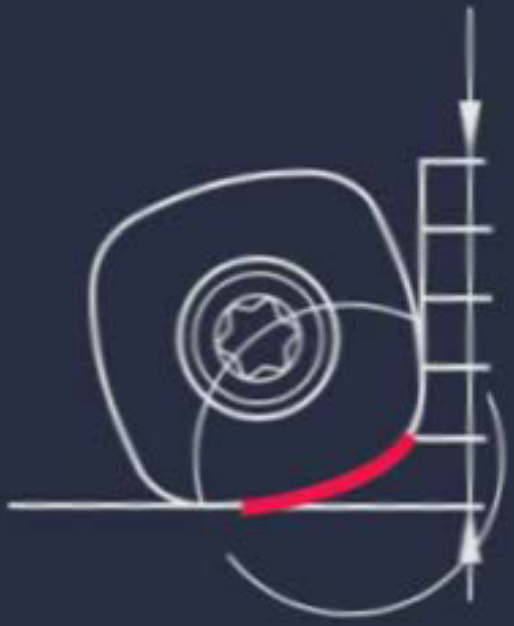
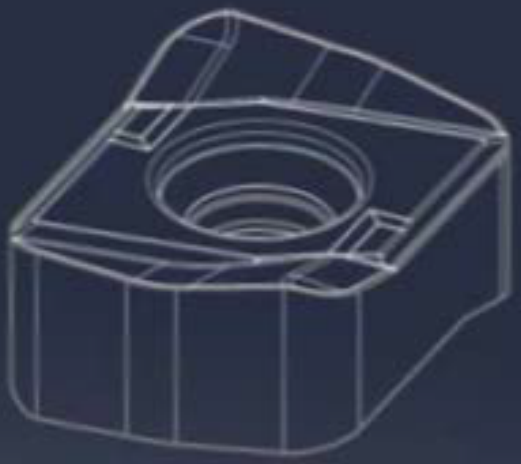
HT Hiper Speedy



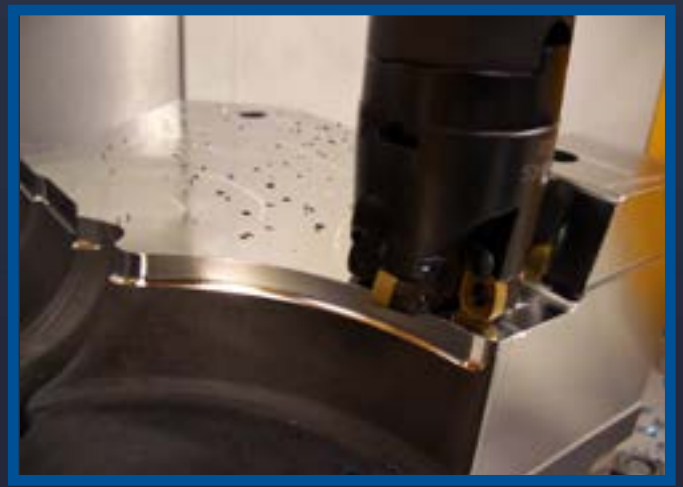


HIPER SPEEDY

é una linea di frese ad alti avanzamenti, grazie a dei nuovi angoli di taglio sono in grado di incrementare 4/5 volte gli avanzamenti senza dover aumentare , come le geometrie tradizionali , anche le velocità di taglio , quindi : un volume di truciolo maggiore e una durata dell'utensile inalterata o addirittura superiore

DIVERSI RAGGI raggi di programmazione R1,2 - 1,5 - 1,6 - 2 -4,5 consentono di applicare ?utensile più idoneo a seconda del volume di truciolo che si vuole sviluppare e in funzione delle caratteristiche della macchina utensile

SEMPRE grazie alla specia le configurazione dell'angolo di attacco , le vibrazioni causate dalla sporgenza del l'utensile vengono scaricate sull'asse del mandrino,aumentando le prestazioni : ***durata più elevata degli inserti e meno rotture .***



HIPER SPEEDY

Il s'agit d'une gamme de fraises à grande avance, grâce à de nouveaux angles de coupe, elles sont capables d'augmenter les avances 4/5 fois sans avoir à augmenter, comme les géométries traditionnelles, également les vitesses de coupe, donc: un plus grand volume de copeaux et durée de vie inchangée ou même plus longue

Différents rayons de program mation des rayons R1,2 - 1,5 - 1,6 - 2 - 4,5 permettent d'appliquer l'outil le plus adapté en fonction du volume de copeaux à dével opper et des caractéristiques de la machine-outil.

Toujours grâce à la configura tion spécifique dell'angle d'atta que, les vibrations provoquées par la saillie de l'outil se décharg ent sur l'axe de la broche, augmentant les performances : ***durée des plaquettes plus longue et moins de casse***.

HIPER SPEEDY

is a line of high feed milling cutters, thanks to new cutting angles they are able to increase feeds 4/5 times without having to increase, (like traditional geometries), also the cutting speeds, therefore: a chip volume longer and an unchanged or even longer tool life

DIFFERENT RAYS programming radiuses R1,2 -1,5 - 1,6 -2 -4,5 allow to apply the most suitable tool according to the chip volume to be developed and according to the characterisic of the machine.

ALLWAYS thanks to the special configuration of the angle of attack, the vibrations caused from the protrusion of the the tool is unloaded on the spindle axis, increasing performance: ***longer life of the inserts and fewer breaks***

HIPER SPEEDY

ist eine Reihe von Schneidern bei hohen Futtermiteln danke Einige neue Schnittwinkel sind In der Lage, den Vorschub um das 4/5-fache zu erhöhen, ohne wie bei herkömmlichen Geometrien auch die Schnittgeschwindigkeiten erhöhen zu müssen: ein größeres Spanvolumen und eine unveränderte oder sogar längere Standzeit

Unterschiedliche Strahlenpro grammierradien R 1,2-1,5 - 1,6 -2 -4,5 ermöglichen es, das am besten geeignete Werkzeug entsprechend dem zu entwickelnden Spanvolumen und den Eigenschaften der Werkzeugmaschine anzuwenden

Immer dank der spezifischen Konfiguration des Anstellwinkels werden die durch den Vorsprung des Werkzeugs verursachten Vibrationen auf die Spindelachse abgegeben, was die Leistung erhöht : ***höhere Dauer der Einsätze und weniger Bruch***..

INDICE

INDICE

INDICE

TORNA INDICE

Fresa Hiper Speedy LD gambo cilindrico per inserto XDNT 1.2....

High feed cutters LD cilindrical shank for insert XDNT 1.2....

codice	D1	D2	L1	L2	Z	insert	raggio rε	torx	screw
1602LD150	16	16	150	30	2	XDNT1,2.....	1,2	TX 08	S 2.5 E
2003LD150	20	20	150	35	3	XDNT1,2.....	1,2		
2504LD150	25	25	150	35	4	XDNT1,2.....	1,2		
2504LD15020*	25	20	150	45	4	XDNT1,2.....	1,2		
3205LD200	32	32	200	45	5	XDNT1,2.....	1,2		

HRC >=60

* =on demand

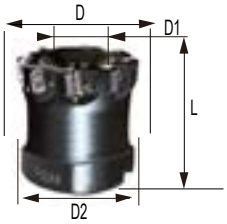
Testina filettata Hiper Speedy LD gambo cilindrico per inserto XDNT 1.2....

Body screw high feed LD for insert XDNT 1.2....

codice	D	L	D1	M	Z	insert	raggio rε	torx	screw
16 LD 23 08	16	30	17,7	M08	2	XDNT1,2.....	1,2	TX 08	S 2.5 E
20 LD 30 10	20	35	20,7	M10	3	XDNT1,2.....	1,2		
25 LD 35 12	25	40	28,7	M12	4	XDNT1,2.....	1,2		
32 LD 43 16	32	40	28,7	M16	5	XDNT1,2.....	1,2		
35 LD 43 16*	35	43	28,7	M16	5	XDNT1,2.....	1,2		
40 LD 43 16*	40	43	28,7	M16	6	XDNT1,2.....	1,2		
42 LD 43 16	42	43	28,7	M16	6	XDNT1,2.....	1,2		

HRC >=60

* =on demand



Fresa a manicotto Hiper Speedy LD per inserto XDNT 1.2....

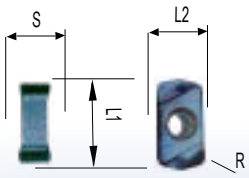
TORNA INDICE

HRC >= 60

High feed shell Hiper Speedy LD for insert XDNT 1.2....

codice	D	L	D1	D2	Z	insert	raggio rε	torx	screw
40 LD 12.6*	40	40	16	38	6	XDNT1,2.....	1,2	 TX 08	 S 25 E
42 LD 12.6*	42	40	16	48	6	XDNT1,2.....	1,2		
50 LD 12.8	50	50	22	48	8	XDNT1,2.....	1,2		
52 LD 12.7*	52	50	22	38	7	XDNT1,2.....	1,2		
63 LD 12 8									

* =on demand



insert code-dimension	L1	L2	S	radius	quality
XDNT1,2.....	12,00	6,00	4,30	1,2	030 - 035 - 034

TORNA INDICE

HRC >=60

Fresa Hiper Speedy HS gambo cilindrico per inserto XDSR/ET 1.5....

High feed cutters HS cilindrical shank for insert XDSR/ET 1.5....

codice	D1	D2	L1	L2	Z	insert	raggio rε	torx	screw
20 02 10 HS	20	20	180	40	2	XDSR/ET1,5	1,5	TX 08	S 30
25 03 10 HS	25	25	200	45	3	XDSR/ET1,5	1,5		
32 04 10 HS	32	32	220	50	4	XDSR/ET1,5	1,5		

HRC >=60

Testina filettata Hiper Speedy HS per inserto XDSR/ET 1.5....

Body screw high feed HS for insert XDNT XDSR/ET 1.5....

codice	D	L	D1	M	Z	insert	raggio rε	torx	screw
20 HS 30 10	20	30	17,7	M08	2	XDSR/ET1,5.....	1,5	TX 08	S 30
25 HS 35 12	25	35	20,7	M10	3	XDSR/ET1,5.	1,5		
32 HS 35 12	32	43	28,7	M12	4	XDSR/ET1,5.	1,5		
35 HS 35 16	35	40	28,7	M16	5	XDSR/ET1,5.	1,5		
42 HS 43 16	42	43	28,7	M16	5	XDSR/ET1,5.	1,5		

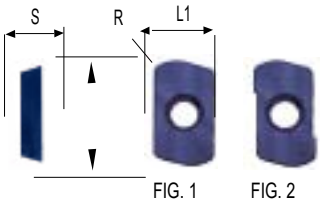


FIG. 1 FIG. 2

insert code-dimension	L1	L2	S	raggio rε	quality
FIG. 1 XDNT1,5.....	14,00	8,00	3,18	1,5	030 - 035 - 034
FIG. 2 XDET1,5.....	14,00	8,00	3,18	1,5	030 - 035 - 034

TORNA INDICE

HRC >=60

Fresa Hiper Speedy GU gambo cilindrico per inserto XDGU 1.6....

High feed cutters GU cilindrical shank for insert XDGU 1.6....

codice	D1	D2	L1	L2	Z	insert	raggio rε	torx	screw
1602GU150	16	16	150	30	2	XDGU 1,6....	1,6	TX 08	S 3-8 K
2003GU150	20	20	150	35	3	XDGU 1,6....	1,6		
2504GU150	25	25	150	35	4	XDGU 1,6....	1,6		
3205GU200	32	32	200	45	5	XDGU 1,6....	1,6		

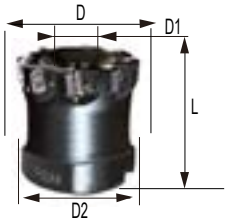
HRC >=60

Testina filettata Hiper Speedy GU gambo cilindrico per inserto XDGU 1.6....

Body screw high feed GU for insert XDGU 1.6....

codice	D	L	D1	M	Z	insert	raggio rε	torx	screw
16 GU 25 08	16	25	12,7	M8	2	XDGU 1,6....	1,6	TX 08	S 3-8 K
20 GU 30 10	20	30	17,7	M10	3	XDGU 1,6....	1,6		
25 GU 35 12	25	35	20,7	M12	4	XDGU 1,6....	1,6		
32 GU 43 16	32	40	28,7	M16	5	XDGU 1,6....	1,6		
35 GU 43 16	35	40	28,7	M16	5	XDGU 1,6....	1,6		
40 GU 43 16*	40	43	28.7	M16	6	XDGU 1,6....	1,6		
42 GU 43 16*	42	43	27.7	M16	6	XDGU 1,6....	1,6		

* =on demand



Fresa a manicotto Hiper Speedy GU per inserto XDGU 1.6....

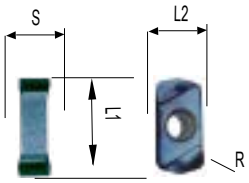
TORNA INDICE

HRC >= 60

High feed shell Hiper Speedy GU for insert XDGU 1.6....

codice	D	L	D1	D2	Z	insert	raggio rε	torx	screw
40 GU 16 06*	40	48	16	38	6	XDGU 1,6....	1,6	 TX 08	 S 25 E
50 GU 22 08*	50	50	22	48	8	XDGU 1,6....	1,6		
52 GU 22 08*	52	50	22	48	8	XDGU 1,6....	1,6		
63 GU 22 08*	63	50	22	58	8	XDGU 1,6....	1,6		

* =on demand



insert code-dimension	L1	L2	S	radius	quality
XDGU 1,6.....	12,00	6,00	4,00	1,6	030 - 035 - 034

TORNA INDICE

HRC >=60

Fresa Hiper Speedy HM gambo cilindrico per inserto XDSR/T 2.0....

High feed cutters HM cilindrical shank for insert XDSR/T 2.0....

codice	D1	D2	L1	L2		insert	raggio rε	screw	torx
1602HM200	16	16	200	40	2	XDSR/T 2.0...	2,0	S 25 B	TX 09
2003HM200	20	20	200	40	3	XDSR/T 2.0...	2,0		
2504HM200	25	25	200	45	4	XDSR/T 2.0...	2,0		

HRC >=60

Testina filettata Hiper Speedy HM per inserto XDSR/T 2.0....

Body screw high feed HM for insert XDSR/T 2.0....

codice	D	L1	D1	M	Z	insert	raggio rε	screw	torx
16 HM 25 08	16	25	12,7	M08	2	XDSR/T 2.0...	2,0	S 25 B	TX 09
20 HM 30 10	20	30	17,7	M10	3	XDSR/T 2.0...	2,0		
25 HM 35 12	25	35	20,7	M12	4	XDSR/T 2.0...	2,0		
32 HM 40 16	32	40	28,7	M16	5	XDSR/T 2.0...	2,0		
35 HM 43 16	35	40	28,7	M16	5	XDSR/T 2.0...	2,0		
40 HM 43 16	40	43	28,7	M16	6	XDSR/T 2.0...	2,0		
42 HM 43 16*	42	43	28,7	M16	6	XDSR/T 2.0...	2,0		

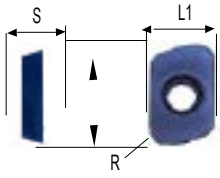


FIG. 1

FIG. 2

insert code-dimension	L1	L2	S	raggio rε	quality
FIG. 1 XDSR2,0.....	9.8	6,5	3,20	2,0	030 - 035 - 034
FIG. 2 XDST2,0.....	9.8	6,5	3,20	2,0	030 - 035 - 034

TORNA INDICE

Fresa Hiper Speedy BL gambo cilindrico per inserto XBLM 2.0....

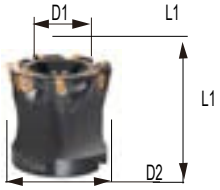
High feed cutters BL cilindrical shank for insert XBLM 2.0....

codice	D1	D2	L1	L2	Z	insert	raggio rε	screw	torx
16 02 150 BL	16	16	150	30	2	XBLM 2.0.....	2.0.....	S 25 E	TX 08
16 02 200 BL	16	16	200	30	2	XBLM 2.0.....	2.0.....		
20 03 150 BL	20	20	150	30	3	XBLM 2.0.....	2.0.....		
20 03 200 BL	20	20	200	30	3	XBLM 2.0.....	2.0.....		
25 04 150 BL	25	25	150	35	4	XBLM 2.0.....	2.0		
25 04 200 BL	25	25	200	35	4	XBLM 2.0.....	2.0		
32 05 150 BL	32	32	150	40	5	XBLM 2.0.....	2.0		
32 05 200 BL	32	32	200	40	5	XBLM 2.0.....	2.0		
35 05 150 BL	35	35	150	40	5	XBLM 2.0.....	2.0		
35 05 200 BL	35	35	200	40	5	XBLM 2.0.....	2.0		

Testina filettata Hiper Speedy BL per inserto XBLM 2.0....

Body screw high feed BL for insert XBLM....

codice	D	L	D1	M	Z	insert	raggio rε	screw	torx
16 06 BL 08	16	25	8.5	M8	2	XBLM 2.0.....	2.0.....	S 25 E	TX 08
20 03 BL 10	20	30	10.5	M10	3	XBLM 2.0.....	2.0.....		
25 04 BL 12	25	35	12.5	M12	4	XBLM 2.0.....	2.0.....		
32 04 BL 16	32	43	17.0	M16	4	XBLM 2.0.....	2.0.....		
32 05 BL 16	32	43	17.0	M16	5	XBLM 2.0.....	2.0.....		
35 04 BL 16	35	43	17.0	M16	4	XBLM 2.0.....	2.0		
35 05 BL 16	35	43	17.0	M16	5	XBLM 2.0.....	2.0		
40 05 BL 16	40	43	17.0	M16	6	XBLM 2.0.....	2.0		
42 05 BL 16	42	43	17.0	M16	6	XBLM 2.0.....	2.0		



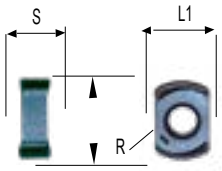
Fresa a manicotto Hiper Speedy BL per inserto XBLM 2.0....

TORNA INDICE

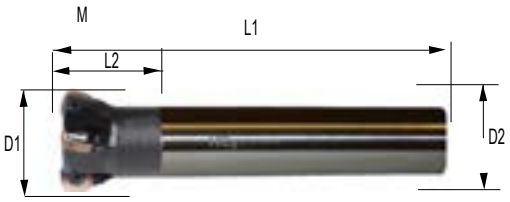
HRC >=55

High feed shell Hiper Speedy BL for insert XBLM 2.0....

codice	D	Z	D1	L	insert	raggio rε	screw	torx
40 BL 20 06	40	5	16	40	XBLM 2.0.....	2,0	S 2.5 E	TX 08
50 BL 20 07	40	6	22	40	XBLM 2.0.....	2,0		
					XBLM 2.0.....	2,0		



insert code-dimension	L1	L2	S	radius	quality
XBLM 2.0.....	9,00	6,38	3,73	2,0	030 - 035 - 034



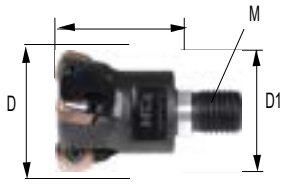
TORNA INDICE

HRC >=60

Fresa Hiper Speedy HP gambo cilindrico per inserto XPMW/T 2.0....

High feed cutters HP cilindrical shank for insert XPMW/T 2.0....

codice	D1	D2	L1	L2	Z	insert	raggio rε	screw	torx
20 03 130 HP	20	20	130	35	3	XPMW/T 2.0.....	2.0.....	S 3 C	TX 10
25 04 140 HP	25	25	140	40	4	XPMW/T 2.0.....	2.0.....		
32 05 200 HP	32	32	150	45	5	XPMW/T 2.0.....	2.0.....		
35 05 200 HP	35	32	150	45	5	XPMW/T 2.0.....	2.0.....		



HRC >=60

Testina filettata Hiper Speedy HP per inserto XPMW/T 2.0....

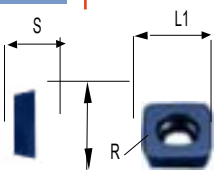
Body screw high feed HP for insert XPMW/T 2.0....

codice	D	L	D1	M	Z	insert	raggio rε	screw	torx
20 HP 30 10	20	30	17,7	M10	3	XPMW/T 2.0.....	2.0.....	S 3 C	TX 10
25 HP 35 12	25	35	20,7	M12	4	XPMW/T 2.0.....	2.0.....		
32 HP 40 16	32	40	28,7	M16	5	XPMW/T 2.0.....	2.0.....		
35 HP 40 16	35	40	28,7	M16	5	XPMW/T 2.0.....	2.0.....		
42 HP 40 16	42	40	28,7	M16	6	XPMW/T 2.0.....	2.0.....		

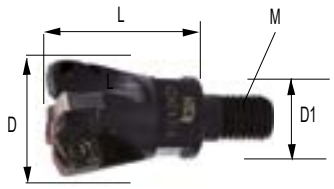
HRC >= 60

Fresa a manicotto Hiper Speedy HP per inserto XPMW/T 2.0....
High feed shell Hiper Speedy HP for XPMW/T 2.0....

codice	D	D1	L	Z	insert	raggio rε	screw	torx
40 HP 20.6	40	16	40	6	XPMW/T 2.0.....	2.0.....	S 3 C	TX 10
50 HP 20.7	50	22	50	7	XPMW/T 2.0.....	2.0.....		
52 HP 20.7	52	22	50	7	XPMW/T 2.0.....	2.0.....		
63 HP 20.8	63	22	50	8	XPMW/T 2.0.....	2.0.....		



insert code-dimension	L1	S	raggio rε	quality
XPMW/T 2.0.....	8,00	3,00	2,0	030 - 035 - 034



TORNA INDICE

Testina filettata Hiper Speedy HZ per inserto XDZT 2.0....

Body screw high feed HZ for insert XDZT 2.0....

codice	D	L	D1	M	Z	insert	raggio rε	screw	torx
32 HZ 02 16	32	43	28,7	16	2	XDZT 2.0	2.0.....	S40 G	TX 15
32 HZ 03 16	42	43	28,7	16	3	XDZT 2.0	2.0.....		
42 HZ 03 16	32	43	28,7	16	3	XDZT 2.0	2.0.....		
42 HZ 04 16	42	43	28,7	16	4	XDZT 2.0	2.0.....		

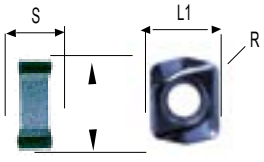
HRC >=60

Fresa a manicotto Hiper Speedy HZ per inserto XDZT 2.0....
High feed shell Hiper Speedy HZ for XDZT 2.0....

codice	D	D1	L	Z	d	insert	raggio rε	screw	torx
50 HZ 20,5	50	48	50	5	22	XDZT 2.0	2.0.....	S 40 G	TX 15
52 HZ 20,5	52	48	50	5	22	XDZT 2.0	2.0.....		
66 HZ 20,6	66	58	50	6	27	XDZT 2.0	2.0.....		
80 HZ 20,7	80	58	50	7	27	XDZT 2.0	2.0.....		
100 HZ 20,8*	100	70	50	8	32	XDZT 2.0	2.0.....		

*=on demand

HRC >= 60



insert code-dimension	L1	L2	S	raggio rε	quality
XDZT 2.0	15,00	12,00	5,5	2,0	030 - 035 - 034

Testina filettata Hiper Speedy BL per inserto XBLM 2.5....

TORNA INDICE

HRC >=55

Body screw high feed BL for insert XBLM 2.5...

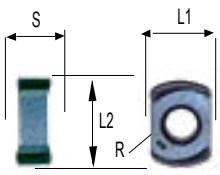
codice	D	L	D1	M	Z	insert	raggio rε	screw	torx
25 03 BL 25 12	25	35	12.5	M12	3	XBLM 2.5.....	2.5.....	S 35 E	TX 08
32 03 BL 25 16	32	43	17.0	M16	3	XBLM 2.5.....	2.5.....		
32 04 BL 25 16	32	43	17.0	M16	4	XBLM 2.5.....	2.5.....		
35 04 BL 25 16	35	43	17.0	M16	4	XBLM 2.5.....	2.5.....		
40 04 BL 25 16	40	43	17.0	M16	4	XBLM 2.5.....	2.5.....		
42 05 BL 25 16	42	43	17.0	M16	5	XBLM 2.5.....	2.5.....		

Fresa a manicotto Hiper Speedy BL per inserto XBLM 2.5....

HRC >=55

High feed shell Hiper Speedy BL for insert XBLM 2.5....

codice	D	Z	D1	L	insert	raggio rε	screw	torx
40 BL 25 05*	40	5	16	40	XBLM 2.5.....	2.5.....	S 35 E	TX 15
50 BL 25 06	50	6	22	50	XBLM 2.5.....	2.5.....		
52 BL 25 06	52	6	22	50	XBLM 2.5.....	2.5.....		
63 BL 25 07*	63	7	22	50	XBLM 2.5.....	2.5.....		
66 BL 25 07*	66	8	27	50	XBLM 2.5.....	2.5.....		



insert code-dimension	L1	L2	S	radius	quality
XBLM 2.5.....	10,00	12,00	3,73	2,5	030 - 035 - 034

TORNA INDICE

Testina filettata Hiper Speedy HQ per inserto XDSR/T4.5

Body screw high feed HQ for insert XDSR/T4.5

codice	D	L	M	D	Z	insert	raggio rε	screw	torx
32 HQ 43 16	32	43	16	28,7	3	XDSR/T 4,5....	4,5	S 40 G /35D	TX 15
42 HQ 43 16	42	43	16	28,7	4				

HRC >=60

Fresa a manicotto Hiper Speedy HQ per inserto XDSR/T4.5

High feed shell Hiper Speedy HQ for XDSR/T4.5

codice	D	D1	L	Z	d	insert	raggio rε	screw	torx
50 HQ 45,5	50	48	50	5	22	XDSR/T 4,5....	4,5	S 40 G /35D	TX 15
52 HQ 45.5	52	48	50	5	22				
66 HQ 45.6	66	58	50	6	27				
80 HQ 45.7	80	58	50	7	27				
100 HQ 45.8	100	70	50	8	32				

HRC >= 60

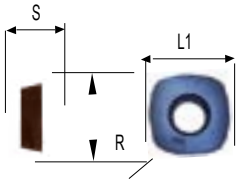
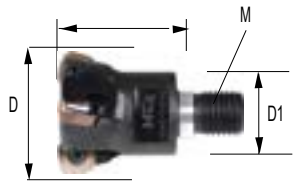


FIG. 1

FIG. 2

insert code-dimension	L1	L2	S	raggio rε	quality
FIG. 1 XDSR 4,5....	13,00	13,00	5,00	4,5	030 - 035 - 034
FIG. 2 XDST 4,5.....	13,00	13,00	5,00	4,5	030 - 035 - 034

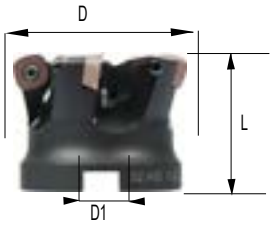


TORNA INDICE

Testina filettata Hiper Speedy AS per inserto XPMW/T 4.5....

Body screw high feed AS for insert XPMW/T 4.5....

codice	D	L	D1	M	Z	insert	raggio rε	screw	torx
32AS120216	32	43	17.0	M16	2	XPMW/T/L 4.5..	4.5.....	S 4 G	TX 15
35AS120316	35	43	17.0	M16	3				
40AS120416	40	43	17.0	M16	4				
42AS120416	42	43	17.0	M16	4				



Fresa a manicotto Hiper Speedy AS per inserto XPMW/T 4.5....
High feed shell Hiper Speedy AS for XPMW/T 4.5....

codice	D	D1	L	Z	insert	raggio rε	screw	torx
42 AS 12 04	42	16.0	40	4	XPMW/T/L 4.5.....	4.5.....	S 4 G	TX 15
50 AS 12 04	50	22.0	50	4				
50 AS 12 05	50	22.0	50	5				
52 AS 12 04	52	22.0	50	4				
52 AS 12 05	52	22.0	50	5				
63 AS 12 04	63	22.0	50	4				
63 AS 12 05	63	22.0	50	5				
63 AS 12 04 27	63	27.0	50	4				
63 AS 12 05 27	63	27.0	50	5				
66 AS 12 05	66	27.0	50	5				
66 AS 12 06	66	27.0	50	6				
80 AS 12 05	80	27.0	50	5				
80 AS 12 06	80	27.0	50	6				
80 AS 12 07	80	27.0	50	7				
100AS 12 08	100	32.0	70	8				

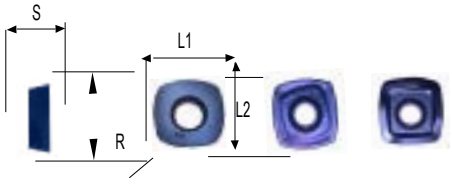
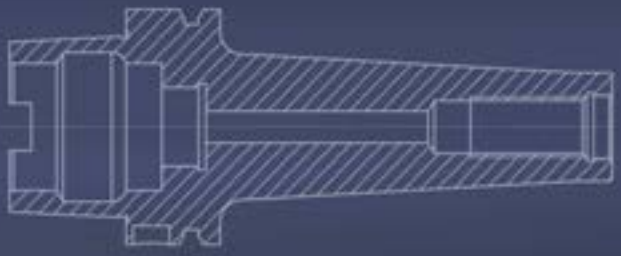


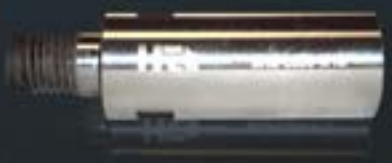
FIG. 1 FIG. 2 FIG. 3

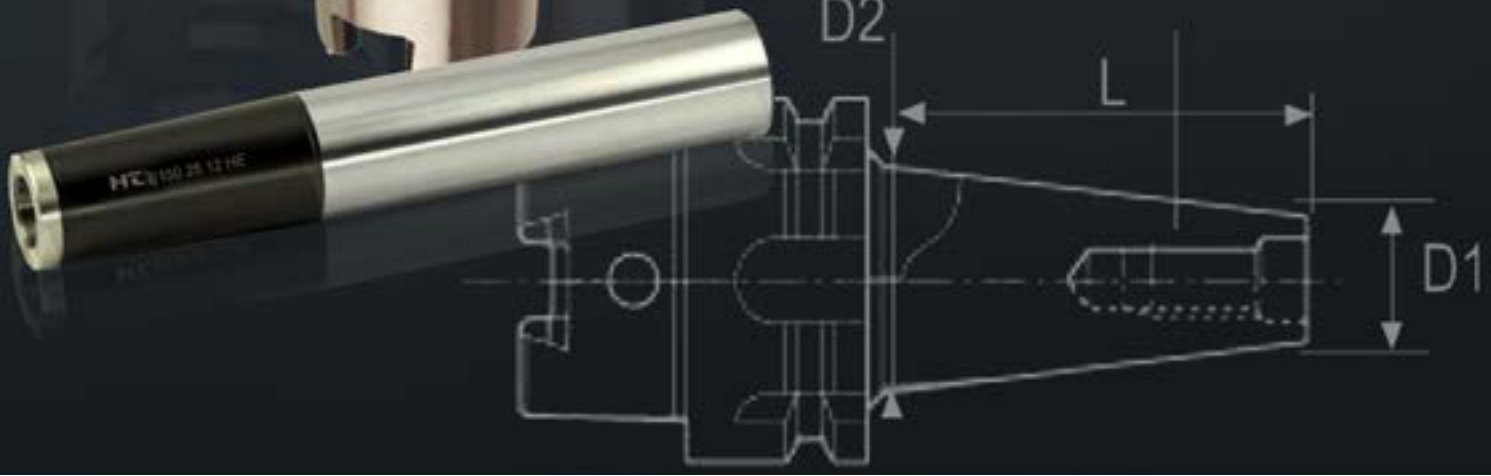
insert code-dimension	L1	L2	S	raggio rε	quality
FIG. 1 XPMW 4.5	12,00	12,00	5,00	4,5	030 - 035 - 034
FIG 2 XPMT 4.5	12,00	12,00	5,00	4,5	030 - 035 - 034
FIG. 3 XPML 4.5	12,00	12,00	5,00	4,5	030 - 035 - 034

Hiper Speedy



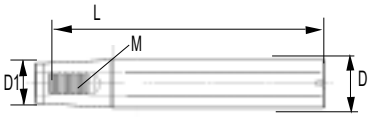
Hiper Extension





COD. HC solid carbide Extension

CARBIDE



Porta Fresa cilindrico per attacchi filettatil in Metallo Duro.

Cylindrical Solid Carbide extension.

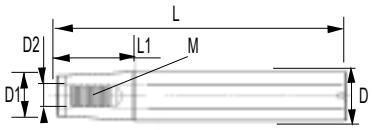
codice	D	L	M	D1	L1
100 10 05 HC	10	100	M5	5,5	15
150 10 05 HC*	10	150	M5	5,5	15
100 10 06 HC	10	100	M6	6,5	15
100 12 06 HC	12	100	M6	6,5	15
150 12 06 HC	12	150	M6	6,5	15
200 12 06 HC*	12	200	M6	6,5	15
100 16 08 HC	16	100	M8	8,5	15
150 16 08 HC	16	150	M8	8,5	15
200 16 08 HC	16	200	M8	8,5	15
250 16 08 HC*	16	250	M8	8,5	15
300 16 08 HC*	16	300	M8	8,5	15
100 20 10 HC	20	100	M10	10,5	20
150 20 10 HC	20	150	M10	10,5	20
200 20 10 HC	20	200	M10	10,5	20
250 20 10 HC*	20	250	M10	10,5	20
300 20 10 HC*	20	300	M10	10,5	20
100 25 12 HC*	25	100	M12	12,5	30
150 25 12 HC	25	150	M12	12,5	30
200 25 12 HC	25	200	M12	12,5	30
250 25 12 HC	25	250	M12	12,5	30
300 25 12 HC	25	300	M12	12,5	30
350 25 12 HC*	25	350	M12	12,5	30
150 32 16 HC*	32	150	M16	17	35
200 32 16 HC*	32	200	M16	17	35
250 32 16 HC*	32	250	M16	17	35
300 32 16 HC	32	300	M16	17	35
350 32 16 HC*	32	350	M16	17	35
400 32 16 HC*	32	400	M16	17	35

TORNA INDICE

* = NON A STOCK- ON DEMAND

** = SI ESEGUONO RETIFICHE A DISEGNO - ARE AVAILABLE ON DRAWING GRINDING

COD. HE Extension



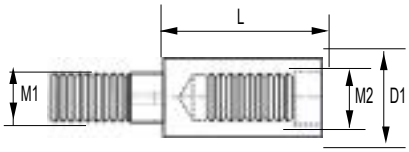
TORNA INDICE

ACCIAO

Porta Fresa cilindrico HE in acciaio per attacchi filettatil....

Steel extension HE for milling cutters modular type.

codice	D	M	L	L1	D1	D1
1601006HE	10	6	160	40	6,5	9,8
1601206HE	12	6	160	40	6,5	9,8
1601208HE	16	8	160	45	8,5	12,8
2001608HE	16	8	200	10	8,5	14
1602010HE	20	10	160	50	10,5	17,8
2502010HE	20	10	250	12	10,5	18
1602512HE	25	12	160	55	12,5	20,8
2502512HE	25	12	250	15	12,5	23
1603216HE	32	16	160	60	17	28,8
3003216HE	32	16	300	18	17	29



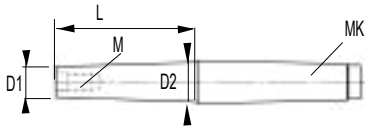
ACCIAO

Prolunghe in acciaio cilindrici per attacchi filettatil....

Steel extension for milling cutters modular type.

codice	M1	M2	D1	L
08 HE 40 08	8	8	13,8	40
08 HE 60 08	8	8	13,8	60
10 HE 40 10	10	10	17,7	40
10 HE 60 10	10	10	17,7	60
12 HE 40 12	12	12	20,7	40
12 HE 60 12	12	12	20,7	60
16 HE 40 16	16	16	28,7	40
16 HE 60 16	16	16	28,7	60

ACCIAO

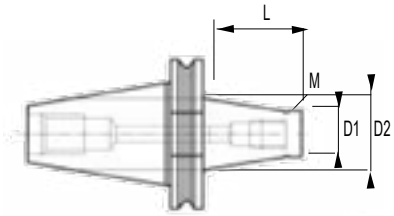


Prolunghe in acciaio attacco CM per attacchi filettatil....

TORNA INDICE

Steel extension for milling cutters modular type CM reduction.

codice	MK	M	D1	D2	L
20 HSM2 08	MK2	M8	13,8	18	20
40 HSM2 08	MK2	M8	13,8	18	40
60 HSM2 08	MK2	M8	13,8	18	60
20 HSM2 10	MK2	M10	18	18	20
40 HSM2 10	MK2	M10	18	18	40
60 HSM2 10	MK2	M10	18	18	60
80 HSM3 08	MK3	M8	13,8	24	80
100 HSM3 08	MK3	M8	13,8	24	100
80 HSM3 10	MK3	M10	18	24	80
100 HSM3 10	MK3	M10	18	24	100
10 HSM3 12	MK3	M12	21	24	10
30 HSM3 12	MK3	M12	21	24	30
45 HSM3 12	MK3	M12	21	24	45
60 HSM3 12	MK3	M12	21	24	60
75 HSM3 12	MK3	M12	21	24	75
85 HSM3 12	MK3	M12	21	24	85
95 HSM3 12	MK3	M12	21	24	95
110 HSM3 12	MK3	M12	21	24	110
120HSM4 12	MK4	M12	21	31,5	120
10 HSM4 16	MK4	M16	29	29	10
35 HSM4 16	MK4	M16	29	31,5	35
50 HSM4 16	MK4	M16	29	31,5	50
65 HSM4 16	MK4	M16	29	31,5	65
80 HSM4 16	MK4	M16	29	31,5	80
95 HSM4 16	MK4	M16	29	31,5	95
110 HSM4 16	MK4	M16	29	31,5	110
125 HSM4 16	MK4	M16	29	31,5	125
150 HSM4 16	MK4	M16	29	31,5	150
100 HSM5 16	MK5	M16	29	45	100
120 HSM5 16	MK5	M16	29	45	120
150 HSM5 16	MK5	M16	29	45	150
180 HSM5 16	MK5	M16	29	45	180
220 HSM5 16	MK5	M16	29	45	220
260 HSM5 16	MK5	M16	29	45	260

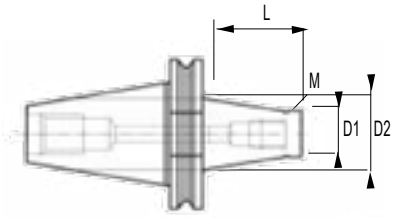


TORNA INDICE

Mandrino SK porta testina per attacchi filettati .

Shank SK for milling cutters modular typescrew-in endmills.

codice	SK	M	D1	D2	L
30 M8/40SK	40	8	12,7	15	30
50 M8/40SK	40	8	12,7	23	50
70 M8/40SK	40	8	12,7	23	70
90 M8/40SK	40	8	12,7	23	90
30 M10/40SK	40	10	17,7	20	30
50 M10/40SK	40	10	17,7	25	50
70 M10/40SK	40	10	17,7	28	70
90 M10/40SK	40	10	17,7	28	90
120 M10/40SK	40	10	17,7	34	120
30M12/40SK	40	12	20,7	24	30
50 M12/40SK	40	12	20,7	24	50
70 M12/40SK	40	12	20,7	31	70
90 M12/40SK	40	12	20,7	31	90
120 M12/40SK	40	12	20,7	38	120
150 M12/40SK	40	12	20,7	42	150
30 M16/40SK	40	16	28,7	29	30
50 M16/40SK	40	16	28,7	34	50
70 M16/40SK	40	16	28,7	34	70
90 M16/40SK	40	16	28,7	34	90
120 M16/40SK	40	16	28,7	39	120
150 M16/40SK	40	16	28,7	44	150
200 M16/40SK	40	16	28,7	44	200
30 M10/50SK	50	10	17,7	20	30
50 M10/50SK	50	10	17,7	25	50
70 M10/50SK	50	10	17,7	28	70
100 M10/50SK	50	10	17,7	31	100
30 M12/50SK	50	12	20,7	24	30
50 M12/50SK	50	12	20,7	24	50



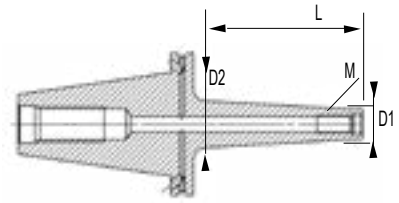
TORNA INDICE

Mandrino SK porta testina per attacchi filettati .

Shank SK for milling cutters modular typescrew-in endmills.

codice	SK	M	D1	D2	L
70 M12/50SK	50	12	20,7	31	70
100 M12/50SK	50	12	20,7	31	100
150 M12/50SK	50	12	20,7	41	150
30 M16/50SK	50	16	28,7	29	30
50 M16/50SK	50	16	28,7	34	50
70 M16/50SK	50	16	28,7	34	70
100 M16/50SK	50	16	28,7	41	100
150 M16/50SK	50	16	28,7	52	150
200 M16/50SK	50	16	28,7	57	200

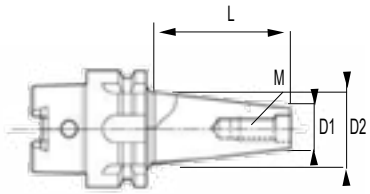
Slim



Mandrino SK porta testina per attacchi filettati SLIM.

Shank SK for milling cutters modular typescrew-in endmills SLIM.

codice	SK	M	D1	D2	L
50 M10/40SK SLIM	40	10	17,7	19,5	50
70 M10/40SK SLIM	40	10	17,7	19,5	70
90M10/40SK SLIM	40	10	17,7	19,5	90
70 M12/40SK SLIM	40	12	20,7	24	70
90 M12/40SK SLIM	40	12	20,7	24	90
50 M16/40SK SLIM	40	16	28,7	31	50
70 M12/40SK SLIM	40	16	28,7	31	70
90 M16/40SK SLIM	40	16	28,7	31	90
120 M16/40SK SLIM	40	16	28,7	31	120



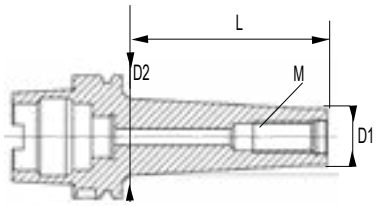
TORNA INDICE

Mandrino HSK A porta testina per attacchi filettati .

Shank HSK A for milling cutters modular typescrew-in endmills.

codice	HSK A	M	D1	D2	L
25 M6/63A	63	6	9,7	10	25
50 M6/63A	63	6	9,7	20	50
75 M6/63A	63	6	9,7	20	75
25 M8/63A	63	8	12' 7	15	25
50 M8/63A	63	8	12' 7	23	50
75 M8/63A	63	8	12' 7	23	75
100 M8/63A	63	8	12,7	25	100
25 M10/63A	63	10	17,7	20	25
50 M10/63A	63	10	17,7	25	50
75 M10/63A	63	10	17,7	28	75
100 M10/63A	63	10	17,7	30	100
125 M10/63A	63	10	17,7	34	125
25 M12/63A	63	12	20,7	24	25
50 M12/63A	63	12	20,7	24	50
75 M12/63A	63	12	20,7	31	75
100 M12/63A	63	12	20,7	31	100
125 M12/63A	63	12	20,7	31	125
150 M12/63A	63	12	20,7	39	150
175 M12/63A	63	12	20,7	42	175
25 M16/63A	63	16	28,7	34	25
50 M16/63A	63	16	28,7	34	50
75 M16/63A	63	16	28,7	34	75
100 M16/63A	63	16	28,7	39	100
125 M16/63A	63	16	28,7	39	125
150 M16/63A	63	16	28,7	39	150
175 M16/63A	63	16	28,7	42	175
200 M16/63A	63	16	28,7	45	200

Mandrini Shank HSK 63A



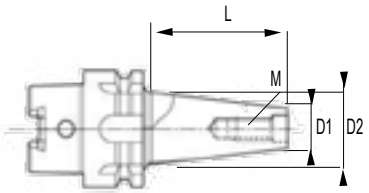
TORNA INDICE

Slim

Mandrino HSK A porta testina per attacchi filettati SLIM.

Shank HSK A for milling cutters modular typescrew-in endmills SLIM..

codice	HSK A	M	D1	D2	L
50 M10/63A SLIM	63	10	18	19,5	50
75 M10/63A SLIM	63	10	18	19,5	75
100 M10/63A SLIM	63	10	18	19,5	100
100 M10/63A SLIM	63	10	21	24	125
75 M12/63A SLIM	63	12	21	24	75
100 M12/63A SLIM	63	12	29	31	100
50 M16/63A SLIM	63	16	29	31	50
75 M16/63A SLIM	63	16	29	31	75
100 M16/63A SLIM	63	16	29	31	100
125 M10/63A SLIM	63	16	29	31	125

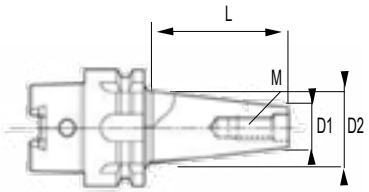


TORNA INDICE

Mandrino HSK E63 porta testina per attacchi filettati .

Shank HSK E63 for milling cutters modular typescrew-in endmills .

codice	HSK E	M	D1	D2	L
25 M6/63E	63	6	9,7	10	25
50 M6/63E	63	6	9,7	20	50
75 M6/63E	63	6	9,7	20	75
25 M8/63E	63	8	12' 7	15	25
50 M8/63E	63	8	12' 7	23	50
75 M8/63E	63	8	12' 7	23	75
100 M8/63E	63	8	12,7	25	100
25 M10/63E	63	10	17,7	20	25
50 M10/63E	63	10	17,7	25	50
75 M10/63E	63	10	17,7	28	75
100 M10/63E	63	10	17,7	30	100
25 M12/63E	63	12	20,7	24	25
50 M12/63E	63	12	20,7	24	50
75 M12/63E	63	12	20,7	31	75
100 M12/63E	63	12	20,7	31	100
25 M16/83E	63	16	28,7	34	25
50 M16/63E	63	16	28,7	34	50
75 M16/63E	63	16	28,7	34	75
100 M16/63E	63	16	28,7	39	100



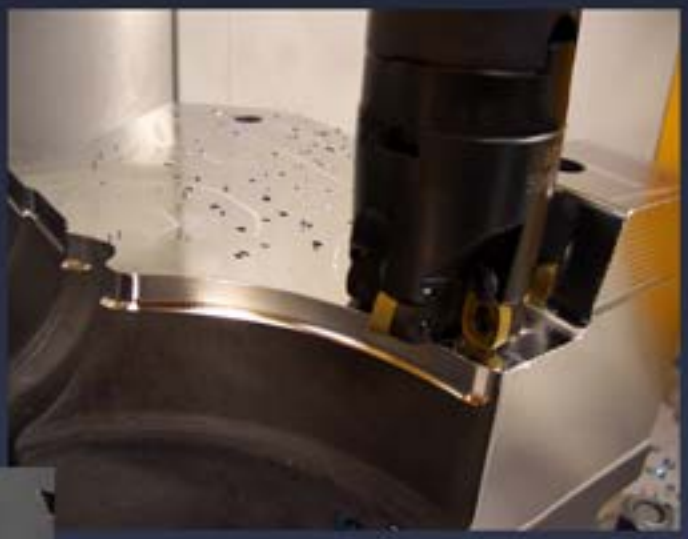
TORNA INDICE

Mandrino HSK A/E 40/50 porta testina per attacchi filettati .

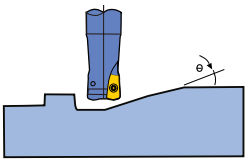
Shank HSK A/E 40/50 for milling cutters modular typescrew-in endmills.

codice A	codice E	HSK	M	D1	D2	L
25 M6 /40A	25 M6 /40E	40	6	9,7	10	25
50 M6 /40A	50 M6 /40E	40	6	9,7	20	50
75 M6 /40A	75 M6 /40E	40	6	9,7	23	75
25 M8 /40A	25 M8 /40E	40	8	12,7	15	25
50 M8 /40A	50 M8 /40E	40	8	12,7	23	50
75 M8 /40A	75 M8 /40E	40	8	12,7	23	75
100 M8 /40A	100 M8 /40E	40	8	12,7	25	100
25 M10 /40A	25 M10 /40E	40	10	17,7	20	25
50 M10 /40A	50 M10 /40E	40	10	17,7	25	50
75 M10 /40A	75 M10 /40E	40	10	17,7	28	75
100 M10 /40A	100 M10 /40E	40	10	17,7	30	100
25 M6 /50A	25 M6 /50E	50	6	9,7	10	25
50 M6 /50A	50 M6 /50E	50	6	9,7	20	50
75 M6 /50A	75 M6 /50E	50	6	9,7	23	75
25 M8 /50A	25 M8 /50E	50	8	12,7	15	25
50 M8 /50A	50 M8 /50E	50	8	12,7	23	50
75 M8 /50A	75 M8 /50E	50	8	12,7	23	75
100 M8 /50A	100 M8/50E	50	8	12,7	25	10
25 M10 /50A	25 M10 /50E	50	10	17,7	20	25
50 M10 /50A	50 M10 /50E	50	10	17,7	25	50
75 M10 /50A	75 M10 /50E	50	10	17,7	28	75
100 M10 /50A	100 M10 /50E	50	10	17,7	30	100
25 M12 /50A	25 M12 /50E	50	12	20,7	24	25
50 M12 /50A	50 M12 /50E	50	12	20,7	24	50
75 M12 /50A	75 M12 /50E	50	12	20,7	31	75
25 M16 /50A	25 M16 /50E	50	16	28,7	34	25
50 M16 /50A	50 M16 /50E	50	16	28,7	34	50
75 M16 /50A	75 M16 /50E	50	16	28,7	34	75

Inserti - Parametri di taglio ap e fz



HT Hiper Speedy

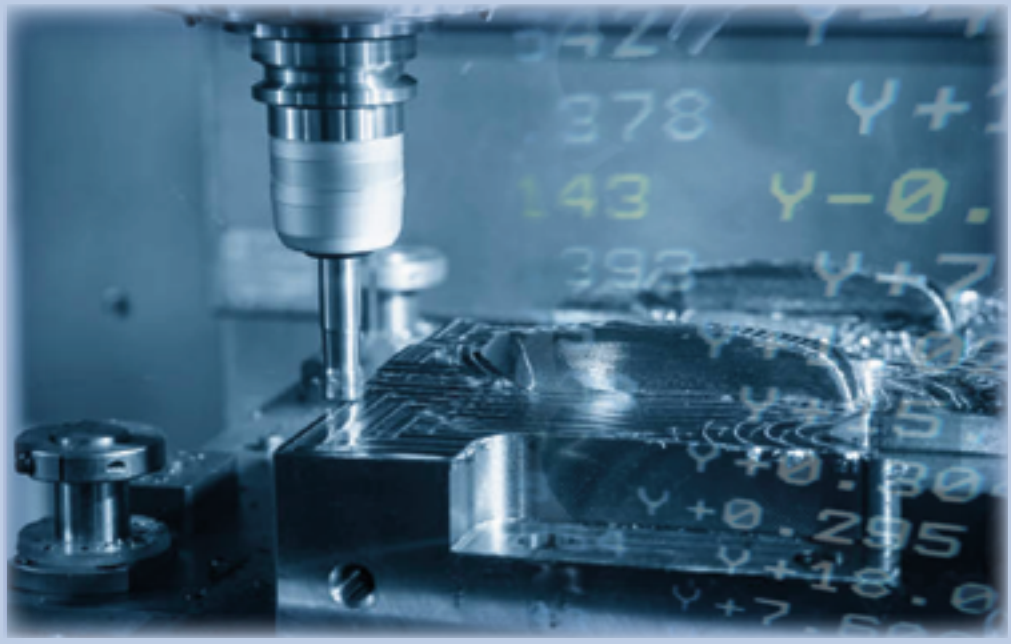


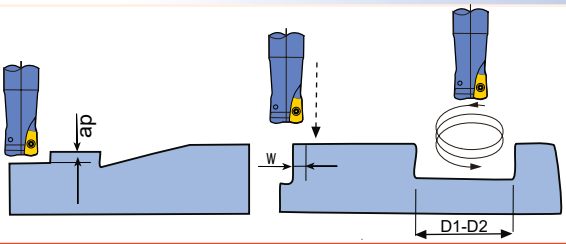
TORNA INDICE

Tabella per l'angolo di penetrazione massima in rampa.

Maximum ramping angle.

ins. \ diam.	16	20	25	32	35	40	42	50	52	63	66	80	100	125
XDNT1,2.....	2,1°	1,4°	1°	0,7°	---	---	---	---	---	---	---	---	---	---
XDSR/ET1,5....	---	3°	3°	3°	3°	3°	3°	3°	3°	---	---	---	---	---
XDGU1,6.....	2,8°	1,7°	1,2°	0,8°	0,8°	---	---	---	---	---	---	---	---	---
XDSR/T 2.0...	4°	3°	2°	2°	1,5°	1,5°	1,5°	1,5°	1°	0,5°	0,5°	---	---	---
XBLM 2.0.....	3°	1,4°	1,4°	0,9°	0,9°	0,9°	0,7°	---	---	---	---	---	---	---
XPMW/T 2.0...	---	0,9°	0,9°	0,9°	0,9°	---	0,9°	0,9°	0,9°	0,9°	---	0,5°	---	---
XDZT 2.0....	---	---	---	1,5°	1,5°	---	1,3°	0,9°	0,8°	0,5°	0,5°			
XBLM 2.5.....	---	---	---	---	---	1,5°	---	1°	---	0,9°		1°	1°	---
XDSR/T 4,5....	---	---	---	1°	---	---	1°	1°	1°	1°	1°	1°	1°	1°
XPMW/T/L 4.5	---	---	---	7°	7°	4.5°	3°	1.7°	1.7°	1°	1°			



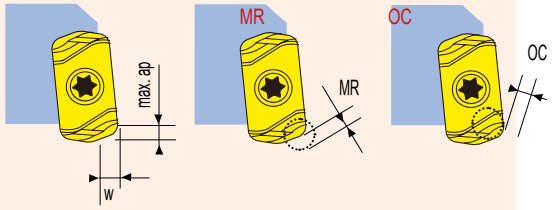


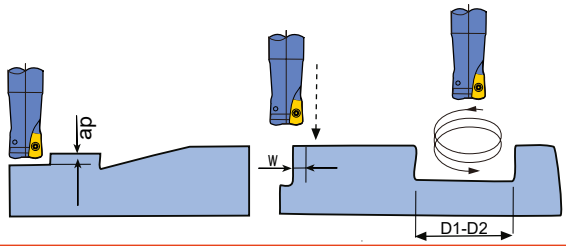
TORNA INDICE

Consigli di utilizzo

INSERT XDNT1,2.....

Diam.	Max ap (mm)	Max W (mm)	Min Hole D1	Max Hole D1	R di programmazione	M R	OC
16	0,3	3,0	22	30	1,2 consigliato	0,6	-----
20	0,5	3,0	30	38	1,5	0,5	-----
25	0,5	3,0	40	48	2,0	0,26	0,09
32	0,8	3,0	54	62	2,5	0,15	0,27
40	--	--	--	--	Massima profondita' di passata ap	Residuo di Materiale Material Remains MR	Materiale asportato in eccesso Over Cut OC
42	1.0	3,0	70	78			
50	1.0	3,0	74	82			
52	1.0	3,0	90	98			



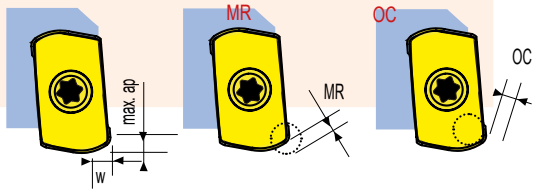


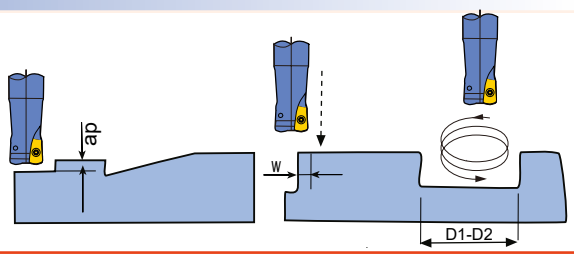
Consigli di utilizzo

Application Data

INSERT XDSR/T 1.5.....

Diam.	Max ap (mm)	Max W (mm)	Min Hole D1	Max Hole D1	R di programmazione	M R	OC
20	0,3	3,3	30	38	1,6 consigliato	0,28	---
25	0,5	3,3	40	48	2,0	0,10	0,3
32	0,5	3,3	54	62	Massima profondita' di passata ap	Residuo di Materiale Material Remains MR	Materiale asportato in eccesso Over Cut OC
35	0,7	3,3	60	68			
42	0,7	3,3	74	82			
52	1.0	3,3	94	102			





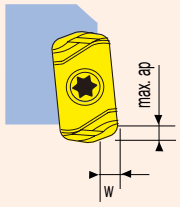
TORNA INDICE

Consigli di utilizzo

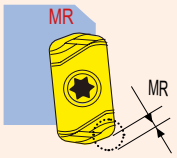
INSERT XDGU 1,6....

Diam.	Max ap (mm)	Max W (mm)	Min Hole D1	Max Hole D1	R di programmazione	M R	OC
16	0,3	3,5	24	30	1,6 consigliato	0,39	-----
20	0,5	3,5	32	38	2,0	0,35	0,09
25	0,5	3,5	42	48	2,5	0,26	0,26
32	0,8	3,5	56	62	3,0	0,17	0,46
35	0,8	3,5	62	68			

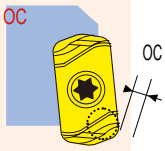
Massima profondita' di passata
ap

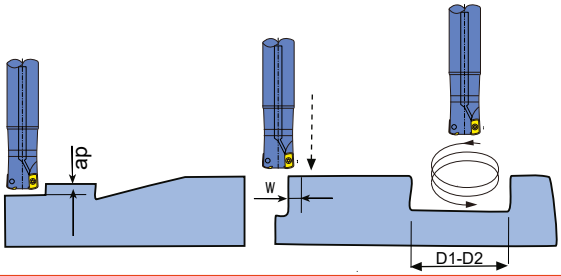


Residuo di Materiale
Material Remains
MR



Materiale asportato in eccesso
Over Cut
OC





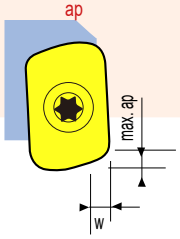
Consigli di utilizzo

Application Data

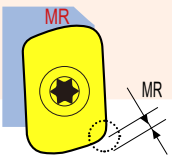
INSERT XDSR/T 2.0.....

Diam.	Max ap (mm)	Max W (mm)	Min Hole D1	Max Hole D1	R di programmazione	M R	OC
16	0,3	4,0	22	30	R2.0 consigliato	0.5	0
20	0,5	4,0	30	38	R2.5	0.35	0.08
25	0,5	4,0	40	48	R3.0	0.24	0.22
32	0,8	4,0	54	62	R3.5	0.11	0.42
40	--	--	--	--			
42	1.0	4,0	70	78			
50	1.0	4,0	74	82			
52	1.0	4,0	90	98			

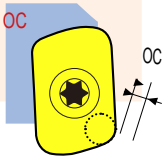
Massima profondita' di passata
ap

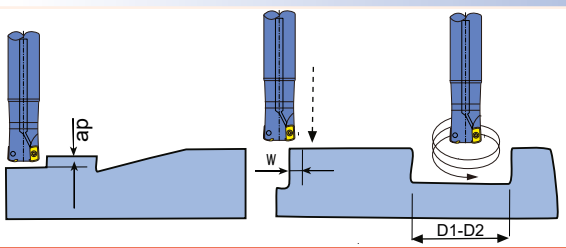


Residuo di Materiale
Material Remains
MR



Materiale asportato in eccesso
Over Cut
OC



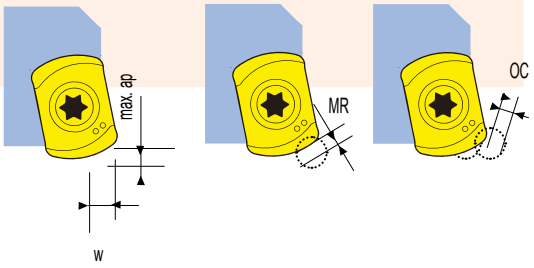


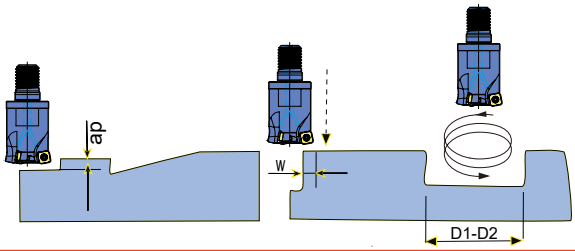
TORNA INDICE

Consigli di utilizzo — Application Data

INSERT XBLM 2.0.....

Diam.	Max ap (mm)	Max W (mm)	Min Hole D1	Max Hole D1	R di programmazione	M R	OC
16	0,5	3,0	23	32	2,0 consigliato	0,4	-----
20	0,5	3,0	31	40	2,5	0,5	0,12
25	0,7	3,0	41	50	3,0	0,26	0,29
32	0,8	3,0	55	64	Massima profondita' di passata ap	Residuo di Materiale Material Remains MR	Materiale asportato in eccesso Over Cut OC
40	1.0	--	71	80			
42	1.0	3,0	91				
50	1.0	3,0					

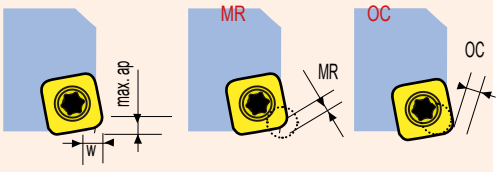




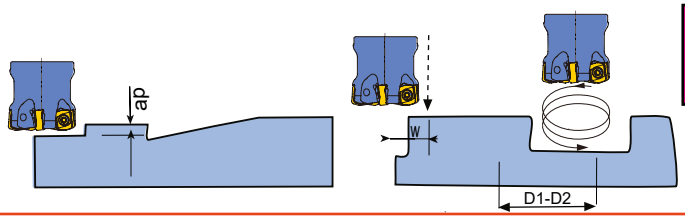
Consigli di utilizzo — Application Data

INSERT XPMW/T 2.0.....

Diam.	Max ap (mm)	Max W (mm)	Min Hole D1	Max Hole D1	R di programmazione	M R	OC
20	0,3	3,3	26	38	2,0 consigliato	0,62	---
25	0,5	3,3	36	48	2,8	0,50	0,17
32	0,5	3,3	50	62	3,0	0,47	0,23
35	0,7	3,3	60	68	Massima profondita' di passata ap	Residuo di Materiale Material Remains MR	Materiale asportato in eccesso Over Cut OC
50	0,7	3,3	86	98			
52	1.0	3,3	86	98			
63	1,0	3,3	112	124			



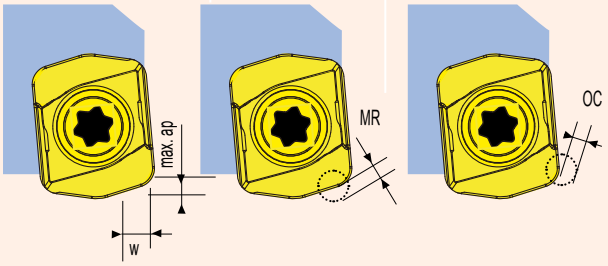
TORNA INDICE

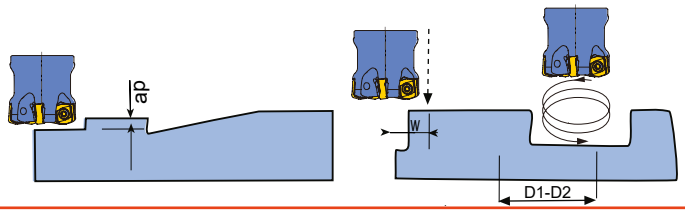


Consigli di utilizzo — Application Data

INSERT XDSZT 2.0.....

Diam.	Max ap (mm)	Max W (mm)	Min Hole D1	Max Hole D1	R di programmazione	M R	OC
32	0,5	5,0	47	59	2,0 consigliato	0,1	-----
42	0,8	5,0	64	77	3,0	0,77	-----
50	1,5	5,0	83	95	4,0	0,54	0,26
52	1,5	5,0	87	99	Massima profondita' di passata ap	Residuo di Materiale Material Remains MR	Materiale asportato in eccesso Over Cut OC
66	1,5	5,0	115	127			
80	1,5	5,0	143	155			
100	1,5	5,0	183	195			

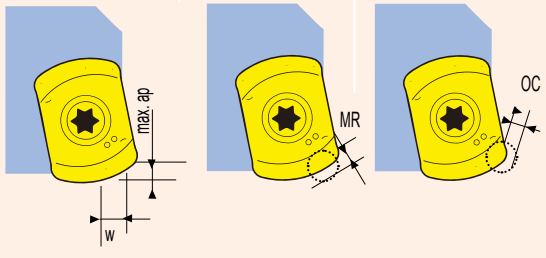


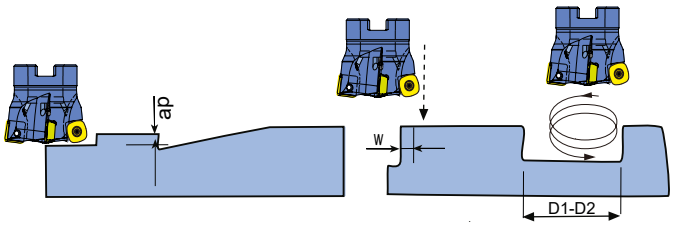


Consigli di utilizzo — Application Data

INSERT XBLM 2.5.....

Diam.	Max ap (mm)	Max W (mm)	Min Hole D1	Max Hole D1	R di programmazione	M R	OC
40	1,5	5,0	47	59	2,0 consigliato	0,1	-----
50	1,5	5,0	64	77	3,0	0,77	-----
63	1,5	5,0	83	95	4,0	0,54	0,26
					Massima profondita' di passata ap	Residuo di Materiale Material Remains MR	Materiale asportato in eccesso Over Cut OC



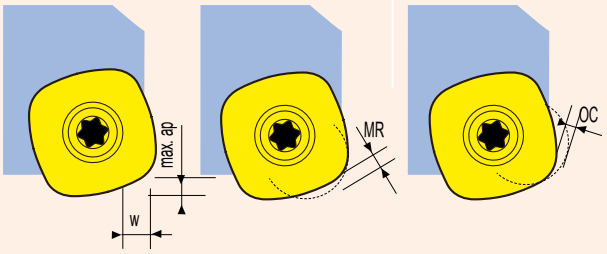


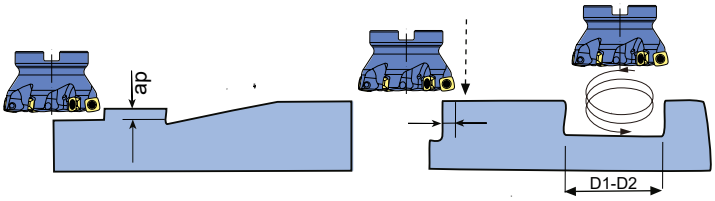
TORNA INDICE

Consigli di utilizzo — Application Data

INSERT XDSR/T 4.5.....

Diam.	Max ap (mm)	Max W (mm)	Min Hole D1	Max Hole D1	R di programmazione	M R	OC
32	0,5	8,2	44	64	4,5 consigliato	0,83	-----
42	0,9	8,2	64	80	5,0	0,65	0,07
50	2,0	8,2	80	96	5,5	0,55	0,2
52	2,0	8,2	85	100	Massima profondita' di passata ap	Residuo di Materiale Material Remains MR	Materiale asportato in eccesso Over Cut OC
66	2,5	8,2	113	128			
80	2,5	8,2	141	156			
100	2,5	8,2	180	195			

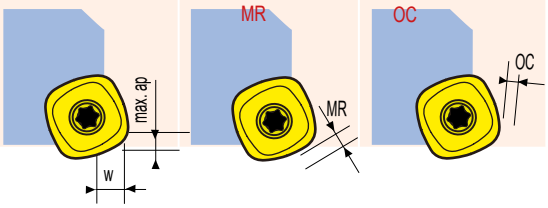




Consigli di utilizzo — Application Data

INSERT XPMW/T 4.5.....

Diam.	Max ap (mm)	Max W (mm)	Min Hole D1	Max Hole D1	R di programmazione	M R	OC
32	0,5	8,2	44	61	4,5 consigliato	0,83	-----
42	0,9	8,2	64	80	5,0	0,65	0,07
50	2,0	8,2	80	96	5,5	0,55	0,2
52	2,0	8,2	85	100	Massima profondita' di passata ap	Residuo di Materiale Material Remains MR	Materiale asportato in eccesso Over Cut OC
63	2,5	8,2	107	122			
66	2,5	8,2	113	128			
80	2,5	8,2	142	156			
100	2,5	8,2	179	195			



Valori guida per profondità di taglio ap e avanzamento per dente fz

ae = 0,6-0,7 x D fz = inversamente proporzionale ad ap

(I valori indicati sono valori standard e potrebbero dover essere adattati alla macchina - Sistema di bloccaggio del pezzo.

TORNA INDICE

			16	20	25	32	42	52	66	80	100	125
	XDNT1,2.....	ap [mm]	0,2					0,8				
		fz [mm/Z]	1,6					1,0				
	XDSR/ET1,5	ap [mm]	0,2					0,8				
		fz [mm/Z]	1,6					1,0				
	XDGU 1,6...	ap [mm]	0,5						1,0			
		fz [mm/Z]	1,6						0,8			
	XDSR/T 2.0...	ap [mm]	0,5					1,0				
		fz [mm/Z]	1,6					0,7				
	XBLM 2.0...	ap [mm]		0,2				1,0				
		fz [mm/Z]		2,0				0,8				

Cutting Conditions

Valori guida per profondità di taglio ap e avanzamento per dente fz

ae = 0,6-0,7 x D fz = inversamente proporzionale ad ap

(I valori indicati sono valori standard e potrebbero dover essere adattati alla macchina - Sistema di bloccaggio del pezzo.

TORNA INDICE

		16	20	25	32	42	52	66	80	100	125
 XPMW/T 2.0..	ap [mm]		0,3					1,0			
	fz [mm/Z]		1,7					1,0			
 XDZT 2.0..	ap [mm]				0,5			1,5			
	fz [mm/Z]				1,7			1,0			
 XBLM 2.5...	ap [mm]		0,2					1,5			
	fz [mm/Z]		2,0					0,8			
 XDSR/T 4,5....	ap [mm]				0,5			1,5			
	fz [mm/Z]				1,7			0,8			
 XPMW/T/L 4.5	ap [mm]				0,7			1,5			
	fz [mm/Z]				1,5			0,6			

Parametri di lavorazione consigliati
Recommended cutting conditions

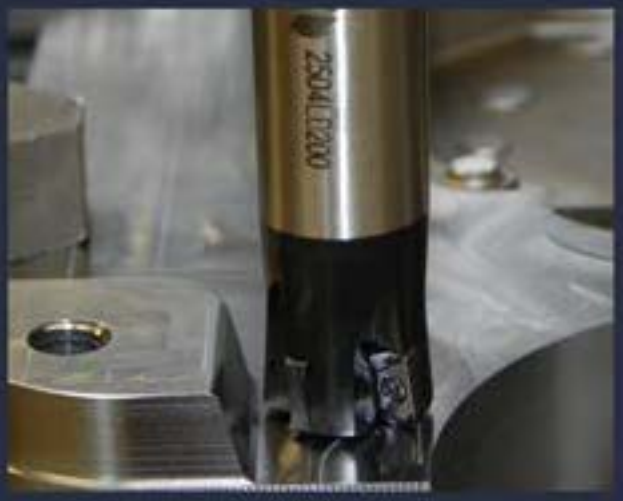
MATERIALI		Resistenza (N/mm^2)	Gruppo Materiali	035 - 034 Vc (m/min) DRY	035 - 034 Vc (m/min) WET	CRX - PRX Vc (m/min) DRY	CRX - PRX Vc (m/min) WET	030 Vc (m/min) DRY	KRX Vc (m/min) DRY	KRX Vc (m/min) WET	029 Vc (m/min) DRY	029 Vc (m/min) WET
P Acciaio Steels	Non Legati Non-Alloy	600-800	1-2-3	300 -160	190 - 140							
	Basso Legati Low-Alloy	800-1000	4-5-6	250 -120	150 - 100							
	Medio Legati Medium-Alloy	1000-1200	7-9	200 -100	140 - 80							
	Alto Legati High-Alloy	1200-1300	10	180 -100	160 - 80							
		1400-1500	11	120 - 80	100 - 60			160 - 80				
M Acciaio Inox Stainless Steels	Martensitico Martensitic		12			300-150	180 - 120					
	Austenitic		13			250-120	150 - 110					
	Inox Duplex Inox-Super Duplex		14				140 - 80		250 - 140		250 - 140	140 - 180
			14,1				110 - 60		200 -120	85 - 45	200 -120	
S Super Leghe Heat Res Alloy	Fe	600-900	31-32									80 - 45
	Ni-Co	900-1000	34-35									70 - 45
	Leghe Titanio Titanium	1200	36									40 - 20
	Alloy	α-β	37									85 - 60
H Acciaio temprato Hardened steels		45-50 Hrc	38					300 - 200				
		50-55 Hrc	39					180 -120				
		> 55 Hrc	40					80 - 60				
K Ghisa Cast iron		≤ 200 HB	15					250 - 150				
N Nonferrous ALU		≤ 110 HB	16								500 - 300	500 - 300
											1500 -500	1500 -500

Lista Materiali

Recommended cutting conditions

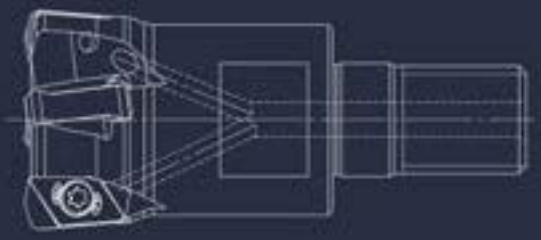
MATERIALI		Gruppo Materiali	DIN	UNI	AISI/ASTM	N° MATER	NOTE
Acciaio Steels P	C 15	1	C 15	C 15		10.401	
	15 CrMo5	6		15 CrMo5		17.262	
	C45	3	C45	C45		10.503	
	38NCD5	9		40NiCrMo6		16.565	Bonificato
	12.311	9	40 CrMgMo 7	40 CrMgMo 7		1,23 1 1	Hardened and
	12.312	9					Tempered Steel
	12.714	9					
	12.738	9		40 CrMnNi Mo 8 6 1		12.738	Bonificato
	1.2738 HH	11				1,2738 HH	Hardened and
	12.343	11				12.343	Tempered Steel
	12.344	11					
	1.2083 STAVAX	11					
	12.365	11					
	12.367	11					
	100Cr 6	9		100Cr6		1.2067	
	36 CrNiMo4	9		36 CrNiMo4		1.65 1 1	
	21 NiCrMo2	9		21 NiCrMo2		1.6523	Bonificato
	X100CrMoV5 1	11		X100CrMoV5 1		1.2363	Hardened and
	NIMAX	9				1.2738/P20	Tempered Steel
	DAC MAGIC	9					
	W 300	11				1.2343	
	IMPAX	11					
	12.080	10					
	K110	10				1.2379	
	K720	11				1.2842	
	K390	11					
	K890	11					
	M4-HSS	11			M4		
Acciaio Inox Stainless Steels M	AISI 304	13		X 5Cr Ni 18 10	630	1.4301	
	304LN	14		XCrNiN	304LN	1	
	AISI 316L	13		X 2 Cr Ni Mo 17 12 2	316L	1.4404	
	FA6	13					
	AISI 420	12		X 30Cr 13	420	1.4028	
	AISI 904L	13		X1NiCrMoCu25 20 5	904L	1.4539	
	17-4PH	14					
	15-5PH	14					
	F53	14,1		X 2 Cr Ni Mo 25 7 4	F53	1.4410	
	F51	14					
	F44	14,1					
	F55	14,1					
Super Leghe Heat Res Alloy S	NIMONIC 80 A	34				2.4631	
	MONEL K500	34				2.4375	
	INCONEL 625	35				2.4856	
	INCONEL 718	36				2.4668	
	INCONEL 718 INV /	36				2.4668	Invecchiato / Aged
	TITANIO	37	TiAl6V4			3.7165	
	1.2738	38		40 CrMnNi Mo 8 6 1		1.2738	
Acciaio temprato Hardened steels H	1.2738 HH	39				1.2738 HH	45 / 50
	1.2343	38				1.2343	
	1.2344	38					
	1.2083 STAVAX	40				1	
	1.2365	39					50 / 55
	1.2367	39					
	TOOLOX 33	39					33
	TOOLOX 44	39					Temprato 44
	DAC MAGIC	39					Hrc 48
	W 300	38				1.2343	Hardened
	IMPAX	39					Steel Hrc
	1.2080	39					45 / 50
	K110	40				1.2379	50 / 55
	K720	40				1.2842	50 / 60
	K390	40					
	K890	40					
	M4-HSS	40			M4		58 / 63
Ghisa Cast iron K	G15	15	G15	G15		0.6015	
	G20-GHISA	15	G20	G20		0.6020	
	G25-CAST IRON	15	G25	G25		0.6025	
Nonferrous ALU N	AVIONAL100	16	AlCuMg1	3579		3.1325	
	ANTICORODAL110	16	AlMgSi1	3571		3.2315	
	ERGAL55	16	AlZnMgCu1.5	3735		3.4365	
		16	G-AlSi8Cu3	5075		3.2161	

LD - GU - HZ
SERIES



Tre geometrie ad alta efficienza ed elevato avanzamento
Inserti BILATERALI: 4 taglienti
Raggio di program. 1,2 -1,6 -2,0
Ampia gamma di diametri

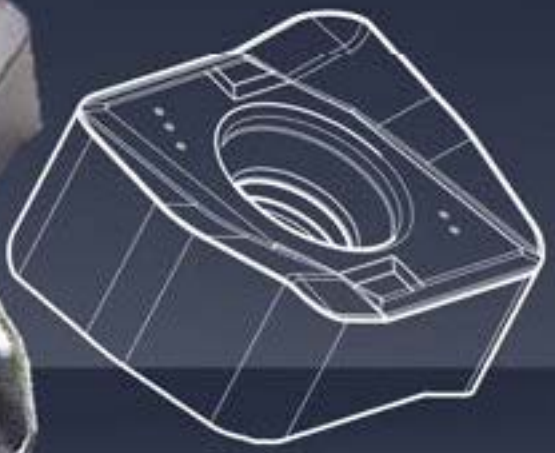
D. 16 - 80



XDTN1.2... RAGGIO DI PROG. 1.2

XDGU 1.6... RAGGIO DI PROG. 1.6

XDZT 2.0... RAGGIO DI PROG. 2.0



NEW CHIP BREAKER

• Lavorazione ad elevata efficienza anche su piccoli centri di lavoro ed in situazioni di sporgenze notevoli.
La buona evacuazione del truciolo grazie al design del tagliente migliora la qualità della lavorazione e consente prestazioni elevate.

HT Hiper Speedy

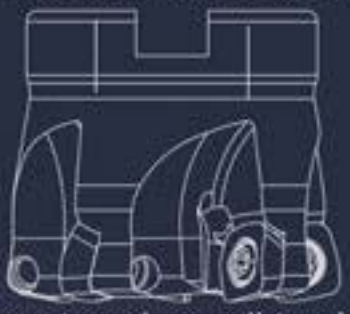
AS SERIES

Fresa ad alta efficienza ed
elevato avanzamento
Inserto monolaterale: 4 taglienti
Raggio di program. 4,5
Ampia gamma di diametri

D. 32- 100

XPML 4.5.. LOW

Ridotte forze di taglio e bassa tendenza alle vibrazioni

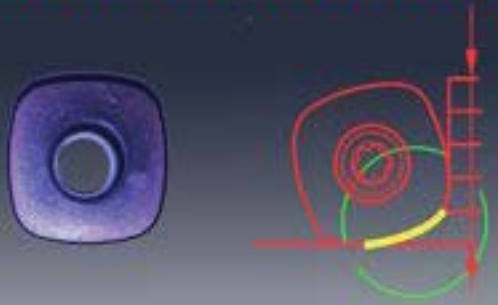


XPMT 4.5... MEDIUM

Medie asportazioni ed elevato volume di truciolo

XPMW 4.5...ROUGHING

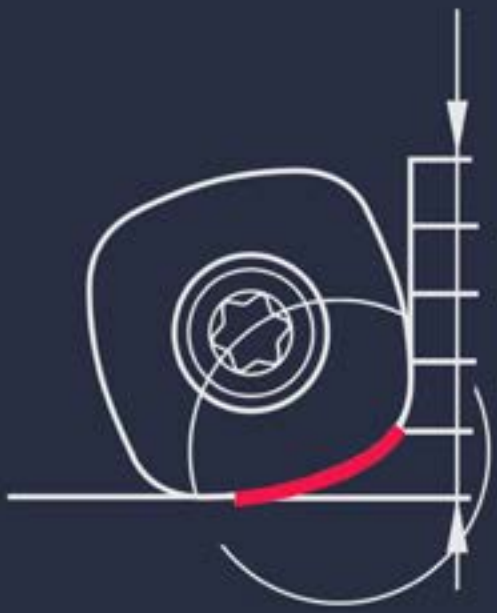
Adatta ad operazioni gravose ed a materiali duri

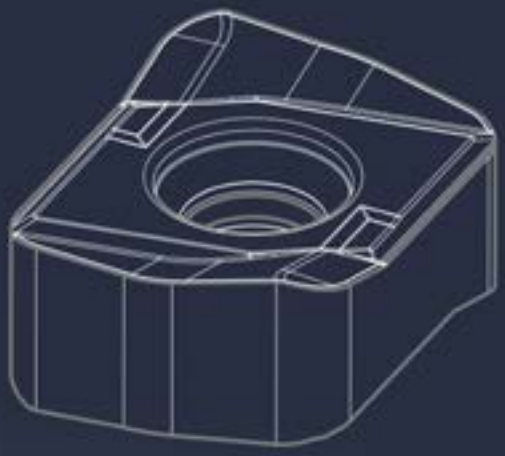


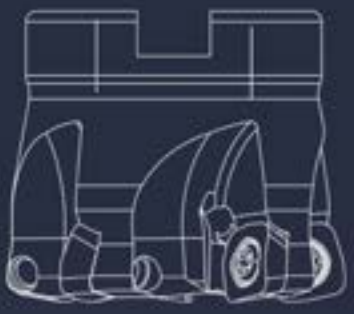
NEW CHIP BREAKER

3 tipi di geometrie del tagliente disponibili Applicabile per lavorazioni ad elevato avanzamento con maggiori valori di ap.consentono di ridurre le vibrazioni per una sgrossatura ad elevata efficienza a seconda della lavorazione da eseguire e della **PW** della macchina.

HC Hiper Speedy







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