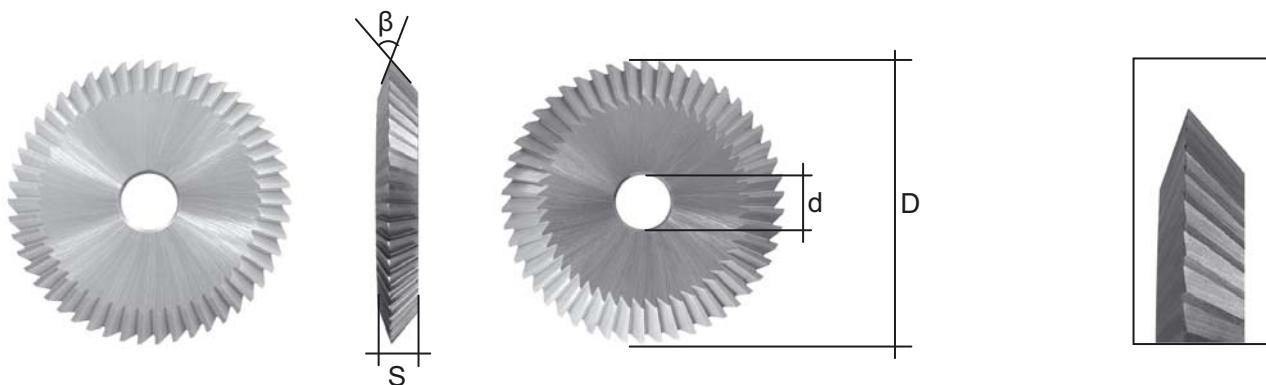
Milling cutter



ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	β	DENTI	LISTINO €
15.053.H20	GULER	HSS M2	50.30	5.20	10	45/46°	60	74,58

## Fresa bi-conica

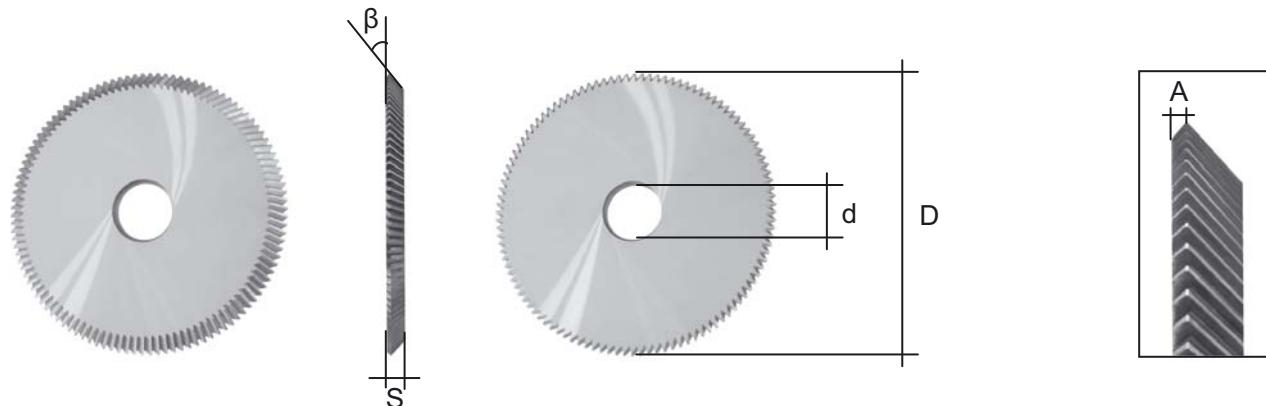
Milling cutter



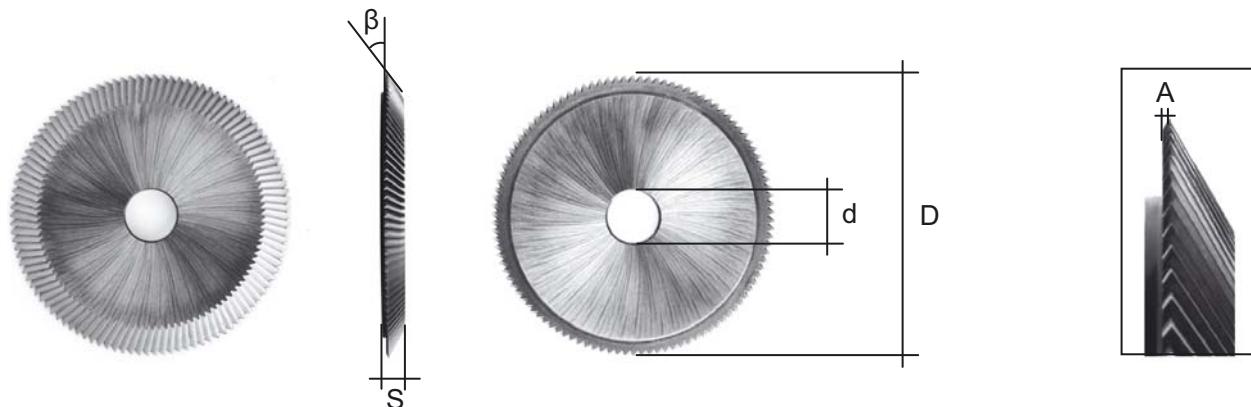
ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	β	DENTI	LISTINO €
15.150.H30	KURT	HSS M35	52.00	7.40	10	20/40°	50	64,44

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**Fresa bi-conica***Milling cutter*

ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	A (mm)	β	DENTI	LISTINO €
15.008.H20	ASTRO II	HSS M2	53.00	6.00	12.00	0.40	45/25°	72	70,00
15.009.H20	ASTRO III	HSS M2	50.00	6.00	12.00	0.40	45/25°	72	70,00
15.010.H20	FP4 - KIS 15R	HSS M2	53.00	6.35	12.70	0.60	45/15°	72	70,00
17.011.H20	KIS Super Major	HSS M2	70.00	6.35	8.00	0.60	45/15°	72	79,30

**Fresa bi-conica***Milling cutter*

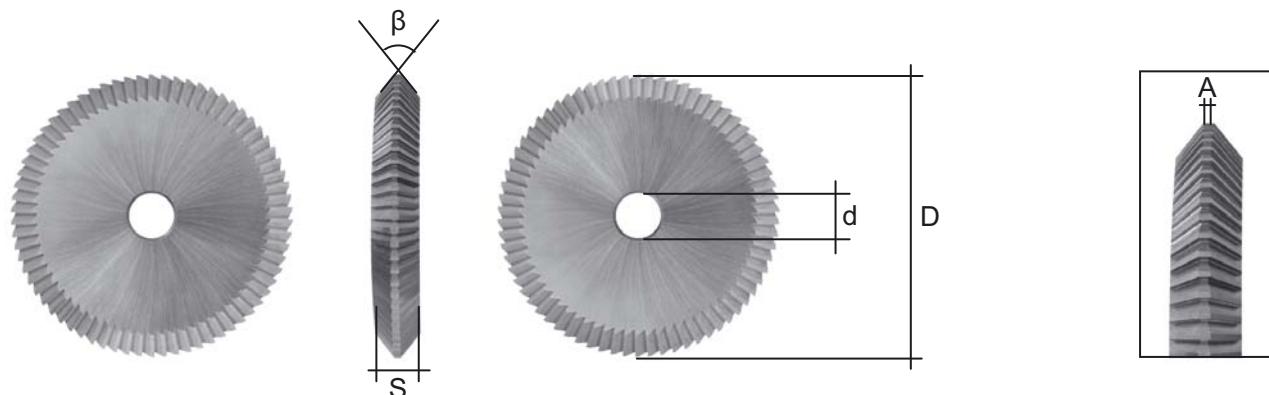
ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	A (mm)	β	DENTI	LISTINO €
17.038.H20	ASTRO I	HSS M2	70.00	5.50	12.70	2.00	60°	106	79,30

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## Fresa bi-conica

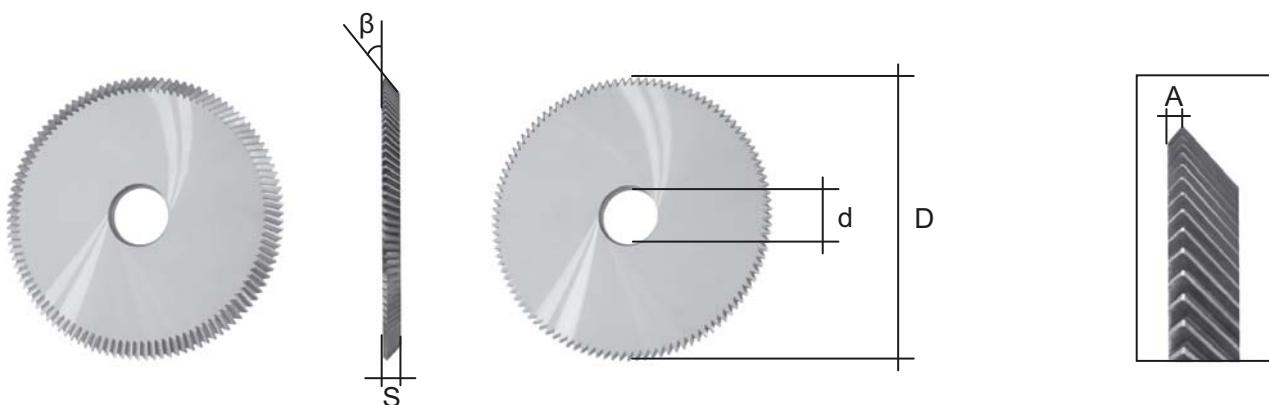
Milling cutter



ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	A (mm)	B	DENTI	LISTINO €
16.045.H30	ASSA 90	HSS M35	60.00	7.60	10.00	1.30	90°	40	111,70
16.046.H30	ASSA 105	HSS M35	60.00	8.00	10.00	0.90	105°	40	111,70

## Fresa bi-conica

Milling cutter



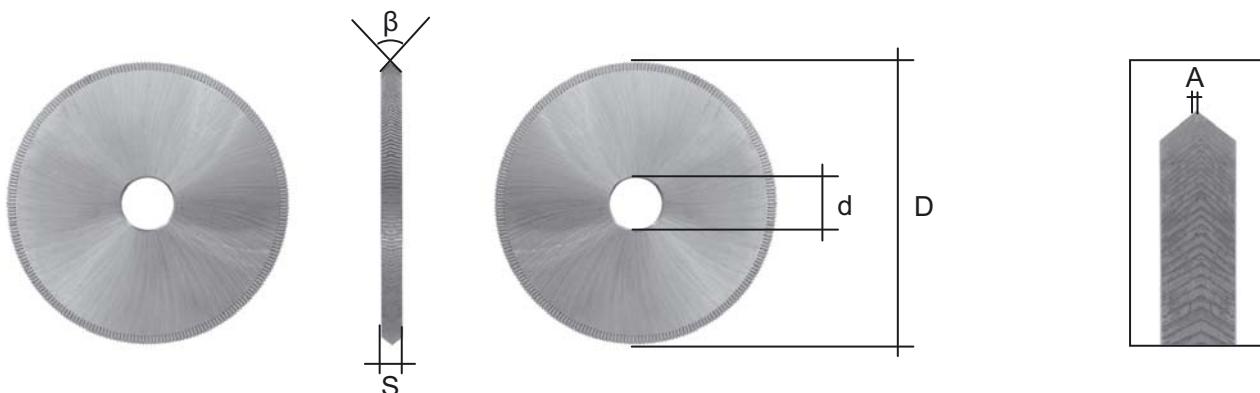
ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	A (mm)	B	DENTI	LISTINO €
16.005.H20	HK 15/45°	HSS M2	68.00	6.00	16.00	1.50	15/45°	110	79,30
16.006.H20	HK 30/45°	HSS M2	68.00	6.00	16.00	1.50	30/45°	110	79,30
16.007.H20	HK 29/44°	HSS M2	68.00	6.00	16.00	1.50	29/44°	110	79,30

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## Fresa bi-conica

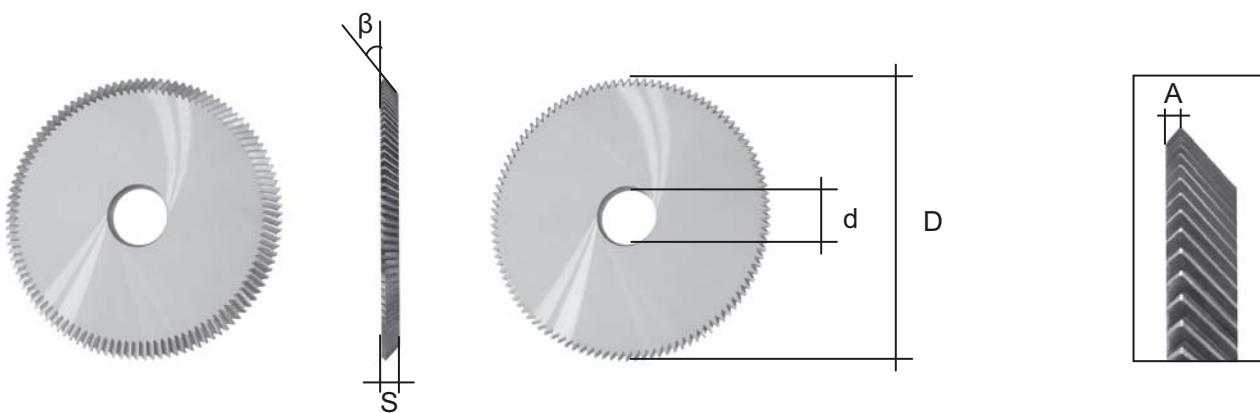
Milling cutter



ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	A (mm)	β	DENTI	LISTINO €
17.020.H20	750C	HSS M2	70.00	4.85	12.70	0.00	90°	140	79,30
17.028.H20	TMC 7504	HSS M2	70.00	4.85	12.70	0.00	90°	140	72,00
17.029.H20	TMC 7505	HSS M2	70.00	4.85	12.70	0.00	110°	140	72,00
17.032.H20	TZ 001	HSS M2	73.00	5.25	12.70	1.5	60°	100	72,00

## Fresa bi-conica

Milling cutter



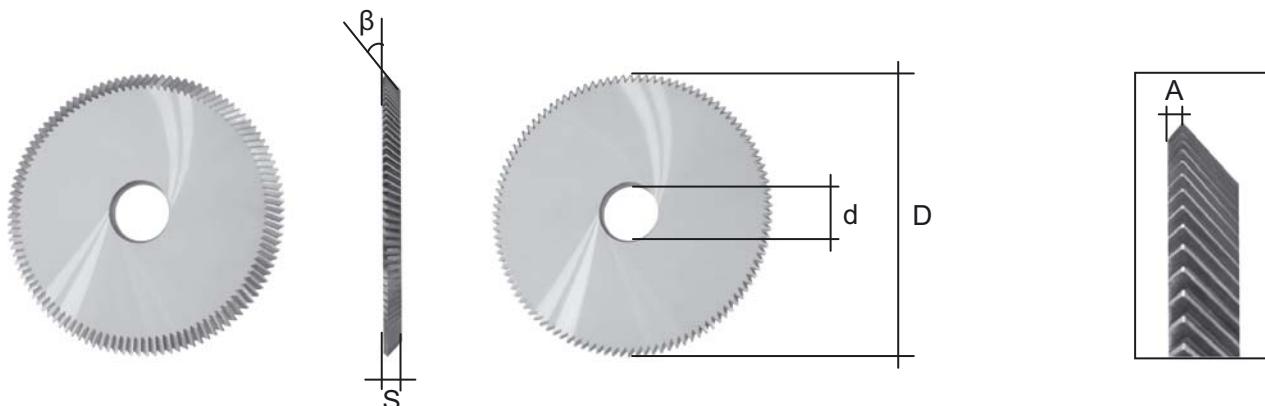
ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	A (mm)	β	DENTI	LISTINO €
18.003.H30	8954-000-001	HSS M35	80.00	4.40	16.00	0.80	80°	100	79,80
18.002.H30	CU11/26MC	HSS M35	80.00	5.00	16.00	1.25	80°	100	80,00
17.525.C00		Carbide	70.00	5.25	9.53	0.5	42/35°	90	394,00
18.003.C00	8954-000-001	Carbide	80.00	4.40	16.00	1.25	80°	100	323,80
18.502.C00	80° A1-CA CU11-C89	Carbide	80.00	5.00	16.00	1.00	80°	100	323,80
18.503.C00	26MC CA CU100	Carbide	80.00	5.00	16.00	1.25	80°	100	323,80
18.510.C00	8954-000-007	Carbide	80.00	6.10	16.00	-	40°	50	323,80

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## Fresa bi-conica

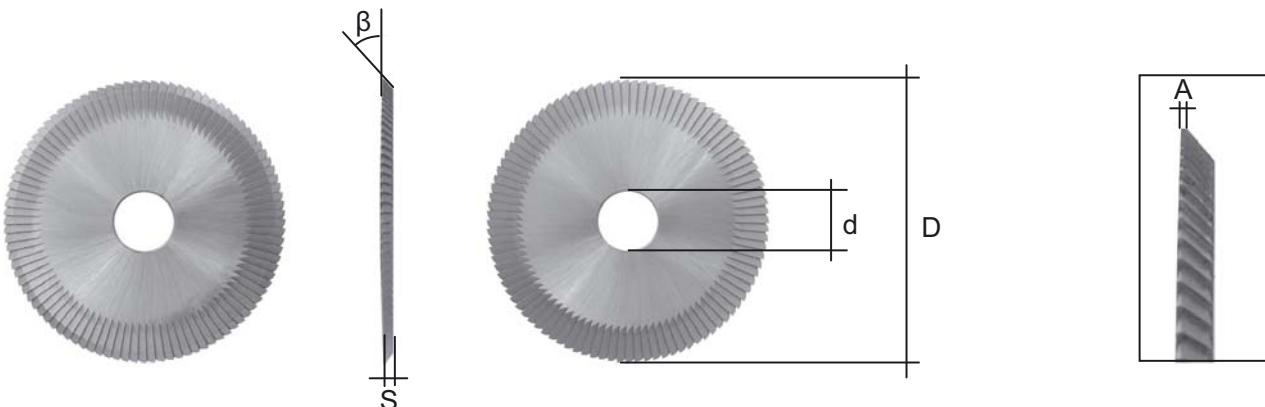
Milling cutter



ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	A (mm)	B	DENTI	LISTINO €
18.027.H30	TOC 2HSS	HSS M35	80.00	5.00	16.00	1.10	84°	100	80,00
18.030.H30	TMC 7515	HSS M35	80.00	5.00	12.70	1.10	84°	100	80,00
18.001.H30	CU100	HSS M35	80.00	5.00	16.00	1.00	80°	100	80,00
18.009.H30	CU100	HSS M35	80.00	5.00	16.00	1.00	80°	120	80,00

## Fresa piatta con intagli laterali

Milling cutter with flat



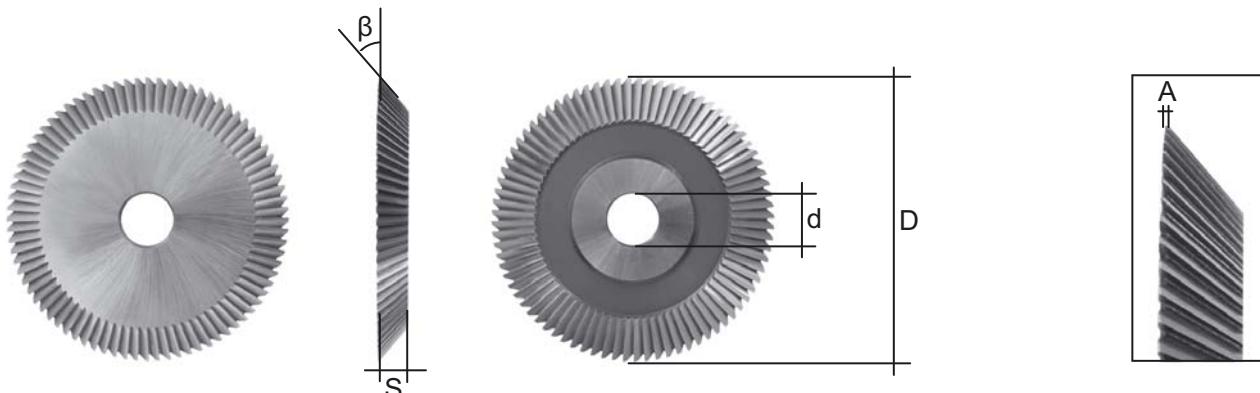
ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	A (mm)	B	DENTI	LISTINO €
76.156.H20	CW 23	HSS M2	57.15	2.50	12.70	0.40	45°	80	56,00
76.227.H20	2277B	HSS M2	57.15	2.36	12.70	0.40	45°	80	56,00

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## Fresa piatta con intagli laterali

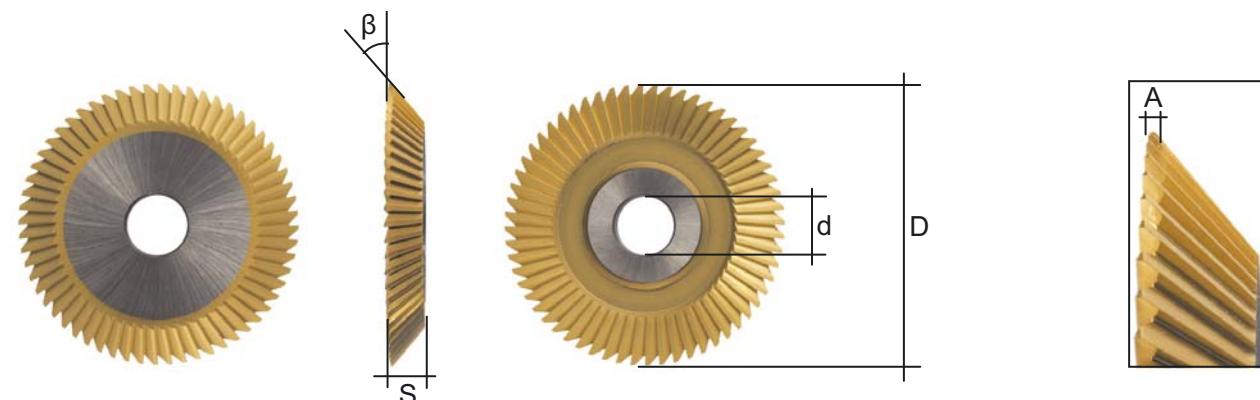
Milling cutter with flat



ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	A (mm)	B	DENTI	LISTINO €
76.051.H20	US 101	HSS M2	60.45	7.30	12.70	0.40	40°	60	79,30
76.053.H30	SK - H9	HSS M35	65.00	5.00	14.00	0.40	40°	60	79,30
77.052.H30	GL 333 A	HSS M35	70.00	6.00	20.00	0.40	40°	80	79,30
77.060.H30	UK-123	HSS M35	70.00	7.40	12.70	0.40	40°	80	79,30
77.062.H30	UK-123	HSS M35	70.00	7.40	12.70	0.40	40°	70	79,30
77.061.H30	UK-123	HSS M35	70.00	7.40	12.70	0.40	40°	100	79,30
76.054.H30	Intercode	HSS M35	68.00	8.00	16.00	0.10	0/35°	100	79,30
76.505.C00	Intercode	Carbide	68.00	8.00	16.00	0.10	0/35°	90	233,36

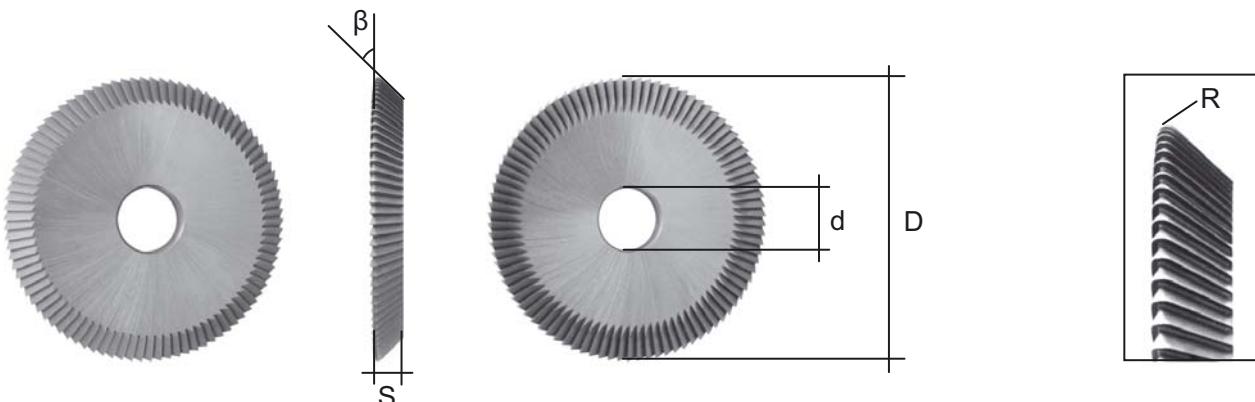
## Fresa piatta con intagli laterali + Trattamento TiN

Milling cutter with flat + TiN coating



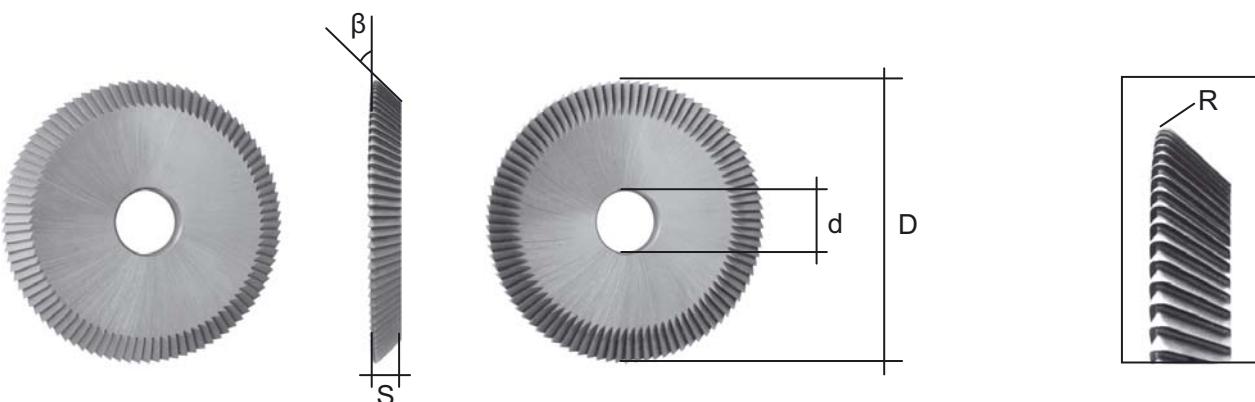
ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	A (mm)	B	DENTI	LISTINO €
76.061.H20.J	Wenxing N°0010B	HSS M2	60.45	7.30	12.70	-	-	80	116,00
76.051.H20.J	US 101	HSS M2	60.45	7.30	12.70	0.40	40°	60	116,00
76.053.H30.J	SK - H9	HSS M35	65.00	5.00	14.00	0.40	40°	60	116,00
77.052.H30.J	GL 333 A	HSS M35	70.00	6.00	20.00	0.40	40°	80	116,00
77.062.H30.J	UK-123	HSS M35	70.00	7.40	12.70	0.40	40°	70	116,00
77.060.H30.J	UK-123	HSS M35	70.00	7.40	12.70	0.40	40°	80	116,00
77.061.H30.J	UK-123	HSS M35	70.00	7.40	12.70	0.40	40°	100	116,00

**Fresa piatta con raggi**  
*Milling cutter with radius*



ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	R (mm)	β	DENTI	LISTINO €
75.001.H20	Jakey 120	HSS M2	57.15	6.35	12.70	0.50	45°	120	55,00

**Fresa piatta con raggi**  
*Milling cutter with radius*



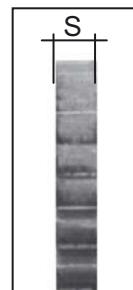
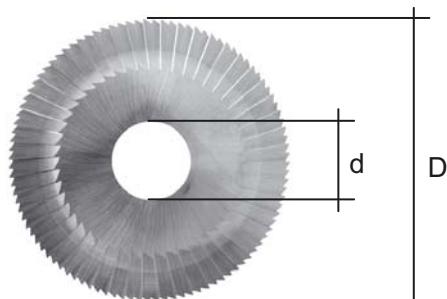
ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	R (mm)	β	DENTI	LISTINO €
75.034.H20	TOC 1JK	HSS M2	57.00	6.40	12.70	0.30	60°	120	76,00

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**Fresa piatta con intagli laterali**

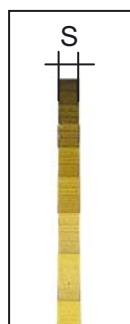
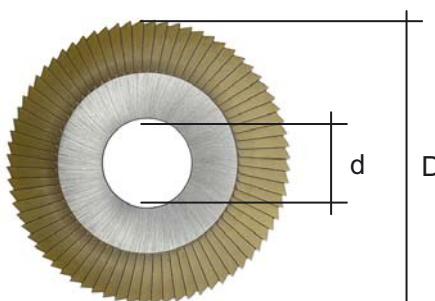
*Face and side milling cutter*



ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	DENTI	LISTINO €
<b>76.045.H20</b>	<b>SMS45</b>	HSS M42	60.20	1.15	12.70	40	86,63
<b>76.030.H20</b>	<b>SMS30</b>	HSS M42	60.20	0.76	12.70	40	86,63
<b>26.100.H10</b>		HSS M42	63.00	1.60	16.00	80	86,63
<b>27.006.H10</b>	<b>TMC 7513 - 750SF</b>	HSS M42	70.00	1.30	12.70	72	70,00
<b>27.515.C00</b>	<b>750SF-CA / TMC 7513-CA</b>	HSS M42	70.00	1.30	12.70	72	185,00
<b>28.001.H10</b>	<b>MINIT</b>	HSS M42	80.00	1.20	22.00	100	86,63
<b>28.120.H10</b>	-	HSS M42	80.00	2.50	16.00	80	86,63

**Fresa piatta con intagli laterali + TiN**

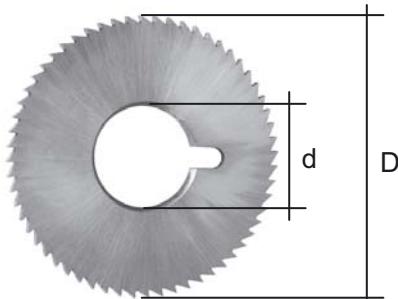
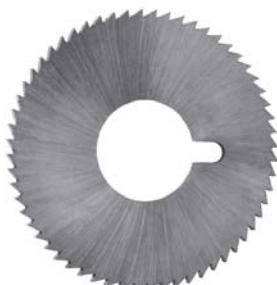
*Face and side milling cutter + TiN*



ARTICOLO	REF WENXING	MAT.	D (mm)	S (mm)	d (mm)	DENTI	LISTINO €
<b>27.013.H10.J</b>	<b>0022A</b>	HSS M42	70.00	1.30	22.00	90	80,00
<b>27.014.H10.J</b>	<b>0020</b>	HSS M42	70.00	1.30	25.40	90	80,00
<b>28.804.H10.J</b>	<b>0023</b>	HSS M42	80.00	1.40	22.00	100	80,00

## Fresa piatta

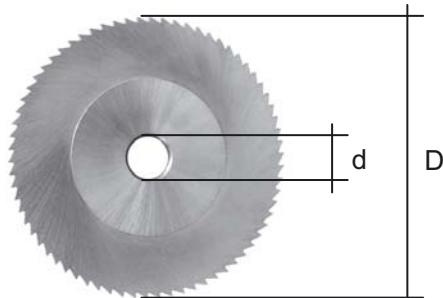
*Flat slotter*



ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	DENTI	LISTINO €
53.021.H30	TOC 3JK	HSS M35	32.00	1.30	11.40	60	52,88
53.020.H30	TOC 2JK	HSS M35	35.00	1.30	11.40	60	52,88

## Fresa piatta

*Flat slotter*



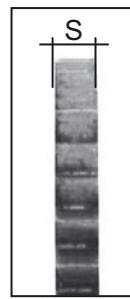
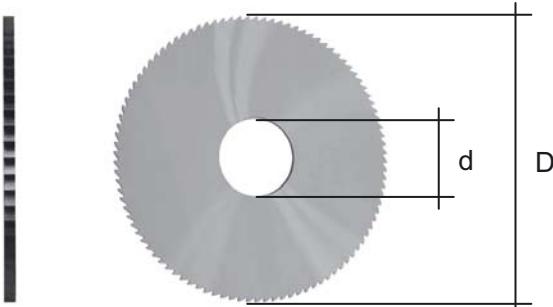
ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	DENTI	LISTINO €
58.016.H10	JF 206	HSS M42	80.00	1.80	22.00	100	60,26
58.017.H10	JF 320	HSS M42	80.00	2.40	22.00	100	60,26

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**Fresa piatta**

Flat slotter



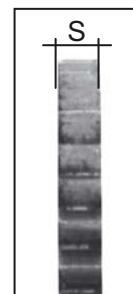
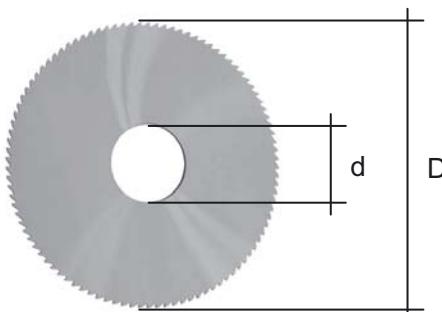
ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	Denti	LISTINO €
52.075.H10	KIS	HSS M42	52.30	0.75	12.70	100	60,77
52.115.H10	KIS	HSS M42	52.30	1.15	12.70	100	60,77
52.185.H10	KIS	HSS M42	52.30	1.85	12.70	100	60,77
52.200.H10	KIS	HSS M42	52.30	2.00	12.70	100	60,77
52.230.H10	KIS	HSS M42	52.30	2.30	12.70	100	60,77
52.700.H10	KIS	HSS M42	52.30	7.00	12.70	100	60,77
56.200.H10	FS60125	HSS M42	60.00	1.25	25.40	80	60,77
56.205.H10	FS60413	HSS M42	60.40	1.30	25.40	80	60,77
56.027.H10	FS6318	HSS M42	63.00	1.80	12.70	100	60,77
56.250.H10	FS6325	HSS M42	63.00	2.50	16.00	40	60,77
56.400.H10	FS6340	HSS M42	63.00	4.00	12.00	40	60,77
57.905.H10	FS7010	HSS M42	70.00	1.00	16.00	100	60,77
57.050.H10	FS7011	HSS M42	70.00	1.10	16.00	100	60,77
57.110.H10	FS70115	HSS M42	70.00	1.15	25.40	86	60,77
57.172.H10	Gladaid	HSS M42	70.00	1.15	25.40	72	60,77
57.051.H10	FS7012	HSS M42	70.00	1.20	16.00	100	60,77
57.210.H10	FS7012	HSS M42	70.00	1.20	22.00	80	60,77
57.125.H10		HSS M42	70.00	1.25	12.70	80	60,77
57.150.H10	FS70125	HSS M42	70.00	1.25	22.00	56	60,77
57.019.H10	TMC 7507	HSS M42	70.00	1.30	12.70	140	60,77
57.049.H10	FS7013	HSS M42	70.00	1.30	16.00	100	60,77
57.200.H10	FS7013-22	HSS M42	70.00	1.30	22.00	100	60,77
57.010.H10	FS7013B	HSS M42	70.00	1.30	25.40	56	60,77
57.009.H10	SWS 101	HSS M42	70.00	1.30	25.40	86	60,77
57.052.H10	FS7014	HSS M42	70.00	1.40	16.00	100	60,77
57.906.H10	FS7015	HSS M42	70.00	1.50	16.00	100	60,77
57.053.H10	FS7016	HSS M42	70.00	1.60	16.00	100	60,77
57.054.H10	FS7017	HSS M42	70.00	1.70	16.00	100	60,77
57.055.H10	FS7018	HSS M42	70.00	1.80	16.00	100	60,77
57.056.H10	FS7019	HSS M42	70.00	1.90	16.00	100	60,77
57.007.H10	FS7020	HSS M42	70.00	2.00	16.00	100	60,77
57.008.H10	FS7025	HSS M42	70.00	2.50	16.00	100	60,77
57.402.H10		HSS M42	76.20	2.40	19.05	120	60,77

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

**TO IMPROVE THE PERFORMANCE OF YOUR TOOLS**, all of these tools could be coated adding the code **J B N V** as explained on page 5 and 6. Check the net extra cost on page 7

## Fresa piatta

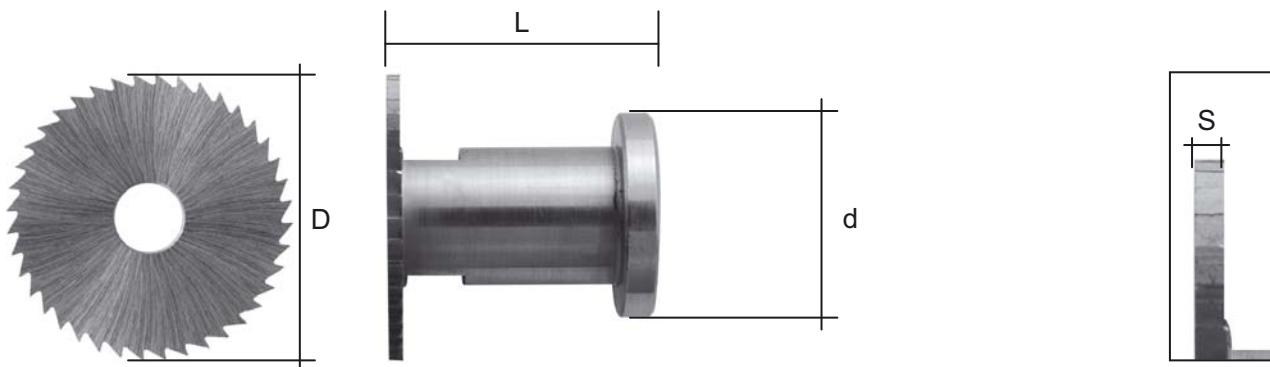
*Flat slotter*



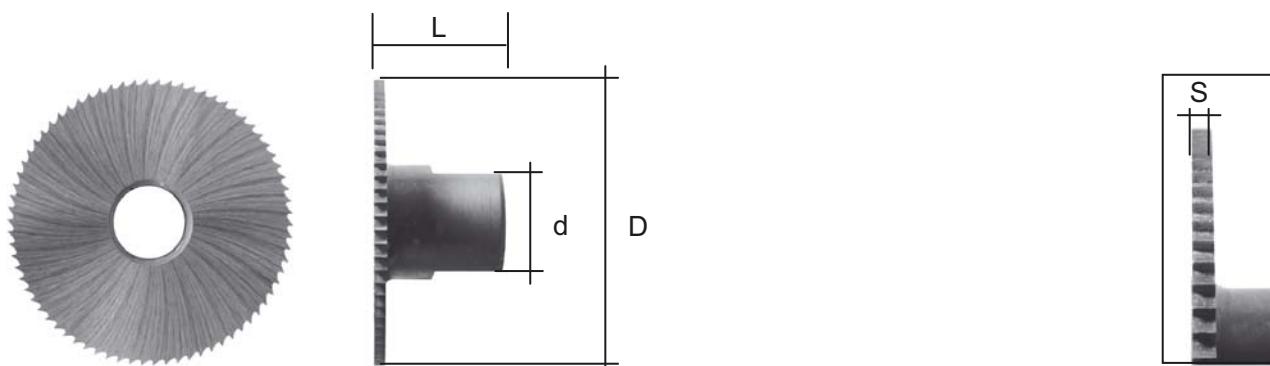
ARTICOLO	TIPO	MAT.	D (mm)	S (mm)	d (mm)	Denti	LISTINO €
52.030.H30	Easy - X-Cut	HSS M35	20.00	0.30	5.00	40	36,90
58.100.H10	FS8010	HSS M42	80.00	1.00	16.00	100	52,90
58.125.H10	FS80125	HSS M42	80.00	1.25	16.00	100	52,90
58.130.H10	FS8013	HSS M42	80.00	1.30	16.00	100	52,90
58.140.H10	FS8014	HSS M42	80.00	1.40	16.00	100	52,90
58.150.H10	FS8015	HSS M42	80.00	1.50	16.00	100	52,90
58.175.H10	FS80175	HSS M42	80.00	1.75	16.00	100	52,90
58.500.H10	FS8020	HSS M42	80.00	2.00	16.00	100	52,90
58.080.H10		HSS M42	80.00	2.00	22.00	80	52,90
58.230.H10	FS8023	HSS M42	80.00	2.30	16.00	100	52,90
58.300.H10		HSS M42	80.00	3.00	22.00	100	52,90
53.115.C00	KIS	Carbide	52.30	1.15	12.70	100	203,50
53.185.C00	KIS	Carbide	53.00	1.85	12.70	100	220,00
53.230.C00	KIS	Carbide	53.00	2.30	12.70	100	220,00
58.122.C00		Carbide	80.00	1.00	22.00	100	220,00

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**Fresa a cappello***Top hat cutter*

ARTICOLO	TIPO	MAT.	M	D (mm)	S (mm)	d (mm)	L (mm)	DENTI	LISTINO €
40.010.H30	TOC 400W	HSS M35	M8	25.00	1.25	24.00	28.00	40	60,88

**Fresa a cappello***Top hat cutter*

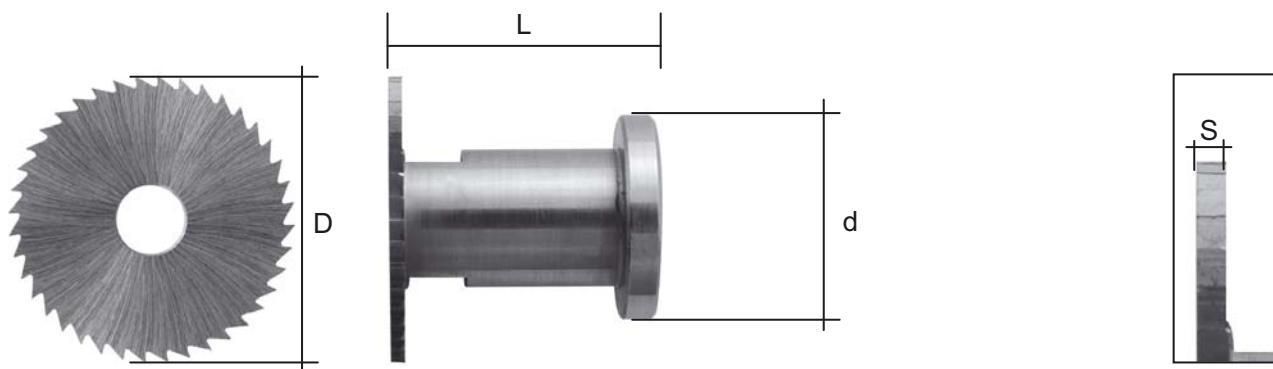
ARTICOLO	TIPO	MAT.	M	D (mm)	S (mm)	d (mm)	L (mm)	DENTI	LISTINO €
40.003.H30	TMC850 0085W	HSS M35	M83/8" BSF 20.6"	32.00	1.40	12.70	14.30	74	60,88

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

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## Fresa a cappello

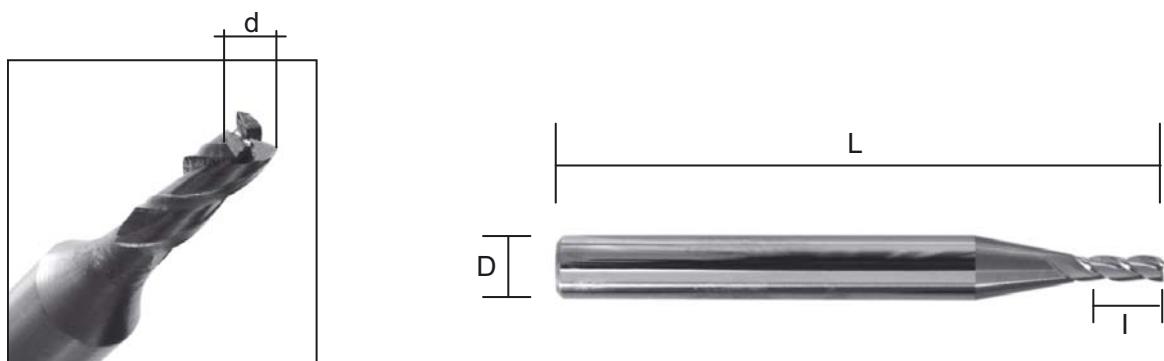
*Top hat cutter*



ARTICOLO	TIPO	MAT.	M	D (mm)	S (mm)	d (mm)	L (mm)	DENTI	LISTINO €
40.004.H30	CHMIN	HSS M35	M8	25.00	1.20	12.00	23.00	40	60,88

## Fresa cilindrica, 3 denti

*End milling cutter, 3 teeth*



ARTICOLO	MAT.	D (mm)	d (mm)	L (mm)	I (mm)	DENTI	LISTINO €
33.545.H10	HSS M42	5.00	3.00	45.00	5.00	3	48,88
33.425.H10	HSS M42	6.00	3.00	45.00	6.00	3	48,88

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7

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## SET MUL-T-LOCK

### MUL-T-LOCK SET

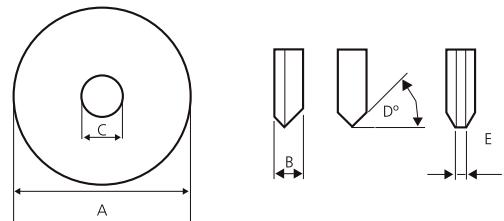


ARTICOLO	TIPO	MAT.	LISTINO €
35.001.H30	MUL-T-LOCK SET	HSS M35	193,00

**PER AUMENTARE LE PRESTAZIONI DEGLI STRUMENTI**, specificare nell'ordine il trattamento desiderato aggiungendo al codice la lettera **J B N V** come illustrato a pagina 5 e 6, verificare il costo netto in supplemento a pag 7  
**TO IMPROVE THE PERFORMANCE OF YOUR TOOLS**, all of these tools could be coated adding the code J B N V as explained on page 5 and 6. Check the net extra cost on page 7

## Fresa piatta

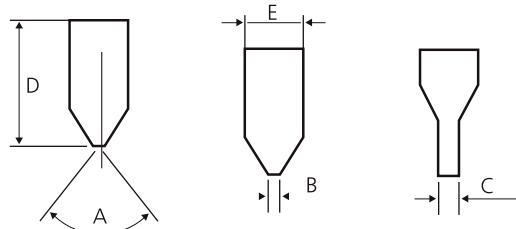
*Flat slotter*



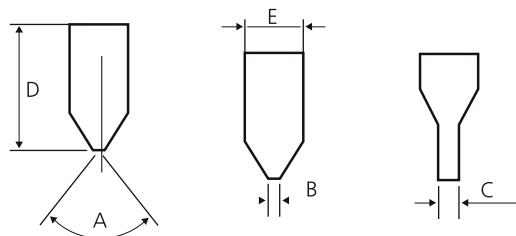
ARTICOLO	AxBxC	D (mm)	E (mm)	PER	MAT	LISTINO €
<b>FP36</b>	63x1,7x16	0	1,7	3-Code - 3-Code Single	HSS	61.20
<b>FP34</b>	63x5,25x16	40	0,1	3-Code - 3-Code Single	HSS	75.60

## Fresa cilindrica

*End milling cutter*



ARTICOLO	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	PER	MAT	LISTINO €
<b>F1A</b>	90	0,8		45	8	NOVACODE	HSS	36.00
<b>F1W</b>	90	0,8		45	6	NOVACODE	W	110.40
<b>F3W</b>			1,5	45	6	NOVACODE	W	106.80
<b>F5W</b>	90	0,9		45	6	NOVACODE	W	90.00
<b>F6</b>	106	1		45	6	NOVACODE	HSS	81.60
<b>F7</b>	70	0,8		45	6	NOVACODE	HSS	42.00
<b>F8W</b>			4	45	6	NOVACODE	W	106.80
<b>F11W</b>			2,5	45	6	NOVACODE	W	94.80
<b>F12A</b>	100	0,6		45	6	NOVACODE	HSS	su richiesta
<b>F12B</b>	100-90	2,1-2,9		45	6	NOVACODE	HSS	52.80
<b>F13W</b>	100	0,8		45	6	NOVACODE	W	110.40
<b>F14</b>	100	1,45		45	6	NOVACODE	HSS	33.60
<b>F16</b>	130	0,6		45	6	NOVACODE	HSS	33.60
<b>F17W</b>			3	45	6	NOVACODE	W	100.80
<b>F19W</b>	90	1,2		45	6	NOVACODE	W	102.00
<b>F21</b>	85	0,72		45	6	NOVACODE	HSS	su richiesta
<b>F22</b>			2,4	45	6	NOVACODE	HSS	76.80
<b>F23W</b>	90	0,8	3,3	45	6	NOVACODE	W	144.00
<b>F24W</b>	95	1		45	6	NOVACODE	W	99.60
<b>F25W</b>	95	1,1		45	6	NOVACODE	W	142.80
<b>F27W</b>	90	0,7		45	6	NOVACODE	W	69.60
<b>F28W</b>	60	1,4		45	6	NOVACODE	W	138.00
<b>F29W</b>	100	0,6		45	6	NOVACODE	W	63.60
<b>F30W</b>	100	0,5		45	6	NOVACODE	W	98.40
<b>F31W</b>	90	0,6		45	6	NOVACODE	W	66.00
<b>F32W</b>	90	0,6	3	45	6	NOVACODE	W	79.20
<b>F33W</b>			2	45	6	NOVACODE	W	98.40
<b>F34</b>	90	1,4		45	6	NOVACODE	HSS	21.60

**Fresa cilindrica***End milling cutter*

ARTICOLO	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	PER	MAT	LISTINO €
<b>F35W</b>	90	3	3	45	6	NOVACODE	W	138.00
<b>F39W</b>	90	0,8	2,7	45	6	NOVACODE	W	144.00
<b>F40W</b>	90	0,2		45	6	NOVACODE	W	98.40
<b>F41W</b>	90	0,56		45	6	NOVACODE	W	su richiesta
<b>F45W</b>			2,7	45	6	NOVACODE	W	su richiesta
<b>F46W</b>			1,8	45	6	NOVACODE	W	76.80
<b>F49W</b>	83	0,8		45	6	NOVACODE	W	98.40
<b>F51W</b>			1,3	45	6	NOVACODE	W	98.40
<b>F52W</b>	97	0,6	2,6	45	6	NOVACODE	W	132.98
<b>F53W</b>	90	0,8	2,2	45	6	NOVACODE	W	106.80
<b>FBW</b>	90-90	2,7-3,3		45	6	NOVACODE	W	su richiesta
<b>FCW</b>	80-80			45	6	NOVACODE	W	su richiesta
<b>FI2W</b>	90	0,4		45	6	NOVACODE	W	98.40
<b>FI3W</b>	100	0,4		45	6	NOVACODE	W	98.40
<b>FS31</b>	60	1,28		48	6	NOVACODE	W	48.00
<b>1F</b>		2,5		30	6	3-Code- 3-Code Dupla	W	57.00
<b>2F</b>	90	0,4		30	6	3-Code- 3-Code Dupla	W	57.00
<b>3F</b>	100	0,4		30	6	3-Code- 3-Code Dupla	W	57.00
<b>4F</b>	90	0,2		30	6	3-Code- 3-Code Dupla	W	82.90
<b>5F</b>	90	0,6	3	30	6	3-Code- 3-Code Dupla	W	82.90
<b>6F</b>	90	0,8	3,3	30	6	3-Code- 3-Code Dupla	W	82.90
<b>7F</b>	60	1,4		30	6	3-Code- 3-Code Dupla	W	82.90
<b>8F</b>		3	3	30	6	3-Code- 3-Code Dupla	W	82.90
<b>9F</b>		2		30	6	3-Code- 3-Code Dupla	W	82.90
<b>10F</b>	83	0,8		30	6	3-Code- 3-Code Dupla	W	su richiesta
<b>11F</b>	97	0,6	2,6	30	6	3-Code- 3-Code Dupla	W	82.90
<b>12F</b>		1,5		30	6	3-Code- 3-Code Dupla	W	82.90
<b>13F</b>	90	1,2		30	6	3-Code- 3-Code Dupla	W	82.90
<b>14F</b>		1,2		30	6	3-Code- 3-Code Dupla	W	82.90
<b>15F</b>	60	1,28		30	6	3-Code- 3-Code Dupla	W	su richiesta
<b>16F</b>	100	0,8		30	6	3-Code- 3-Code Dupla	W	su richiesta
<b>17F</b>	90	0,8	2,2	30	6	3-Code- 3-Code Dupla	W	82.90
<b>18F</b>		1,3		30	6	3-Code- 3-Code Dupla	W	su richiesta
<b>19F</b>		4		30	6	3-Code- 3-Code Dupla	W	su richiesta
<b>21F</b>		1,8		30	6	3-Code- 3-Code Dupla	W	su richiesta

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