

Fresa a grossare testa piana in metallo duro integrale rivestita in diamante

Solid carbide flat nose roughing end mill diamond coated

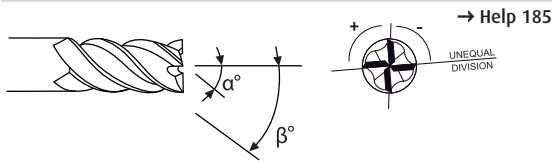
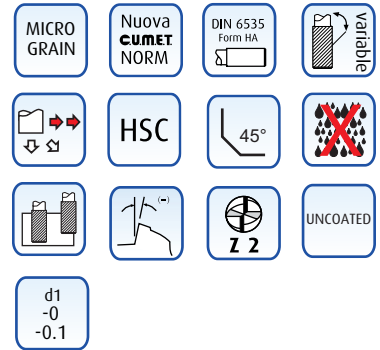
VHM - Schaft Schrufffräser, Diamant Beschichtet - Fraise carbure a degrossir à bout plat, revêtement en diamant
Фреза концевая твердосплавная плоский торец для черновой обработки с алмазным покрытием
Sk hrubovací fréza s diamantovým povlakem



CODE	d1 mm	d2h6 mm	CH mm	l1 mm	L mm
5040.030	3	3	0.2	12	40
5040.040	4	4	0.2	16	5
5040.060	6	6	0.2	19	50
5040.060.1	6	6	0.2	40	100
5040.080	8	8	0.2	25	60
5040.080.1	8	8	0.2	40	100
5040.100	10	10	0.2	25	70
5040.100.1	10	10	0.2	40	100
5040.120	12	12	0.2	25	75
5040.120.1	12	12	0.2	40	100

Graphyte

CARBON FIBER



→ Help 185

Fresa a grossare testa torica in metallo duro integrale rivestita in diamante

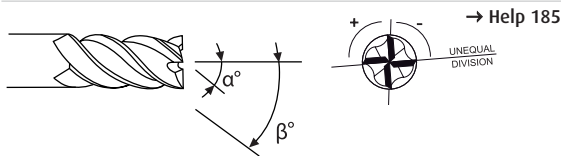
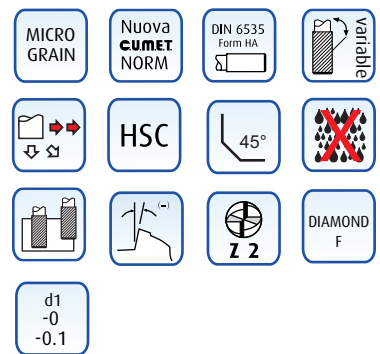
Solid carbide corner radius roughing end mill diamond coated

VHM - Torus Schrufffräser, Diamant Beschichtet - Fraise carbure a degrossir avec rayon d'angle, revêtement en diamant
Фреза концевая твердосплавная с угловым радиусом с алмазным покрытием
Sk hrubovací fréza s rohovým rádiusem a diamantovým povlakem



CODE	d1 mm	d2h6 mm	rp mm	l1 mm	L mm
5040F.030	3	3	0.2	12	40
5040F.040	4	4	0.2	16	50
5040F.060	6	6	0.2	19	50
5040F.060.1	6	6	0.2	40	100
5040F.080	8	8	0.2	25	60
5040F.080.1	8	8	0.2	40	100
5040F.100	10	10	0.2	25	70
5040F.100.1	10	10	0.2	40	100
5040F.120	12	12	0.2	25	75
5040F.120.1	12	12	0.2	40	100

CARBON FIBER



→ Help 185

Fresa per contornatura e finitura in metallo duro integrale

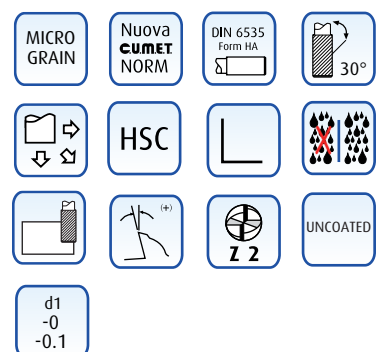
Solid carbide end mill for profiling and finishing

VHM - Fräser Für die Profilerstellung und Veredelung - Fraise carbure pour le profilage et finition
Фреза концевая твердосплавная для профильной финишной обработки
Sk fréza pro profilování a dokončování



CODE	d1 mm	d2h6 mm	l1 mm	L mm
5010.020	2	3	9	40
5010.030	3	3	12	40
5010.040	4	4	16	50
5010.060	6	6	19	50
5010.060.1	6	6	40	100
5010.080	8	8	25	60
5010.080.1	8	8	40	100
5010.100	10	10	25	70
5010.100.1	10	10	40	100
5010.120	12	12	25	75
5010.120.1	12	12	40	100

HRC < 60
Graphyte
CARBON FIBER
GLASS FIBER



→ Help 194

Fresa per contornatura e finitura in metallo duro integrale

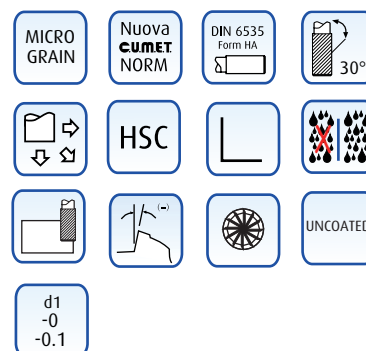
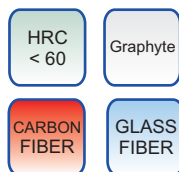
Solid carbide end mill for profiling and finishing

VHM - Fräser Für die Profilerstellung und Veredelung - Fraise carbure pour le profilage et finition
 Фреза концевая твердосплавная для профильной финишной обработки
 Sk fréza pro profilování a dokončování



CODE	d1 mm	d2h6 mm	l1 mm	L mm
5020.020	2	3	9	40
5020.030	3	3	12	40
5020.040	4	4	16	50
5020.060	6	6	19	50
5020.060.1	6	6	40	100
5020.080	8	8	25	60
5020.080.1	8	8	40	100
5020.100	10	10	25	70
5020.100.1	10	10	40	100
5020.120	12	12	25	75
5020.120.1	12	12	40	100

→ Help 194



Fresa per foratura, contornatura e finitura in metallo duro integrale

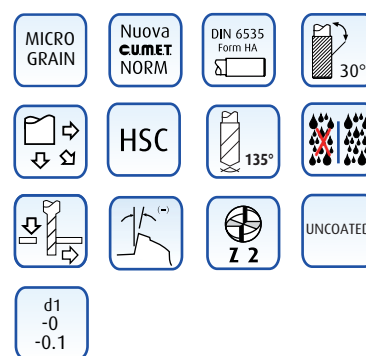
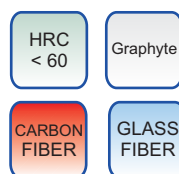
Solid carbide end mill for drilling, profiling and finishing

VHM - Schaftfraser Für bohren, profilerstellung und finishing - Fraises carbure pour le perçage, profilage et finition
 Sk fréza pro profilování a dokončování s možností zavrtání



CODE	d1 mm	d2h6 mm	l1 mm	L mm
5030.030	3	3	12	40
5030.040	4	4	16	50
5030.060	6	6	19	50
5030.060.1	6	6	40	100
5030.080	8	8	25	60
5030.080.1	8	8	40	100
5030.100	10	10	25	70
5030.100.1	10	10	40	100
5030.120	12	12	25	75
5030.120.1	12	12	40	100

→ Help 194



Fresa Forante in metallo duro integrale alto avanzamento

Solid carbide Drilling end mill for High Feed

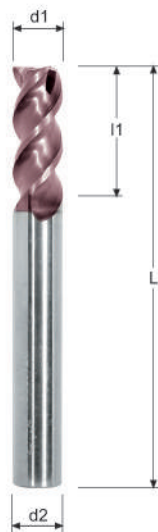
VHM – schaftfräser Bohrer für Hoch Vorschub - Fraise à Piercer en carbure a bout plat pour Haute avances
 Фреза концевая твердосплавная с опцией сверления и высокими параметрами подачи
 Sk rychloposuvová rohová fréza s možností vrtání



CODE	*d1 mm	d2h6 mm	rp mm	l1 mm	L mm	Z no.
Y300.020	2	6	-	4	50	3
Y300.025	2.5	6	-	5	50	3
Y300.030	3	6	-	6	50	3
Y300.035	3.5	6	-	7	50	3
Y300.040	4	6	-	8	50	3
Y300.045	4.5	6	-	9	50	3
Y300.050	5	6	-	10	50	3
Y300.055	5.5	6	-	11	50	3
Y300.060	6	6	-	13	57	3
Y300.065	6.5	8	-	16	60	3
Y300.070	7	8	-	16	60	3
Y300.075	7.5	8	-	16	60	3
Y300.080	8	8	-	19	60	3
Y300.085	8.5	10	-	19	70	3
Y300.090	9	10	-	19	70	3
Y300.095	9.5	10	-	19	70	3
Y300.100	10	10	-	22	70	3
Y300.110	11	12	-	22	75	3
Y300.120	12	12	-	26	100	3
Y300.130	13	14	-	26	100	3
Y300.140	14	14	-	26	100	3
Y300.150	15	16	-	26	100	3
Y300.160	16	16	-	30	100	3
Y300.200	20	20	-	32	100	3

→ Help 171

*d1 ≤ ø 6 h9
 d1 ≤ ø20 f7



Fresa con fori in elica a semifinire in metallo duro integrale

Solid carbide semi-finishing end mill with coolant feed

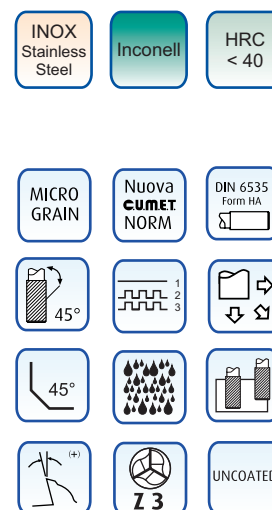
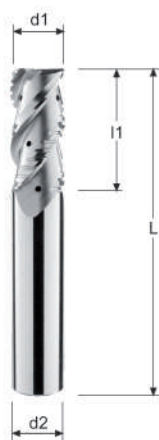
VHM - Schrupp-Schlichtfräser mit Durchgewendelten Kühlkanälen - Fraise carbure pour semifinition à trous de réfrigération
 Фреза концевая твердосплавная с подачей СОЖ для полустойковой обработки
 Sk středně dokončovací fréza s chlazením všech břitů



CODE	*d1 mm	d2h6 mm	l1 mm	L mm	Z no.
455.060	6	6	20	50	3
455.080	8	8	22	60	3
455.100	10	10	25	70	3
455.120	12	12	27	75	3
455.160	16	16	30	85	3

→ Help 192

*d1 ≤ ø 6 h9
 d1 ≤ ø16 f7



Fresa con fori in elica a grossare in metallo duro integrale

Solid carbide coolant feed roughing end mill

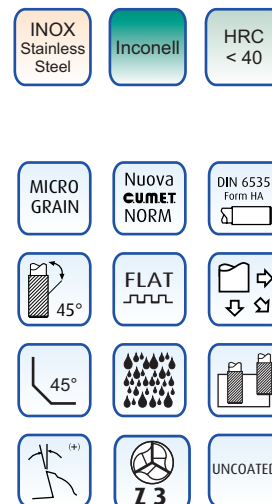
VHM - Schruppfräser mit Durchgewendelten Kühlkanälen - Fraise carbure ébauche à trous de réfrigération
Фреза концевая твердосплавная с подачей СОЖ для черновой обработки
Sk hrubovací fréza s chlazením všech břitů



CODE	*d1 mm	d2h6 mm	l1 mm	L mm	Z no.
454.060	6	6	20	50	3
454.080	8	8	22	60	3
454.100	10	10	25	70	3
454.120	12	12	27	75	3
454.160	16	16	30	85	3
454.180	18	18	40	100	3

→ Help 192

*d1 ≤ ø 6 h9
d1 ≤ ø18 f7



Fresa testa piana in metallo duro integrale

Solid carbide flat nose end mill

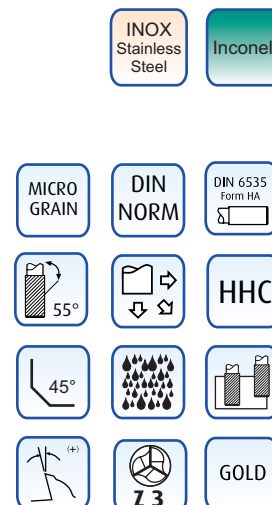
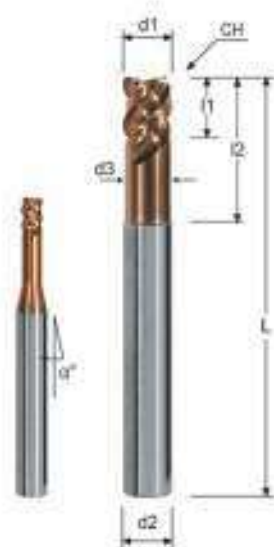
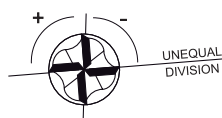
VHM - Schaftfräser - Fraise carbure à bout plat
Фреза концевая твердосплавная с плоским торцом - Sk rohová fréza



CODE	*d1 mm	d2h6 mm	CH mm	l1 mm	l2 mm	L mm	d3 mm	Z no.	α°
302.030	3	6	0.10	4	14	57	2.8	3	15°
302.040	4	6	0.10	5	16	57	3.8	3	15°
302.050	5	6	0.15	6	18	57	4.8	3	15°
302.060	6	6	0.15	7	20	57	5.5	3	-
302.080	8	8	0.15	9	26	63	7.5	3	-
302.100	10	10	0.20	11	30	72	9.2	3	-
302.120	12	12	0.20	13	37	83	11.2	3	-
302.160	16	16	0.20	17	45	92	15.2	3	-
302.200	20	20	0.20	22	55	100	19.2	3	-

→ Help 172

*d1 ≤ ø 6 h9
d1 ≤ ø20 f7



Fresa con fori in elica in metallo duro integrale

Solid carbide coolant feed end mill

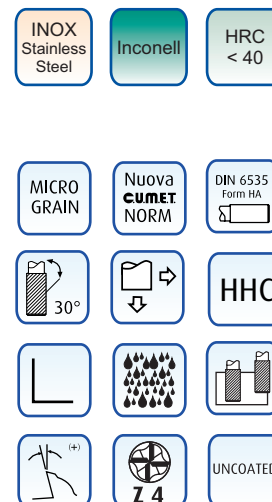
VHM - Schlichtfräser mit Durchgewendelten Kühlkanälen - Fraise carbure à trous de réfrigération
Фреза концевая твердосплавная с подачей СОЖ - Sk fréza s chlazením všech břitů



CODE	*d1 mm	d2h6 mm	l1 mm	L mm	Z no.
410.060	6	6	20	50	4
410.080	8	8	22	60	4
410.100	10	10	25	70	4
410.120	12	12	27	75	4
410.140	14	14	30	85	4
410.160	16	16	30	85	4
410.200	20	20	40	100	4

→ Help 196-198

*d1 ≤ ø 6 h9
d1 ≤ ø20 f7



Fresa con fori in elica a semifinire in metallo duro integrale

Solid carbide coolant feed semi-finishing end mill

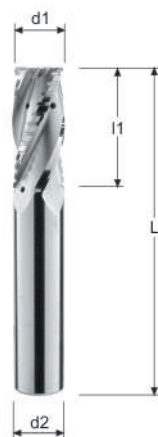
VHM - Schrupp-Schlichtfräser mit Durchgewendelten Kühlkanälen - Fraise carbure pour semifinition à trous de réfrigération
Фреза концевая твердосплавная с подачей СОЖ для получистовой обработки
Sk polodokončovací fréza s chlazením všech břitů



CODE	*d1 mm	d2h6 mm	l1 mm	L mm	Z no.
T3006	6	6	20	50	4
T3008	8	8	22	60	4
T3010	10	10	25	70	4
T3012	12	12	27	75	4
T3016	16	16	30	85	4
T3020	20	20	40	100	4

→ Help 192

*d1 ≤ ø 6 h9
d1 ≤ ø20 f7



Fresa con fori in elica a grossare in metallo duro integrale

Solid carbide coolant feed roughing end mill

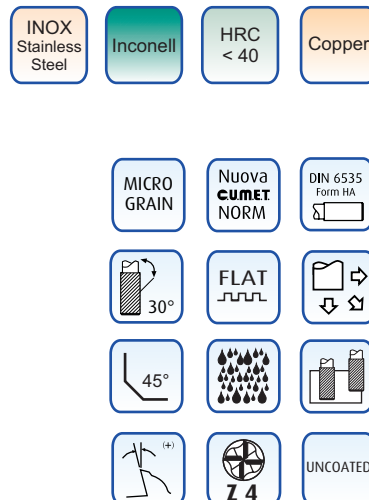
VHM - Schruppfräser mit Durchgewendelten Kühlkanälen - Fraise carbure a degrosir à trous de réfrigération
Фреза концевая твердосплавная с подачей СОЖ для полуступовой обработки
Sk hrubovací fréza s chlazením všech břitů



CODE	*d1 mm	d2h6 mm	l1 mm	L mm	Z no.
T2206	6	6	20	50	4
T2208	8	8	22	60	4
T2210	10	10	25	70	4
T2212	12	12	27	75	4
T2216	16	16	30	85	4
T2220	20	20	40	100	4

→ Help 192

*d1 ≤ ø 6 h9
d1 ≤ ø20 f7



Frese testa piana in metallo duro integrale

Solid carbide flat nose end mill

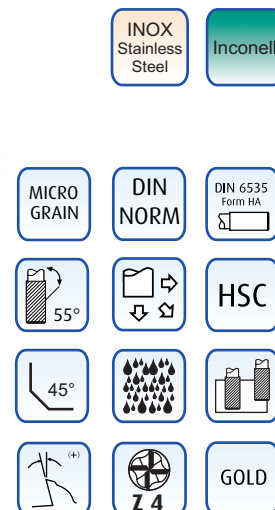
VHM - Schafffräser - Fraise carbure à bout plat
Фреза концевая твердосплавная с плоским торцом - Sk rohová fréza



CODE	*d1 mm	d2h6 mm	CH	l1 mm	l2 mm	L mm	d3 mm	Z no.	α°
40403057	3	6	0.10	8	-	57	-	3	15°
40403057.1	3	6	0.10	4	14	57	2.8	3	15°
40404057	4	6	0.10	11	-	57	-	3	15°
40404057.1	4	6	0.10	5	16	57	3.8	3	15°
40405057	5	6	0.15	13	-	57	-	4	15°
40405057.1	5	6	0.15	6	18	57	4.8	4	15°
40406057	6	6	0.15	13	-	57	-	4	-
40406057.1	6	6	0.15	7	20	57	5.5	4	-
40408063	8	8	0.15	19	-	63	-	4	-
40408063.1	8	8	0.15	9	26	63	7.5	4	-
40410072	10	10	0.20	22	-	72	-	4	-
40410072.1	10	10	0.20	11	31	72	9.2	4	-
40412083	12	12	0.20	26	-	83	-	4	-
40412083.1	12	12	0.20	13	37	83	11.2	4	-
40416092	16	16	0.20	32	-	92	15.2	4	-

→ Help 172

*d1 ≤ ø 6 h9
d1 ≤ ø16 f7



Fresa ad alto avanzamento in metallo duro integrale

Solid carbide High feed end mill

VHM- Fräser für Hoch Vorschub - Fraise carbure pour Haut avances

Фреза концевая твердосплавная для обработки с высокими параметрами подачи

Sk vysokoposuvová fréza



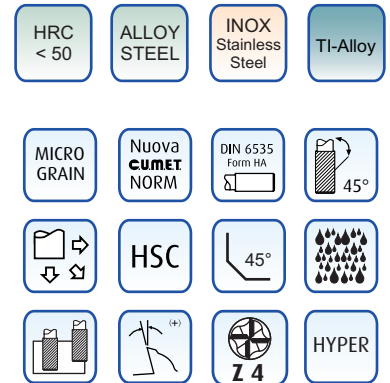
CODE	*d1 mm	d2h6 mm	CH mm	l1 mm	L mm	Z no.
Y400P.030	3	6	0.05	8	60	4
Y400P.040	4	6	0.05	11	60	4
Y400P.050	5	6	0.05	13	60	4
Y400P.060	6	6	0.05	13	60	4
Y400P.080	8	8	0.10	19	75	4
Y400P.100	10	10	0.10	22	80	4
Y400P.120	12	12	0.10	25	100	4
Y400P.160	16	16	0.10	30	100	4
Y400P.200	20	20	0.10	40	100	4

Ad esaurimento - by exhaustion

→ Help 181

*d1 ≤ ø 6 h9

d1 ≤ ø20 f7



Fresa testa torica alto avanzamento in metallo duro integrale

Solid carbide corner radius end mill, High Feed

VHM - Gesenkräuser mit Eckenradius High Feed - Fraise carbure avec rayon d'angle, High Feed

Фреза концевая твердосплавная с угловым радиусом - Sk vysokoposuvová fréza s rohovým rádiusem



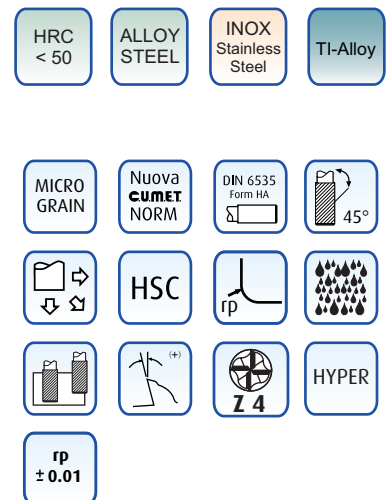
CODE	*d1 mm	d2h6 mm	rp mm	l1 mm	L mm	Z no.
Y400.030.02	3	6	0.2	8	60	4
Y400.030.05	3	6	0.5	8	60	4
Y400.040.02	4	6	0.2	11	60	4
Y400.040.05	4	6	0.5	11	60	4
Y400.040.1	4	6	1.0	11	60	4
Y400.050.02	5	6	0.2	13	60	4
Y400.050.05	5	6	0.5	13	60	4
Y400.050.1	5	6	1.0	13	60	4
Y400.060.03	6	6	0.3	13	60	4
Y400.060.05	6	6	0.5	13	60	4
Y400.060.1	6	6	1.0	13	60	4
Y400.060.15	6	6	1.5	13	60	4
Y400.080.03	8	8	0.3	19	75	4
Y400.080.05	8	8	0.5	19	75	4
Y400.080.1	8	8	1.0	19	75	4
Y400.080.15	8	8	1.5	19	75	4
Y400.080.2	8	8	2.0	19	75	4
Y400.100.03	10	10	0.3	22	80	4
Y400.100.05	10	10	0.5	22	80	4
Y400.100.1	10	10	1.0	22	80	4
Y400.100.15	10	10	1.5	22	80	4
Y400.100.2	10	10	2.0	22	80	4
Y400.100.3	10	10	3.0	22	80	4
Y400.120.05	12	12	0.5	25	100	4
Y400.120.1	12	12	1.0	25	100	4
Y400.120.15	12	12	1.5	25	100	4
Y400.120.2	12	12	2.0	25	100	4
Y400.120.3	12	12	3.0	25	100	4
Y400.160.05	16	16	0.5	30	100	4
Y400.160.1	16	16	1.0	30	100	4
Y400.160.15	16	16	1.5	30	100	4
Y400.160.2	16	16	2.0	30	100	4
Y400.160.3	16	16	3.0	30	100	4
Y400.160.5	16	16	5.0	30	100	4
Y400.200.1	20	20	1.0	40	100	4
Y400.200.15	20	20	1.5	40	100	4
Y400.200.2	20	20	2.0	40	100	4
Y400.200.3	20	20	3.0	40	100	4
Y400.200.5	20	20	5.0	40	100	4

Ad esaurimento - by exhaustion

→ Help 181

*d1 ≤ ø 6 h9

d1 ≤ ø20 f7



Fresa a divisione irregolare antivibrante in metallo duro integrale

Solid carbide unequal division anti-vibration end mill

VHM-Ungleiche Drallwinkel Fräser - Fraise carbure avec division irregular

Фреза концевая твердосплавная с переменным углом наклона винтовой канавки

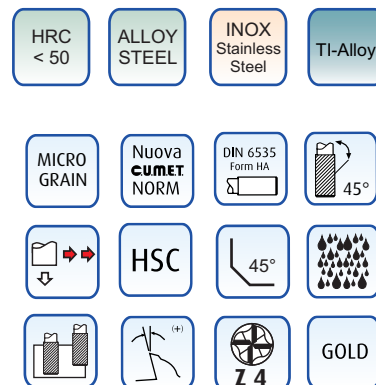
Sk fréza s nerovnoměrným úhlem šroubovice



CODE	*d1 mm	d2h6 mm	CH mm	l1 mm	L mm	Z no.
400V.030	3	6	0.05	8	60	4
400V.040	4	6	0.05	11	60	4
400V.050	5	6	0.05	13	60	4
400V.060	6	6	0.05	13	60	4
400V.080	8	8	0.10	20	75	4
400V.100	10	10	0.10	22	80	4
400V.120	12	12	0.10	25	100	4
400V.160	16	16	0.10	30	100	4
400V.200	20	20	0.10	40	100	4

→ Help 181

*d1 ≤ ø 6 h9
d1 ≤ ø20 f7



Fresa testa torica a divisione irregolare antivibrante in metallo duro integrale

Solid carbide anti-vibration corner radius end mill unequal division

VHM-Ungleiche Drallwinkel Fräser - Fraise carbure rayon d'angle avec division irregular

Фреза концевая твердосплавная с переменным углом наклона винтовой канавки

Sk fréza s rohovým rádiusem a nerovnoměrným úhlem šroubovice



CODE	*d1 mm	d2h6 mm	rp mm	l1 mm	L mm	Z no.
Y400V.030.02	3	6	0.2	8	60	4
Y400V.030.05	3	6	0.5	8	60	4
Y400V.040.02	4	6	0.2	11	60	4
Y400V.040.05	4	6	0.5	11	60	4
Y400V.040.1	4	6	1.0	11	60	4
Y400V.050.02	5	6	0.2	13	60	4
Y400V.050.05	5	6	0.5	13	60	4
Y400V.050.1	5	6	1.0	13	60	4
Y400V.060.03	6	6	0.3	13	60	4
Y400V.060.05	6	6	0.5	13	60	4
Y400V.060.1	6	6	1.0	13	60	4
Y400V.060.15	6	6	1.5	13	60	4
Y400V.080.03	8	8	0.3	20	75	4
Y400V.080.05	8	8	0.5	20	75	4
Y400V.080.1	8	8	1.0	20	75	4
Y400V.080.15	8	8	1.5	20	75	4
Y400V.080.2	8	8	2.0	20	75	4
Y400V.100.03	10	10	0.3	22	80	4
Y400V.100.05	10	10	0.5	22	80	4
Y400V.100.1	10	10	1.0	22	80	4
Y400V.100.15	10	10	1.5	22	80	4
Y400V.100.2	10	10	2.0	22	80	4
Y400V.100.3	10	10	3.0	22	80	4
Y400V.120.05	12	12	0.5	25	100	4
Y400V.120.1	12	12	1.0	25	100	4
Y400V.120.15	12	12	1.5	25	100	4
Y400V.120.2	12	12	2.0	25	100	4
Y400V.120.3	12	12	3.0	25	100	4
Y400V.160.05	16	16	0.5	30	100	4
Y400V.160.1	16	16	1.0	30	100	4
Y400V.160.15	16	16	1.5	30	100	4
Y400V.160.2	16	16	2.0	30	100	4
Y400V.160.3	16	16	3.0	30	100	4
Y400V.160.5	16	16	5.0	30	100	4
Y400V.200.1	20	20	1.0	40	100	4
Y400V.200.15	20	20	1.5	40	100	4
Y400V.200.2	20	20	2.0	40	100	4
Y400V.200.3	20	20	3.0	40	100	4
Y400V.200.5	20	20	5.0	40	100	4

→ Help 181

*d1 ≤ ø 6 h9
d1 ≤ ø20 f7



Fresa a Divisione Irregolare-Elica Variabile in metallo duro integrale

Solid carbide end mill, unequal division - Variable Helix

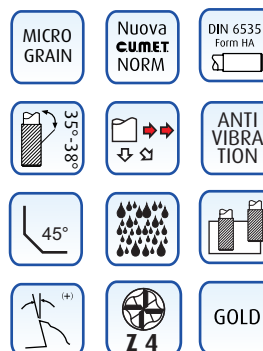
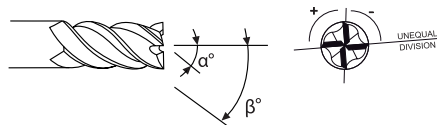
VHM-Torusfräser Ungleiche Drallwinkel-Ungleiche Teilung - Fraise end carbur avec rayon d'angle, Irrégulière Division-Hélice Variable
 Фреза концевая твердосплавная с угловым радиусом с переменным углом наклона винтовой канавки
 Sk fréza s rohovým rádiusem a nerovnoměrným úhlem šroubovice - Variabilní helix



CODE	*d1 mm	d2 mm	CH mm	l1 mm	l2 mm	L mm	d3 mm	Z no.
400SV.030	3	6	0.1x45°	9	12	57	2.8	4
400SV.040	4	6	0.1x45°	11	16	57	3.8	4
400SV.050	5	6	0.1x45°	15	20	57	4.8	4
400SV.060	6	6	0.3x45°	13	23	57	5.8	4
400SV.080	8	8	0.3x45°	22	29	63	7.8	4
400SV.100	10	10	0.3x45°	25	34	70	9.8	4
400SV.120	12	12	0.3x45°	27	42	83	11.8	4
400SV.140	14	14	0.3x45°	30	45	83	13.8	4
400SV.160	16	16	0.3x45°	34	49	92	15.8	4
400SV.200	20	20	0.3x45°	40	55	104	19.8	4

→ Help 182

*d1 ≤ ø 6 h9
 d1 ≤ ø20 f7



Fresa testa torica antivibrante ad alto avanzamento in metallo duro integrale

Solid carbide anti-vibrating corner radius end mill, High Feed

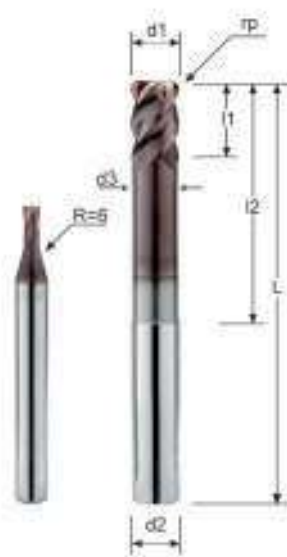
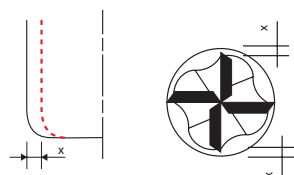
VHM - Gesenkfräser mit Eckenradius High Feed - Fraise carbure avec rayon d'angle, High Feed
 Фреза концевая твердосплавная с угловым радиусом
 Sk rychloposuvová fréza s rohovým rádiusem



CODE	*d1 mm	d2h6 mm	rp mm	l1 mm	l2 mm	L mm	d3 mm	Z no.
Y400R.040	4	6	1	8	12	75	3.95	4
Y400R.050	5	6	1.2	10	15	75	-	4
Y400R.060	6	6	1.5	12	-	100	-	4
Y400R.060.1	6	6	1.5	9	30	75	5.85	4
Y400R.080	8	8	2	16	-	100	-	4
Y400R.080.1	8	8	2	12	40	100	7.8	4
Y400R.100	10	10	2	20	-	100	-	4
Y400R.100.1	10	10	2	15	50	100	9.75	4
Y400R.120	12	12	2	24	-	100	-	4
Y400R.120.1	12	12	2	18	50	100	11.75	4

→ Help 178-179-180

*d1 ≤ ø 6 h9
 d1 ≤ ø12 f7



Fresa testa torica a Divisione Irregolare-Elica Variabile in metallo duro integrale

Solid carbide corner radius end mill, unequal division - Variable Helix

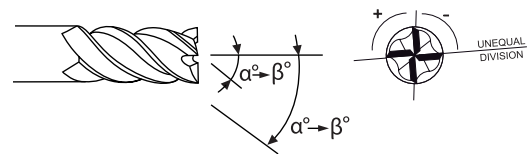
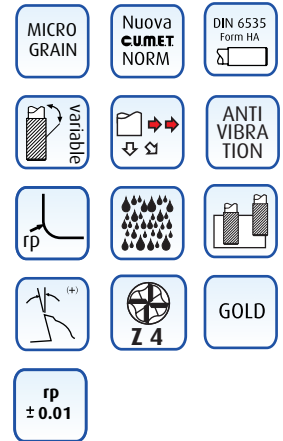
VHM-Torusfräser Ungleiche Drallwinkel-Ungleiche Teilung - Fraise end carbur avec rayon d'angle, Irrégulière Division-Hélice Variable
 Фреза концевая твердосплавная с угловым радиусом с переменным углом наклона винтовой канавки
 Sk fréza s rohovým rádiusem a nerovnoměrným úhlem šroubovice - Variabilní helix



CODE	*d1 mm	d2h6 mm	rp mm	l1 mm	L mm	Z no.
500RV03.050R03	3	6	0.3	10	50	4
500RV03.050R05	3	6	0.5	10	50	4
500RV04.050R05	4	6	0.5	12	50	4
500RV05.050R05	5	6	0.5	14	50	4
500RV06.050R05	6	6	0.5	20	50	4
500RV06.100R05	6	6	0.5	40	100	4
500RV06.050R1	6	6	1	20	50	4
500RV06.075R1	6	6	1	20	75	4
500RV06.075R15	6	6	1.5	20	75	4
500RV08.060R05	8	8	0.5	22	60	4
500RV08.100R05	8	8	0.5	40	100	4
500RV08.060R1	8	8	1	22	60	4
500RV08.100R1	8	8	1	22	100	4
500RV08.100R15	8	8	1.5	22	100	4
500RV08.100R2	8	8	2	22	100	4
500RV08.100R25	8	8	2.5	22	100	4
500RV10.070R05	10	10	0.5	25	70	4
500RV10.100R05	10	10	0.5	45	100	4
500RV10.070R1	10	10	1	25	70	4
500RV10.100R1	10	10	1	25	100	4
500RV10.100R15	10	10	1.5	25	100	4
500RV10.100R2	10	10	2	25	100	4
500RV10.100R25	10	10	2.5	25	100	4
500RV10.100R3	10	10	3	25	100	4
500RV12.075R05	12	12	0.5	27	75	4
500RV12.100R05	12	12	0.5	45	100	4
500RV12.075R1	12	12	1	27	75	4
500RV12.100R1	12	12	1	27	100	4
500RV12.100R15	12	12	1.5	27	100	4
500RV12.100R2	12	12	2	27	100	4
500RV12.100R25	12	12	2.5	27	100	4
500RV12.100R3	12	12	3	27	100	4
500RV14.085R05	14	14	0.5	30	85	4
500RV14.100R05	14	14	0.5	45	100	4
500RV16.085R05	16	16	0.5	30	85	4
500RV16.100R05	16	16	0.5	45	100	4
500RV16.150R05	16	16	0.5	65	150	4
500RV16.085R1	16	16	1	30	85	4
500RV16.100R1	16	16	1	30	100	4
500RV16.100R15	16	16	1.5	30	100	4
500RV16.100R2	16	16	2	30	100	4
500RV16.100R3	16	16	3	30	100	4
500RV16.100R5	16	16	5	30	100	4
500RV20.100R05	20	20	0.5	40	100	4
500RV20.150R05	20	20	0.5	65	150	4
500RV20.100R1	20	20	1	40	100	4
500RV20.100R15	20	20	1.5	40	100	4
500RV20.100R2	20	20	2	40	100	4
500RV20.100R3	20	20	3	40	100	4
500RV20.100R5	20	20	5	40	100	4

→ Help 182-183

*d1 ≤ ø 6 h9
 d1 ≤ ø20 f7

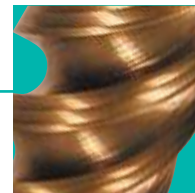


Fresa testa torica in metallo duro integrale

Solid carbide corner radius end mill

VHM - Stirn Radiusfräser - Fraise carbure avec rayon d'angle

Фреза концевая твердосплавная с угловым радиусом - Sk fréza s rohovým rádiusem



CODE	*d1 mm	d2h6 mm	rp mm	l1 mm	L mm	Z no.
Y401.060.05	6	6	0.5	13	57	4
Y401.060.1	6	6	1	13	57	4
Y401.080.05	8	8	0.5	19	63	4
Y401.080.1	8	8	1	19	63	4
Y401.100.05	10	10	0.5	22	72	4
Y401.100.1	10	10	1	22	72	4
Y401.100.15	10	10	1.5	22	72	4
Y401.120.05	12	12	0.5	26	83	4
Y401.120.1	12	12	1	26	83	4
Y401.120.15	12	12	1.5	26	83	4
Y401.160.05	16	16	0.5	32	92	4
Y401.160.1	16	16	1	32	92	4
Y401.160.15	16	16	1.5	32	92	4
Y401.200.05	20	20	0.5	40	100	4
Y401.200.1	20	20	1	40	100	4
Y401.200.15	20	20	1.5	40	100	4

→ Help 172-173

*d1 ≤ ø 6 h9
d1 ≤ ø20 f7



INOX
Stainless
Steel

Inconell

MICRO
GRAIN

DIN
NORM

DIN 6535
Form HA

55°

HHC

HHC

rp

Z 4

GOLD

Z 4

GOLD

rp
± 0.01

Fresa testa torica a Divisione Irregolare-Elica Variabile in metallo duro integrale

Solid carbide corner radius end mill, unequal division - Variable Helix

VHM-Torusfräser Ungleiche Drillwinkel-Ungleiche Teilung - Fraise end carbur avec rayon d'angle, Irrégulière Division-Hélice Variable

Фреза концевая твердосплавная с угловым радиусом с переменным углом наклона винтовой канавки

Sk fréza s rohovým rádiusem a nerovnoměrným úhlem šroubovice - Variabilní helix



CODE	*d1 mm	d2 mm	rp-CH mm	l1 mm	l2 mm	L mm	d3 mm	Z no.
500SV.060	6	6	0.1x45°	13	23	57	5.8	5
500SV.060R05	6	6	0,5	13	23	57	5.8	5
500SV.060R1	6	6	1	13	23	57	5.8	5
500SV.080	8	8	0.2x45°	22	32	63	7.5	5
500SV.080R05	8	8	0,5	22	32	63	7.5	5
500SV.080R1	8	8	1	22	32	63	7.5	5
500SV.080R2	8	8	2	22	32	63	7.5	5
500SV.100	10	10	0.2x45°	25	35	72	9.5	5
500SV.100R05	10	10	0,5	25	35	72	9.5	5
500SV.100R1	10	10	1	25	35	72	9.5	5
500SV.100R2	10	10	2	25	35	72	9.5	5
500SV.120	12	12	0.3x45°	27	42	83	11.5	5
500SV.120R05	12	12	0,5	27	42	83	11.5	5
500SV.120R1	12	12	1	27	42	83	11.5	5
500SV.120R2	12	12	2	27	42	83	11.5	5
500SV.160	16	16	0.3x45°	32	47	92	15.5	5
500SV.160R1	16	16	1	32	47	92	15.5	5
500SV.160R2	16	16	2	32	47	92	15.5	5
500SV.160R3	16	16	3	32	47	92	15.5	5
500SV.200	20	20	0.3x45°	40	55	104	19.5	5
500SV.200R1	20	20	1	40	55	104	19.5	5
500SV.160R2	20	20	2	40	55	104	19.5	5
500SV.160R3	20	20	3	40	55	104	19.5	5
500SV.160R4	20	20	4	40	55	104	19.5	5

→ 182

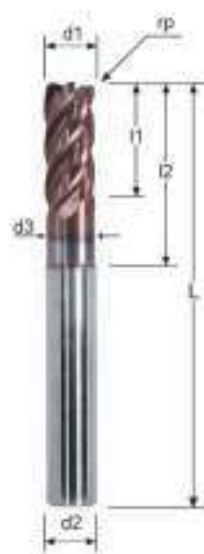
*d1 ≤ ø 6 h9
d1 ≤ ø20 f7

Ti-Alloy

INOX
Stainless
Steel

Inconell

HRC
< 55



MICRO
GRAIN

Nuova
CUMET
NORM

DIN 6535
Form HA

Variable

ANTI
VIBRA
TION

ANTI
VIBRA
TION

rp

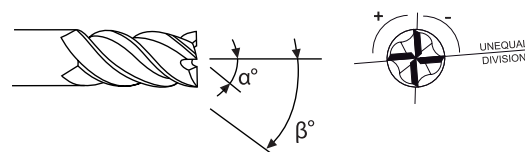
CH
45°

GOLD

Z 5

GOLD

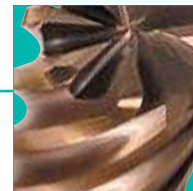
rp
± 0.01



Fresa testa torica per lavorazione pale in metallo duro integrale

Solid carbide corner radius end mill for turbine blades

VHM - Fräser mit eckenradius für Turbinenschaufeln - Fraise carbure avec rayon d'angle pour aubes de turbine
 Sk vysoce výkonná fréza s rohovým rádiusem



CODE	*d1 mm	d2h6 mm	rp mm	l1 mm	l2 mm	L mm	d3 mm	Z no.
Y507.030.03	3	6	0.3	8	12	75	2.9	4
Y507.030.05	3	6	0.5	8	12	75	2.9	4
Y507.040.03	4	6	0.3	10	15	75	3.9	4
Y507.040.05	4	6	0.5	10	15	75	3.9	4
Y507.050.03	5	6	0.3	12	18	75	4.9	4
Y507.050.05	5	6	0.5	12	18	75	4.9	4
Y507.060.05	6	6	0.5	13	21	75	5.9	6
Y507.060.1	6	6	1.0	13	21	75	5.9	6
Y507.060.1.5	6	6	1.5	13	21	75	5.9	6
Y507.080.05	8	8	0.5	20	28	100	7.8	6
Y507.080.1	8	8	1.0	20	28	100	7.8	6
Y507.080.1.5	8	8	1.5	20	28	100	7.8	6
Y507.080.2	8	8	2.0	20	28	100	7.8	6
Y507.080.2.5	8	8	2.5	20	28	100	7.8	6
Y507.100.05	10	10	0.5	22	35	100	9.8	8
Y507.100.1	10	10	1.0	22	35	100	9.8	8
Y507.100.1.5	10	10	1.5	22	35	100	9.8	8
Y507.100.2	10	10	2.0	22	35	100	9.8	8
Y507.120.05	12	12	0.5	25	40	100	11.7	8
Y507.120.1	12	12	1.0	25	40	100	11.7	8
Y507.120.1.5	12	12	1.5	25	40	100	11.7	8
Y507.120.2	12	12	2.0	25	40	100	11.7	8
Y507.120.3	12	12	3.0	25	40	100	11.7	8
Y507.160.05	16	16	0.5	30	45	100	15.7	10
Y507.160.1	16	16	1.0	30	45	100	15.7	10
Y507.160.1.5	16	16	1.5	30	45	100	15.7	10
Y507.160.2	16	16	2.0	30	45	100	15.7	10
Y507.160.3	16	16	3.0	30	45	100	15.7	10
Y507.160.5	16	16	5.0	30	45	100	15.7	10
Y507.200.05	20	20	0.5	40	50	100	19.7	10
Y507.200.1	20	20	1.0	40	50	100	19.7	10
Y507.200.1.5	20	20	1.5	40	50	100	19.7	10
Y507.200.2	20	20	2.0	40	50	100	19.7	10
Y507.200.3	20	20	3.0	40	50	100	19.7	10
Y507.200.5	20	20	5.0	40	50	100	19.7	10
Y507.250.1	25	25	1	40	50	100	24.8	10
Y507.250.1.5	25	25	1.5	40	50	100	24.8	10
Y507.250.2	25	25	2	40	50	100	24.8	10
Y507.250.3	25	25	3	40	50	100	24.8	10
Y507.250.5	25	25	5	40	50	100	24.8	10



Inconell

INOX
Stainless
Steel

HRC
< 52

SUB
MICRO
GRAIN

Nuova
CUMET
NORM

DIN 6535
Form HA

45°

HSC
HHC

TP

GOLD

Z 4

Z 6

Z 8

Z 10

06-08

010-012

016-025

rp
± 0.01

→ Help 173-185

*d1 ≤ ø 6 h9
 d1 ≤ ø25 f7

Fresa per kevlar in metallo duro integrale

Solid carbide kevlar end mill

VHM - Fräser für Kevlar - Fraise carbure pour kevlar

Фреза концевая твердосплавная для кевлара - Sk fréza pro obrábění kevlaru



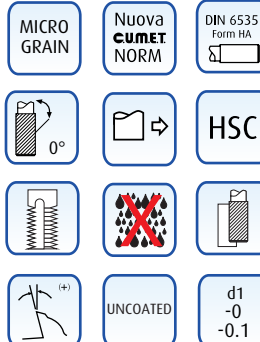
CODE	d1h10 mm	d2h6 mm	l1 mm	L mm	Z no.
200K.050	5.0	5.0	20	60	2
200K.060	6.0	6.0	25	75	2
200K.063	6.35	6.35	25	75	2
200K.080	8.0	8.0	25	75	2
200K.100	10.0	10.0	25	75	2
200K.120	12.0	12.0	25	75	2

Vc =250~450m/min

Fz =0.4~2.0mm



KEVLAR



Fresa a forare e fresare per kevlar in metallo duro integrale

Solid carbide end mill-drill for kevlar

VHM - Fräser - Bohren für Kevlar - Fraise carbure a forer pour kevlar

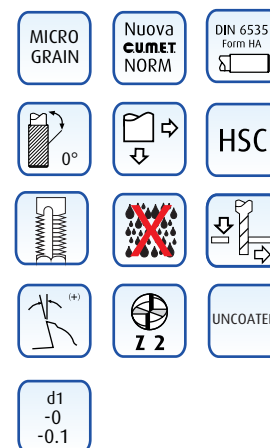
Сверло-фреза для кевлара - Sk fréza pro obrábění kevlaru s možností vrtání



CODE	d1h6 mm	d2h6 mm	l1 mm	l2 mm	L mm	Z no.
200KF.047	4.7	4.7	2.0	20	60	2
200KF.050	5.0	5.0	2.0	20	60	2
200KF.060	6.0	6.0	2.0	25	75	2
200KF.063	6.35	6.35	2.0	25	75	2
200KF.080	8.0	8.0	2.0	25	75	2
200KF.100	10.0	10.0	2.5	25	75	2



KEVLAR



Punta per kevlar in metallo duro integrale

Solid carbide kevlar drill

VHM - Spiralböhler für Kevlar - Foret carbure pour kevlar

Сверло спиральное твердосплавное для кевлара - Sk vrták pro vrtání kevlaru

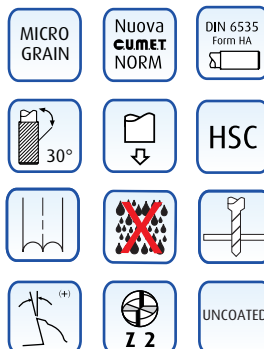


CODE	d1h6 mm	d2h6 mm	l1 mm	L mm	Z no.
170.024	2.4	2.4	14	45	2
170.027	2.7	2.7	16	45	2
170.030	3.0	3.0	16	45	2
170.031	3.1	3.1	18	49	2
170.0317	3.17	3.17	18	49	2
170.032	3.2	3.2	18	49	2
170.035	3.5	3.5	20	53	2
170.036	3.6	3.6	20	53	2
170.037	3.7	3.7	20	53	2
170.038	3.8	3.8	22	53	2
170.040	4.0	4.0	22	53	2
170.041	4.1	4.1	22	53	2
170.044	4.4	4.4	24	58	2
170.045	4.5	4.5	24	58	2
170.0476	4.76	4.76	24	58	2
170.048	4.8	4.8	26	60	2
170.050	5.0	5.0	26	60	2
170.055	5.5	5.5	28	66	2
170.0555	5.55	5.55	28	66	2
170.056	5.6	5.6	28	66	2
170.060	6.0	6.0	28	66	2
170.061	6.1	6.1	31	70	2
170.062	6.2	6.2	31	70	2
170.0635	6.35	6.35	31	70	2
170.065	6.5	6.5	31	70	2
170.070	7.0	7.0	34	74	2
170.0793	7.93	7.93	37	79	2
170.080	8.0	8.0	37	79	2
170.085	8.5	8.5	37	79	2
170.090	9.0	9.0	40	84	2
170.0952	9.52	9.52	40	84	2
170.100	10.0	10.0	43	89	2
170.120	12.0	12.0	51	100	2

Vc = 120-160m/min

Fz = 0.04-0.16mm

KEVLAR



Il metallo duro integrale utilizzato in questa sezione ha un basso contenuto di cobalto e alta resistenza all'abrasione.

The solid carbide used for this section has a low percentage of cobalt content with high resistance to the abrasion.

Das Carbid in diesem Abschnitt verwendet wird, hat einen niedrigen Gehalt an Kobalt und mit hoher Abriebfestigkeit.

Le carbure utilisé est au moins cobalt contenu à haute résistance à l'abrasion.

Твердый сплав с небольшим содержанием кобальта для высокой резистентности к абразивным материалам.

Pevný karbid v této sekci má nízké procento kobaltu s vysokou odolností proti oděru.