NORMALTECH MF

NOVITÀ 2018



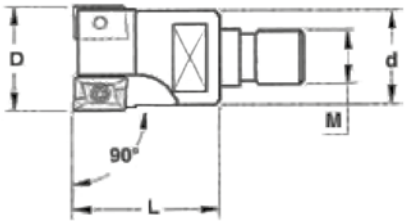




PRODUZIONE E DISTRIBUZIONE UTENSILI AD ASPORTAZIONE TRUCIOLO

ATTACCO FILETTATO

NOVITÀ

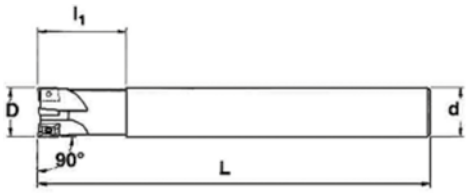




CODICE	Ø D	L	Ø d	M	Z	INSERTO	VITE	TORX
16 CN 02 08	16	30	12.7	8	2	CNUH 070310		
20 CN 03 10	20	36	17.7	10	3	CNUH 070310	S25	Tx8
25 CN 04 12	25	44	20.7	12	4	CNUH 070310		

ATTACCO CILINDRICO

NOVITÀ

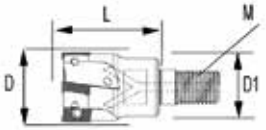




CODICE	Ø D	L	l1	Ø d	Z	INSERTO	VITE	TORX
16 02 CN 200	16	150	40	16	2	CNUH 070310		
20 03 CN 200	20	150	40	20	3	CNUH 070310	S25	Tx8
25 04 CN 200	25	150	45	20	4	CNUH 070310		

ATTACCO FILETTATO

NOVITÀ





CODICE	M	Ø D	L1	Ø D1	Z	INSERTO	VITE	TORX
16 XH 23 08	08	16	23	12.7	2	FHCS 090310030 FHSS 090310030		
20 XH 30 10	10	20	30	17.7	3	FHCS 090310030 FHSS 090310030		
25 XH 35 12	12	25	35	20.7	4	FHCS 090310030 FHSS 090310030		
32 XH 35 16	16	32	35	28.7	5	FHCS 090310030 FHSS 090310030	S25	TX8
35 XH 43 16	16	35	43	28.7	5	FHCS 090310030 FHSS 090310030		
42 XH 43 16	16	42	43	28.7	4	FHCS 090310030 FHSS090310030		

ATTACCO CILINDRICO

NOVITÀ

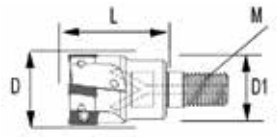




CODICE	Ø D	Ø D1	L	L1	Z	INSERTO	VITE	TORX
1002 06XO 120	10	10	120	20	2	XOKT 060204 XOKT 060208	S18	TX06
1102 06XO 110	11	10	110	13	2	XOKT 060204 XOKT 060208		
11 0 06XO 150	11	10	150	13	2	XOKT 060204 XOKT 060208		
1202 06XO 100	12	12	100	25	2	XOKT 060204 XOKT 060208		
1202 06XO 130	12	12	130	25	2	XOKT 060204 XOKT 060208		
1203 06XO 100	12	12	100	25	3	XOKT 060204 XOKT 060208		
1203 06XO 130	12	12	130	25	3	XOKT 060204 XOKT 060208		
1302 06XO 130	13	12	130	18	2	XOKT 060204 XOKT 060208		
1303 06XO 130	13	12	130	18	3	XOKT 060204 XOKT 060208		
1604 06XO 150	16	16	150	28	4	XOKT 060204 XOKT 060208		
1604 06XO 200	16	16	200	28	4	XOKT 060204 XOKT 060208		
1704 06XO 150	17	16	150	20	4	XOKT 060204 XOKT 060208		
1602 09XO 150	16	16	150	28	2	XOKT 090308	S25	TX08
1602 09XO 200	16	16	200	28	2	XOKT 090308		
1702 09XO 150	17	16	150	20	2	XOKT 090308		
1702 09XO 200	17	16	200	20	2	XOKT 090308		
2002 09XO 150	20	20	150	30	2	XOKT 090308		
2002 09XO 200	20	20	200	30	2	XOKT 090308		
2003 09XO 150	20	20	150	30	4	XOKT 090308		
2003 09X0 200	20	20	200	30	3	XOKT 090308		
2012 09XO 150	21	20	150	30	2	XOKT 090308		
2012 09XO 200	21	20	200	30	2	XOKT 090308		
2013 09XO 150	21	20	150	30	3	XOKT 090308		
2013 09XO 200	21	20	200	30	3	XOKT 090308		
2503 09XO 150	25	25	150	35	3	XOKT 090308		
2503 09XO 200	25	25	200	35	3	XOKT 090308		
2603 09XO 150	26	25	150	30	3	XOKT 090308		
2603 09XO 200	26	25	200	30	3	XOKT 090308		
3205 09XO 150	32	32	150	35	5	XOKT 090308		
3205 09XO 200	32	32	200	35	5	XOKT 090308		

ATTACCO FILETTATO

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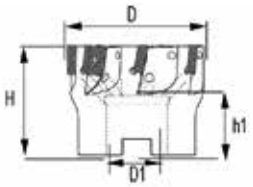




CODICE	M	Ø D	Ø D1	L	Z	INSERTO	VITE	TORX
10 XO 02 05	M5	10	5.5	16	2	XOKT 060204 XOKT 060208	S18	TX6
11 XO 02 05	M5	11	5.5	16	2	XOKT 060204 XOKT 060208		
12 XO 02 06	M6	12	6.5	18	2	XOKT 060204 XOKT 060208		
12 XO 03 06	M6	12	6.5	18	3	XOKT 060204 XOKT 060208		
13 XO 02 06	M6	13	6.5	18	2	XOKT 060204 XOKT 060208		
13 XO 03 06	M6	13	6.5	18	3	XOKT 060204 XOKT 060208		
16 XO 04 08	M8	16	8.5	20	4	XOKT 060204 XOKT 060208		
18 XO 04 08	M8	18	8.5	20	4	XOKT 060204 XOKT 060208		
20 XO 04 10	M10	20	10.5	24	4	XOKT 060204 XOKT 060208		
20 XO 05 10	M10	20	10.5	24	5	XOKT 060204 XOKT 060208		
25 XO 04 12	M12	25	12.5	28	4	XOKT 060204 XOKT 060208		
25 XO 05 12	M12	25	12.5	28	5	XOKT 060204 XOKT 060208		
16 XO 02 08	M8	16	8.5	25	2	XOKT 090308	S25	TX8
17 XO 02 08	M8	17	8.5	25	2	XOKT 090308		
20 XO 03 10	M10	20	10.5	30	3	XOKT 090308		
21 XO 03 10	M10	21	10.5	30	3	XOKT 090308		
25 XO 03 12	M12	25	12.5	35	3	XOKT 090308		
26 XO 04 12	M12	26	12.5	35	4	XOKT 090308		
32 XO 05 16	M16	32	17	43	5	XOKT 090308		
33 XO 05 16	M16	33	17	43	5	XOKT 090308		

ATTACCO A MANICOTTO

NOVITÀ

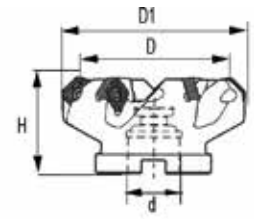




CODICE	Ø D	H	Ø D1	h1	Z	INSERTO	VITE	TORX
40 06 09 XO	40	40	22	18	6	XOKT 090308	S25	TX8
50 07 09 XO	50	40	22	20	7	XOKT 090308		
63 09 09 XO	63	40	20	27	9	XOKT 090308		

ATTACCO A MANICOTTO

NOVITÀ





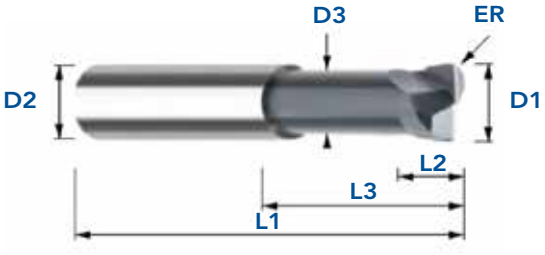
CODICE	Ø D	Ø D1	H	d	Z	ap	INSERTO	VITE	TORX
40 0314 FX	40	54.4	45	16	3	7	SFNX 1405ASR	S50	T20
50 0414 FX	50	64.4	45	22	4	7	SFNX 1405ASR	S50	T20
63 0514 FX	63	77.4	40	22	5	7	SFNX 1405ASR	S50	T20
80 0614 FX	80	94.4	50	27	6	7	SFNX 1405ASR	S50	T20
100 0714 FX	100	114.4	50	32	7	7	SFNX 1405ASR	S50	T20
100 0714 FXA	100	114.4	50	32	7	7	SFNX 1405ASR	S50	T20
100 0914 FX	100	114.4	50	32	9	7	SFNX 1405ASR	S50	T20
100 0914 FXA	100	114.4	50	32	9	7	SFNX 1405ASR	S50	T20
125 0814 FX	125	139.4	63	40	8	7	SFNX 1405ASR	S50	T20
125 0814 FXA	125	139.4	63	40	8	7	SFNX 1405ASR	S50	T20
125 1014 FX	125	139.4	63	40	10	7	SFNX 1405ASR	S50	T20
160 1014 FX	160	174.4	63	40	10	7	SFNX 1405ASR	S50	T20
160 1314 FX	160	174.4	63	60	13	7	SFNX 1405ASR	S50	T20
200 1214 FX	200	214.4	63	60	12	7	SFNX 1405ASR	S50	T20
250 1414 FX	250	264.4	63	60	14	7	SFNX 1405ASR	S50	T20
315 1814 FX	315	329.4	80	60	18	7	SFNX 1405ASR	S50	T20

* SU RICHIESTA

TYP H-N | HSC | HRC 45-65 | STEEL | GG(G) | AIR | ALTIN

332...

NOVITÀ

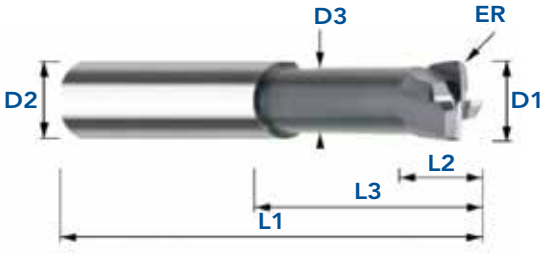


CODICE	D1	D2	L2	L1	D3	L3	ERth	ER	R	Z
332.040.00	4.00	6.00	1.5	57	3.40	20	0.40	0.32	6.0	2
332.060.00	6.00	6.00	2.5	57	5.00	25	0.60	0.50	9.0	2
332.080.00	8.00	8.00	3.0	63	6.70	25	0.80	0.65	12.0	2
332.100.00	10.00	10.00	4.0	72	8.70	35	1.00	0.80	15.0	2
332.120.00	12.00	12.00	5.0	83	10.00	40	1.20	1.00	18.0	2

TYP H-N | HSC | HRC 45-65 | STEEL | GG(G) | AIR | ALTIN

336...

NOVITÀ



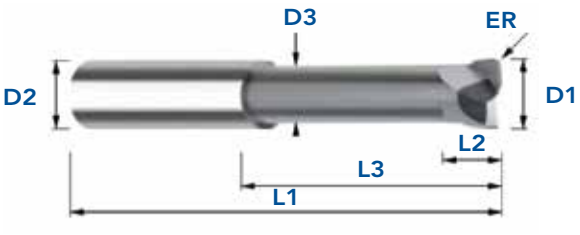
CODICE	D1	D2	L2	L1	D3	L3	ERth	ER	R	Z
336.040.00	4.00	6.00	1.5	57	3.40	20	0.40	0.32	6.0	4
336.050.00	5.00	6.00	2.0	57	4.20	20	0.50	0.40	7.5	4
336.060.00	6.00	6.00	2.5	57	5.00	25	0.60	0.50	9.0	4
336.080.00	8.00	8.00	3.0	63	6.70	25	0.80	0.65	12.0	4
336.100.00	10.00	10.00	4.0	72	8.70	35	1.00	0.80	15.0	4
336.120.00	12.00	12.00	5.0	83	10.00	40	1.20	1.00	18.0	4
336.160.00	16.00	16.00	6.0	92	13.50	45	1.60	1.30	24.0	4

NORMALTECH MF

TYP H-N | HSC | HRC 45-65 | STEEL | GG(G) | AIR | ALTIN

333...

NOVITÀ

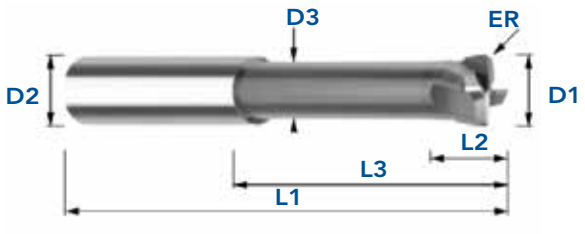


CODICE	D1	D2	L2	L1	D3	L3	ERth	ER	R	Z
333.040.00	4.00	6.00	1.5	80	3.40	40	0.40	0.32	6.0	2
333.060.00	6.00	6.00	2.5	80	5.00	45	0.60	0.50	9.0	2
333.080.00	8.00	8.00	3.0	90	6.70	55	0.80	0.65	12.0	2
333.100.00	10.00	10.00	4.0	100	8.70	60	1.00	0.80	15.0	2
333.120.00	12.00	12.00	5.0	110	10.00	65	1.20	1.00	18.0	2

TYP H-N | HSC | HRC 45-65 | STEEL | GG(G) | AIR | ALTIN

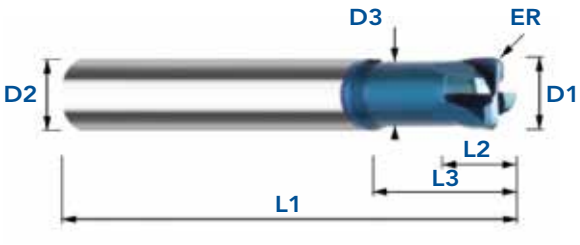
337...

NOVITÀ



CODICE	D1	D2	L2	L1	D3	L3	ERth	ER	R	Z
337.040.00	4.00	6.00	1.5	80	3.40	40	0.40	0.32	6.0	4
337.050.00	5.00	6.00	2.0	80	4.20	40	0.50	0.40	7.5	4
337.060.00	6.00	6.00	2.5	80	5.00	45	0.60	0.50	9.0	4
337.080.00	8.00	8.00	3.0	90	6.70	55	0.80	0.65	12.0	4
337.100.00	10.00	10.00	4.0	100	8.70	60	1.00	0.80	15.0	4
337.120.00	12.00	12.00	5.0	110	10.00	65	1.20	1.00	18.0	4
337.160.00	16.00	16.00	6.0	130	13.50	80	1.60	1.30	24.0	4

* SU RICHIESTA



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338...

TYP H-N

4 HSC

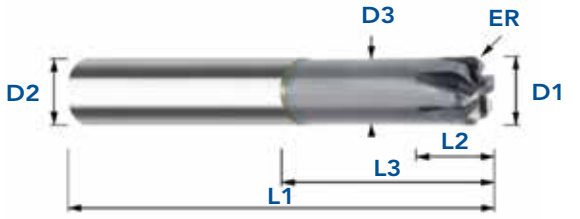
ER HRC 45-65

0° STEEL

HA xyz

BLUE ae=ap

CODICE	D1	D2	L2	L1	D3	L3	ER	Z
338.020.05	2.00	6.00	1.5	50	1.90	6	0.5	4
338.030.05	3.00	6.00	2.0	50	2.80	8	0.5	4
338.040.05	4.00	6.00	4.5	50	3.80	20	0.5	4
338.050.05	5.00	6.00	2.0	60	4.80	10	0.5	4
338.060.05	6.00	6.00	2.5	75	5.40	25	0.5	4
338.060.10	6.00	6.00	2.5	60	5.40	30	1.0	4
338.080.10	8.00	8.00	3.5	75	7.60	40	1.0	4
338.100.10	10.00	10.00	4.0	70	9.00	45	1.0	4
338.100.20	10.00	10.00	4.0	70	9.00	45	2.0	4
338.120.10	12.00	12.00	5.0	100	11.00	62	1.0	4
338.121.20	12.00	12.00	5.0	100	11.00	62	2.0	4
338.120.20	12.00	12.00	5.0	80	11.00	45	2.0	4
338.160.10	16.00	16.00	7.0	120	15.00	70	1.0	4
338.160.20	16.00	16.00	7.0	120	15.00	70	2.0	4
338.200.20	20.00	20.00	8.0	130	19.00	75	2.0	4
338.200.30	20.00	20.00	8.0	130	19.00	75	3.0	4



NOVITÀ

339...

TYP H

6 ALTIN

ER HSC

0° HRC 45-65

HA xyz

Norm ae=ap

CODICE	D1	D2	L2	L1	D3	L3	ER	Z
339.040.05	4.00	6.00	2.5	60	3.8	15	0.5	6
339.040.10	4.00	6.00	2.5	60	3.8	15	1.0	6
339.060.05	6.00	6.00	3.0	60	5.6	20	0.5	6
339.060.10	6.00	6.00	3.0	60	5.6	20	1.0	6
339.080.05	8.00	8.00	3.5	70	7.6	30	0.5	6
339.080.10	8.00	8.00	3.5	70	7.6	30	1.0	6
339.100.10	10.00	10.00	4.0	75	9.5	35	1.0	6
339.100.20	10.00	10.00	4.0	75	9.5	35	2.0	6
339.120.10	12.00	12.00	4.0	90	11.5	40	1.0	6
339.120.15	12.00	12.00	4.0	90	11.5	40	1.5	6

NORMALTECH MF

NOVITÀ

FRESATURA TROCOIDALE
TROCHOIDAL SPEED CUTTING

La fresatura trocoidale è un nuovo ciclo di lavorazione che combina la fresatura circolare con un movimento in avanti. Quindi, grandi sezioni trasversali possono essere lavorate con basse forze di taglio e velocità elevate.

Trochoidal Speed Cutting is a new machining cycle which combines circular milling with a forward moving. Thereby, huge cross-sections can be processed with low cutting forces and high speeds.

ae Larghezza di impegno - *Engagement width*

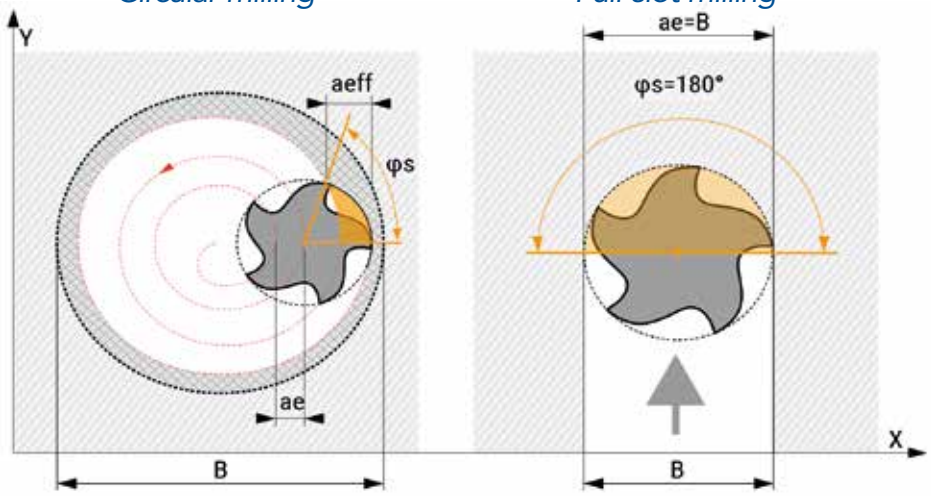
aeff Larghezza effettiva di impegno - *Effective engagement width*

B Diametro foro/larghezza fessura - *Bore diameter/slot width*

þs Angolo di arco di taglio - *Angle of cutting bow*

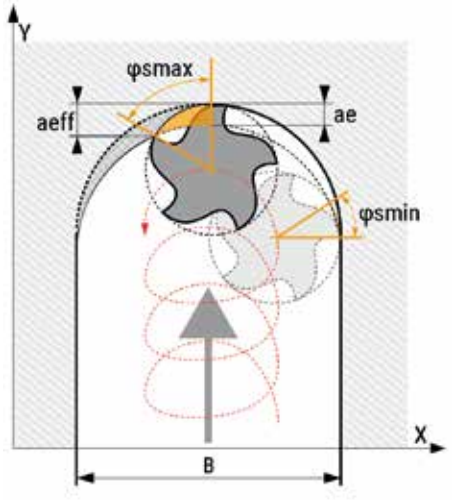
Fresatura circolare
Circular milling

Fresatura a slot full-slot
Full-slot milling



Quando si combinano i due tipi di lavorazione conosciuti, si ottiene una fresatura trocoidale (spessore di taglio medio hm≠costante).

When the two known types of machining are combined, you get static TSC milling (middle chipping thickness hm≠constant).



L'obiettivo principale è quello di ridurre la forza di taglio e lo sviluppo del calore. Ciò può essere ottenuto con un angolo inferiore di arco di taglio "þs", che consente anche un migliore flusso di truciolo. Per ridurre il tempo di lavorazione è consigliabile usare utensili con un numero maggiore di denti, che aumenta anche la velocità di avanzamento.

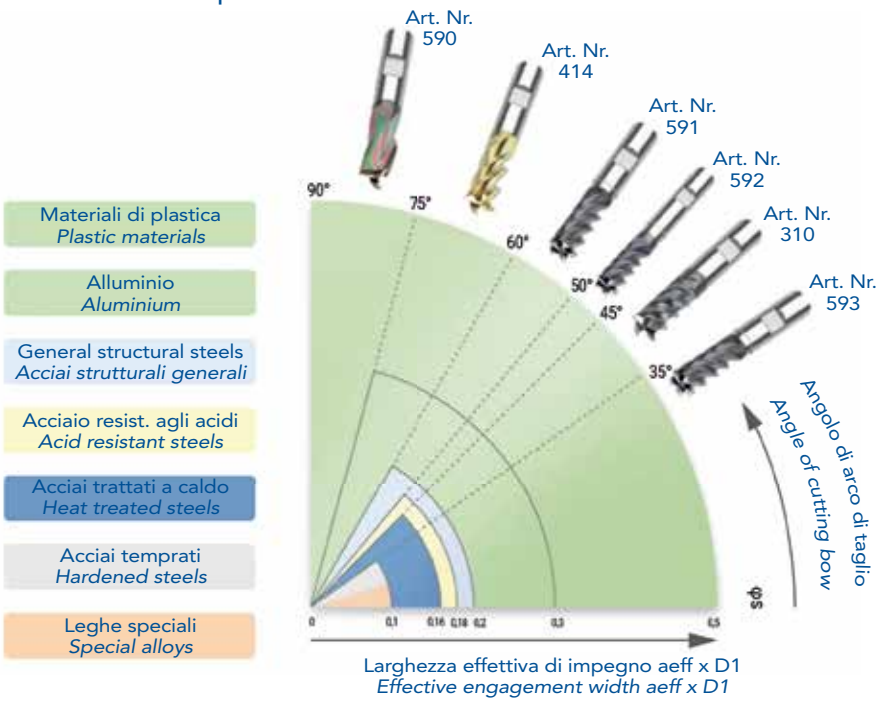
The main aim is to reduce the cutting force and the resulting heat development. This can be achieved by a lower angle of cutting bow "þs", which also enables a better chip flow. To reduce machining time a higher number of teeth is used, which also increases the feed rate.

Durante la fresatura dinamica TSC (hm≈costante) di contornitura con i sistemi CAM moderni, lo spessore medio di taglio deve essere mantenuto costante aumentando notevolmente l'alimentazione con un angolo inferiore dell'arco di taglio. Durante la lavorazione di contornitura, i dati di taglio devono essere regolati sull'angolo dell'arco di taglio.

During dynamic TSC milling (hm≈constant) of contours with modern CAM systems, the middle chipping thickness shall be held constant by increasing the feed considerably with a lower angle of cutting bow. When processing contours, the cutting data needs to be adjusted to the angle of cutting bow by way of calculation.

Gli utensili TSC vengono utilizzati principalmente per enormi sezioni trasversali e/o enormi profondità di impegno, materiali difficili da usare e macchine inefficienti. La profondità di impegno "ap" dovrebbe essere maggiore di 1XD per la redditività. Il raggio dell'utensile dovrebbe essere significativamente più piccolo del raggio più piccolo della componente per ricevere dati di taglio ragionevoli. Con condizioni ottimali, è possibile risparmiare fino al 60% di tempo di elaborazione.

TSC tools are mainly used for huge cross-sections and/or huge depths of engagement, hard-to-machine material and inefficient machines. The depth of engagement "ap" should be bigger than 1XD for profitability. The tool radius should be significantly smaller than the smallest radius on the component part to receive reasonable cutting data. With optimum conditions, it's possible to save up to 60% processing time.



Lo schema descrive l'angolo raccomandato dell'arco di taglio "þs" per il rispettivo materiale e la larghezza di taglio in proporzione al diametro dell'utensile. Per mantenere costante lo spessore medio "hm", è necessario aumentare l'alimentazione con un angolo inferiore dell'arco di taglio. Il programma di dati di taglio NT-CARBIDE offre tutte le opzioni per il calcolo dei dati di taglio variabile.

The diagram describes the recommended angle of cutting bow "þs" for the respective material and the engagement width in proportion to the diameter of the tool. In order to keep the middle chipping thickness "hm" constant, the feed must be increased with a lower angle of cutting bow. The cutting data program NT-CARBIDE offers you all options for calculating the variable cutting data.

NT-243...
FRESA MD RAGGIATA

NOVITÀ

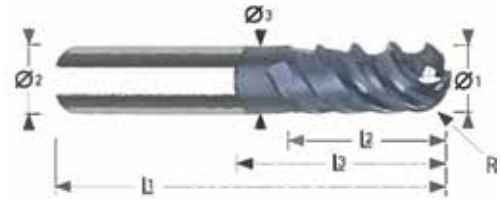


TYP N | HA | INOX VA | 3 | DIN 6527 LUNGO | TITAN | R | ALTIN | | 43°/45°/47° | HPC

CODICE	Ø1	Ø2	L2	L1	R	Z
243.030.015.00	3.00	6.00	8	57	1.50	3
243.040.020.00	4.00	6.00	11	57	2.00	3
243.060.030.00	6.00	6.00	13	57	3.00	3
243.080.040.00	8.00	8.00	19	63	4.00	3
243.100.050.00	10.00	10.00	22	72	5.00	3
243.120.060.00	12.00	12.00	26	83	6.00	3
243.160.080.00	16.00	16.00	32	92	8.00	3

NT-310...
FRESA MD RAGGIATA

NOVITÀ



TYP H | HA | HRC 55-60 | 4 | ALTIN | GG(G) | R | HPC | | 52° | ACCIAIO STEEL

CODICE	Ø1	Ø2	L2	L1	Ø3	L3	R	Z
310.030.015.00	3.00	6.00	5	57	2.8	7	1.50	4
310.040.020.00	4.00	6.00	11	57	3.8	21	2.00	4
310.060.030.00	6.00	6.00	13	57	5.8	21	3.00	4
310.080.040.00	8.00	8.00	19	63	7.8	27	4.00	4
310.100.050.00	10.00	10.00	22	72	9.8	32	5.00	4
310.120.060.00	12.00	12.00	26	83	11.8	38	6.00	4
310.160.080.00	16.00	16.00	32	92	15.8	44	8.00	4

NT-350...
FRESA MD RAGGIATA LUNGA

NOVITÀ

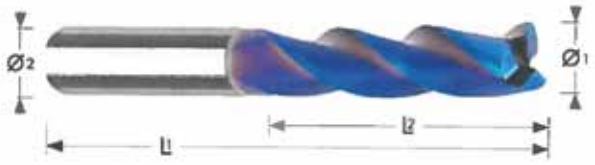


TYP N | 30° | Univer-sale | 3 | HA | R | NACO BLUE

CODICE	Ø1	Ø2	L2	L1	R	Z
350.030.015.00	3.00	6.00	45	100	1.50	3
350.040.020.00	4.00	6.00	45	100	2.00	3
350.060.030.00	6.00	6.00	45	100	3.00	3
350.080.040.00	8.00	8.00	45	100	4.00	3
350.100.050.00	10.00	10.00	45	100	5.00	3
350.120.060.00	12.00	12.00	45	100	6.00	3
350.160.080.00	16.00	16.00	45	100	8.00	3

NT-350...
FRESA MD LUNGA

NOVITÀ



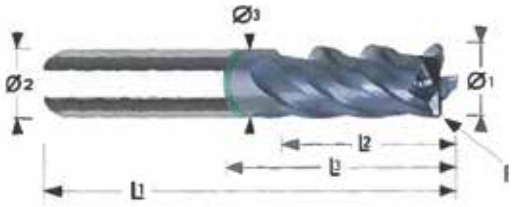
TYP N | 30° | Univer-sale | 3 | HA | NACO BLUE

CODICE	Ø1	Ø2	L2	L1	Z
350.030.001.00	3.00	6.00	45	100	3
350.040.002.00	4.00	6.00	45	100	3
350.060.003.00	6.00	6.00	45	100	3
350.080.004.00	8.00	8.00	45	100	3
350.100.005.00	10.00	10.00	45	100	3
350.120.006.00	12.00	12.00	45	100	3
350.160.008.00	16.00	16.00	45	100	3

NORMALTECH MF

NT-833...
FRESA MD TORICA

NOVITÀ

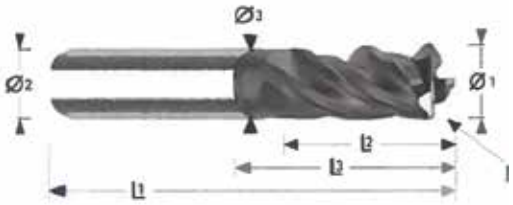


TYP N-H | VAROCON | 4 | HPC | ER | ACCIAIO STEEL | 40° | TITANIO | DIVISIONE INEGUALE | INOX VA | HA

CODICE	Ø1	Ø2	L2	L1	Ø3	L3	R	Z
833.060.020.00	6.00	6.00	13	57	5.50	21	0.20	4
833.060.050.00	6.00	6.00	13	57	5.50	21	0.50	4
833.060.100.00	6.00	6.00	13	57	5.50	21	1.00	4
833.080.020.00	8.00	8.00	19	63	7.50	28	0.20	4
833.080.050.00	8.00	8.00	19	63	7.50	28	0.50	4
833.080.100.00	8.00	8.00	19	63	7.50	28	1.00	4
833.080.200.00	8.00	8.00	19	63	7.50	28	2.00	4
833.100.050.00	10.00	10.00	22	72	9.50	32	0.50	4
833.100.100.00	10.00	10.00	22	72	9.50	32	1.00	4
833.100.200.00	10.00	10.00	22	72	9.50	32	2.00	4
833.100.300.00	10.00	10.00	22	72	9.50	32	3.00	4
833.120.100.00	12.00	12.00	26	83	11.50	38	1.00	4
833.120.200.00	12.00	12.00	26	83	11.50	38	2.00	4
833.120.300.00	12.00	12.00	26	83	11.50	38	3.00	4
833.160.100.00	16.00	16.00	32	92	15.50	44	1.00	4
833.160.200.00	16.00	16.00	32	92	15.50	44	2.00	4
833.160.300.00	16.00	16.00	32	92	15.50	44	3.00	4

NT-738...
FRESA MD TORICA

NOVITÀ

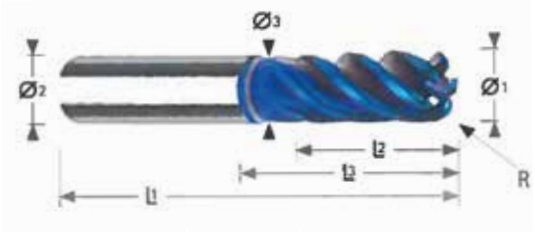


TYP N | ALTIN | 4 | HPC | ER | ACCIAIO STEEL | 35°/38° | INOX VA | DIVISIONE INEGUALE | HA

CODICE	Ø1	Ø2	L2	L1	Ø3	L3	R	Z
738.060.020.00	6.00	6.00	13	57	5.50	21	0.20	4
738.060.050.00	6.00	6.00	13	57	5.50	21	0.50	4
738.060.100.00	6.00	6.00	13	57	5.50	21	1.00	4
738.080.020.00	8.00	8.00	19	63	7.50	27	0.20	4
738.080.050.00	8.00	8.00	19	63	7.50	27	0.50	4
738.080.100.00	8.00	8.00	19	63	7.50	27	1.00	4
738.080.200.00	8.00	8.00	19	63	7.50	27	2.00	4
738.100.050.00	10.00	10.00	22	72	9.50	32	0.50	4
738.100.100.00	10.00	10.00	22	72	9.50	32	1.00	4
738.100.200.00	10.00	10.00	22	72	9.50	32	2.00	4
738.100.300.00	10.00	10.00	22	72	9.50	32	3.00	4
738.120.100.00	12.00	12.00	26	83	11.50	38	1.00	4
738.120.200.00	12.00	12.00	26	83	11.50	38	2.00	4
738.120.300.00	12.00	12.00	26	83	11.50	38	3.00	4
738.160.100.00	16.00	16.00	32	92	15.50	44	1.00	4
738.160.200.00	16.00	16.00	32	92	15.50	44	2.00	4
738.160.300.00	16.00	16.00	32	92	15.50	44	3.00	4

NT-789...
FRESA MD TORICA

NOVITÀ

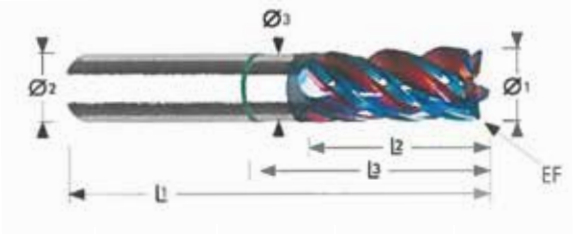


TYP N-H | NACO BLUE | 4-5 HPC | ER ACCIAIO STEEL | 35°/38° TITANIO | DIVISIONE INEGUALE INOX VA | LUNGO | HA

CODICE	Ø1	Ø2	L2	L1	Ø3	L3	R	Z
789.060.020.00	6.00	6.00	13	57	5.50	21	0.20	4
789.060.050.00	6.00	6.00	13	57	5.50	21	0.50	4
789.060.100.00	6.00	6.00	13	57	5.50	21	1.00	4
789.080.020.00	8.00	8.00	19	63	7.50	27	0.20	5
789.080.050.00	8.00	8.00	19	63	7.50	27	0.50	5
789.080.100.00	8.00	8.00	19	63	7.50	27	1.00	5
789.080.200.00	8.00	8.00	19	63	7.50	27	2.00	5
789.100.050.00	10.00	10.00	22	72	9.50	32	0.50	5
789.100.100.00	10.00	10.00	22	72	9.50	32	1.00	5
789.100.200.00	10.00	10.00	22	72	9.50	32	2.00	5
789.100.300.00	10.00	10.00	22	72	9.50	32	3.00	5
789.120.100.00	12.00	12.00	26	83	11.50	38	1.00	5
789.120.200.00	12.00	12.00	26	83	11.50	38	2.00	5
789.120.300.00	12.00	12.00	26	83	11.50	38	3.00	5
789.160.100.00	16.00	16.00	32	92	15.50	44	1.00	5
789.160.200.00	16.00	16.00	32	92	15.50	44	2.00	5
789.160.300.00	16.00	16.00	32	92	15.50	44	3.00	5

NT-789...
FRESA MD

NOVITÀ



TYP N-H | HA | 4-5 NACO BLUE | ACCIAIO STEEL | 35°/38° TITANIO | DIVISIONE INEGUALE INOX VA | LUNGO

CODICE	Ø1	Ø2	L2	L1	Ø3	L3	EF	Z
789.060.00	6.00	6.00	13	57	5.50	21	0.20	4
789.080.00	8.00	8.00	19	63	7.50	27	0.20	5
789.100.00	10.00	10.00	22	72	9.50	32	0.30	5
789.120.00	12.00	12.00	26	83	11.50	38	0.30	5
789.160.00	16.00	16.00	32	92	15.50	44	0.40	5
789.200.00	20.00	20.00	38	104	19.50	54	0.50	5

NORMALTECH MF

NT-231...
FRESA MD

NOVITÀ

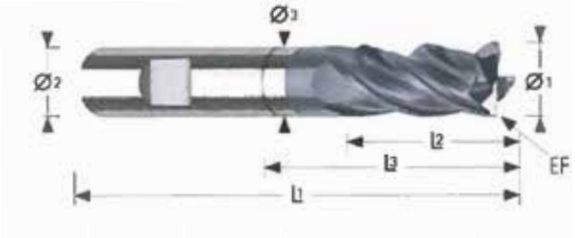


TYP N-H | HB | 4 | CORTO | VARACON | 35°/38° | HPC | DIVISIONE INEGUALE | ACCIAIO STEEL | HA

CODICE	Ø1	Ø2	L2	L1	EF	Z	HA	HB
231.060...	6.00	6.00	10	54	0.13	4	.00	.10
231.080...	8.00	8.00	12	58	0.15	4	.00	.10
231.100...	10.00	10.00	14	66	0.20	4	.00	.10
231.120...	12.00	12.00	16	73	0.25	4	.00	.10
231.160...	16.00	16.00	22	82	0.35	4	.00	.10
231.200...	20.00	20.00	26	92	0.40	4	.00	.10

NT-233...
FRESA MD

NOVITÀ



TYP N-H | HB | 4 | LUNGO | VARACON | 35°/38° | HPC | DIVISIONE INEGUALE | ACCIAIO STEEL | HA

CODICE	Ø1	Ø2	L2	L1	Ø3	L3	EF	Z	HA	HB
233.060...	6.00	6.00	13	57	5.50	21	0.13	4	.00	.10
233.080...	8.00	8.00	19	63	7.50	27	0.15	4	.00	.10
233.100...	10.00	10.00	22	72	9.50	32	0.20	4	.00	.10
233.120...	12.00	12.00	26	83	11.50	38	0.25	4	.00	.10
233.160...	16.00	16.00	32	92	15.50	44	0.35	4	.00	.10
233.200...	20.00	20.00	38	104	19.50	54	0.40	4	.00	.10

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