FRÉZY TVRDOKOVOVÉ
GRAFIT

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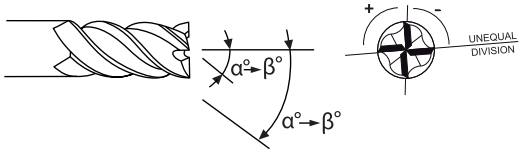
Fresa a sgrossare testa piana in metallo duro integrale rivestita in diamante

Solid carbide flat nose roughing end mill diamond coated

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

Code Uncoated	Code Graphite	Code Carbon Fiber	*d1 mm	d2h6 mm	CH mm	l1 mm	L mm
5040.030	5040G.030	5040F.030	**3**	3	0.2	12	40
5040.040	5040G.040	5040F.040	**4**	4	0.2	16	50
5040.060	5040G.060	5040F.060	**6**	6	0.2	19	50
5040.060.1	5040G.060.1	5040F.060.1	**6**	6	0.2	40	100
5040.080	5040G.080	5040F.080	**8**	8	0.2	25	60
5040.080.1	5040G.080.1	5040F.080.1	**8**	8	0.2	40	100
5040.100	5040G.100	5040F.100	**10**	10	0.2	25	70
5040.100.1	5040G.100.1	5040F.100.1	**10**	10	0.2	40	100
5040.120	5040G.120	5040F.120	**12**	12	0.2	25	75
5040.120.1	5040G.120.1	5040F.120.1	**12**	12	0.2	40	100

→ Help 179



Graphyte
CARBON FIBER

MICRO GRAIN
HSC
DIN 6535 Form HA
variable
45°
DIAMOND
Z 2
d1 -0 -0.1

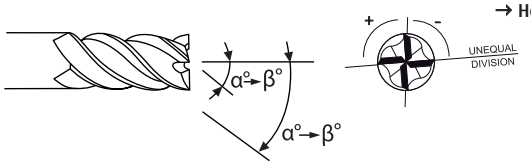
Fresa a sgrossare testa torica in metallo duro integrale rivestita in diamante

Solid carbide corner radius roughing end mill diamond coated

VHM - Torus Schruppfräser, Diamant Beschichtet - Fraise carbure a degrossir avec rayon d'angle, revetement 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
Y5040.060.05	**6**	6	0.5	20	50
Y5040.060.05L	**6**	6	0.5	32	75
Y5040.080.05	**8**	8	0.5	25	60
Y5040.080.05L	**8**	8	0.5	40	75
Y5040.100.05	**10**	10	0.5	25	70
Y5040.100.05L	**10**	10	0.5	40	100
Y5040.120.05	**12**	12	0.5	25	75
Y5040.120.05L	**12**	12	0.5	40	100

→ Help 179



Graphyte

MICRO GRAIN
HSC
DIN 6535 Form HA
variable
rp
DIAMOND 1
Z 2
d1 -0 -0.1

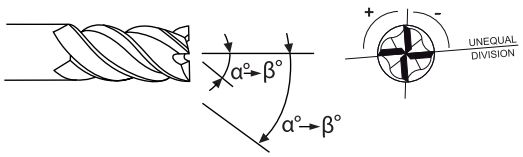
Fresa a sgrossare testa raggiata in metallo duro integrale rivestita in diamante

Solid carbide ball nose roughing end mill diamond coated

VHM - Radius Schruppfräser, Diamant Beschichtet - Fraise carbure a degrossir hémisphérique, revetement en diamant
Фреза концевая твердосплавная радиусная для черновой обработки с алмазным покрытием
Sk kulová hrubovací fréza s diamantovým povlakem

Code	*d1 mm	d2h6 mm	l1 mm	L mm
5040R.060	**6**	6	20	50
5040R.060.1	**6**	6	32	75
5040R.080	**8**	8	25	60
5040R.080.1	**8**	8	40	75
5040R.100	**10**	10	25	70
5040R.100.1	**10**	10	40	100
5040R.120	**12**	12	25	75
5040R.120.1	**12**	12	40	100

→ Help 179



Graphyte

MICRO GRAIN
HSC
DIN 6535 Form HA
variable
DIAMOND 1
Z 2
d1 -0 -0.1

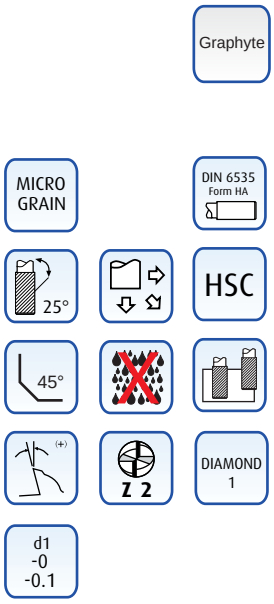
Fresa a semi-finire testa piana rivestita in diamante in metallo duro integrale

Solid carbide flat nose semi-finishing diamond coated end mill

VHM - Schaft Vorschlichtenfräser, Diamant Beschichtet - Fraise carbure semi-finition à bout plat, avec revetement en diamont
Фреза концевая твердосплавная плоский торец для получистовой обработки с алмазным покрытием
Sk polodokončovací fréza s diamantovým povlakem

Code	*d1 mm	d2h6 mm	CH mm	l1 mm	l2 mm	L mm	d3 mm
6010D.030	**3**	3	0.2	12	-	50	-
6010D.040	**4**	4	0.2	16	-	50	-
6010D.060	**6**	6	0.2	19	-	50	-
6010D.060.1	**6**	6	0.2	19	45	100	5.7
6010D.080	**8**	8	0.2	25	-	60	-
6010D.080.1	**8**	8	0.2	25	55	100	7.7
6010D.100	**10**	10	0.2	25	-	70	-
6010D.100.1	**10**	10	0.2	25	60	100	9.7
6010D.120	**12**	12	0.2	25	-	75	-
6010D.120.1	**12**	12	0.2	30	60	100	11.7

→ Help 179



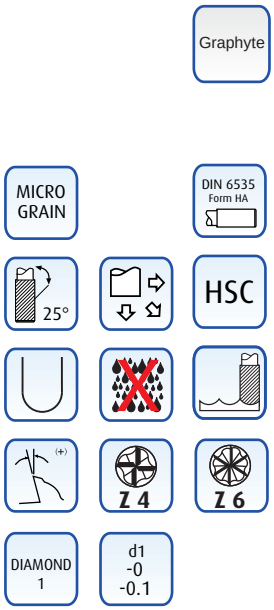
Fresa a semi-finire testa raggiata rivestita in diamante in metallo duro integrale

Solid carbide ball nose semi-finishing diamond coated end mill

VHM - Radius Vorschlichtenfräser, Diamant Beschichtet - Fraise carbure semi-finition à bout hémisphérique, revetement en diamont
Фреза концевая твердосплавная радиусная для получистовой обработки с алмазным покрытием
Sk kulová polodokončovací fréza s diamantovým povlakem

Code	*d1 mm	d2h6 mm	l1 mm	l2 mm	L mm	d3 mm
6010RD.030	**3**	3	12	-	50	-
6010RD.040	**4**	4	16	-	50	-
6010RD.060	**6**	6	19	-	50	-
6010RD.060.1	**6**	6	19	45	100	5.7
6010RD.080	**8**	8	25	-	60	-
6010RD.080.1	**8**	8	25	55	100	7.7
6010RD.100	**10**	10	25	-	70	-
6010RD.100.1	**10**	10	25	60	100	9.7
6010RD.120	**12**	12	25	-	75	-
6010RD.120.1	**12**	12	30	60	100	11.7

→ Help 179



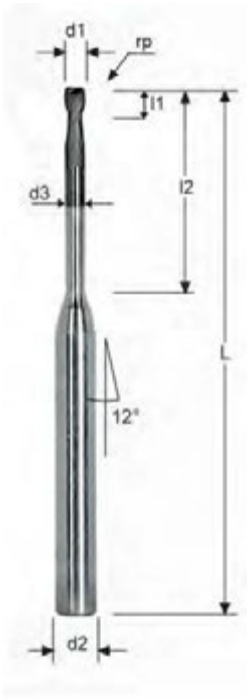
Microfresa testa torica in metallo duro integrale gambo Ø 3 mm

Solid carbide miniature corner radius end mill, shank Ø 3 mm

VHM - Mini Schaftfräser mit Eckenradius, Schaft Ø 3 mm - Microfraise carbure avec rayon d'angle, queue Ø 3 mm
Мини-фреза концевая твердосплавная 3 с угловым радиусом, хвостовик Ø 3 mm
Sk miniaturní fréza s rohovým rádiusem se stopkou Ø 3 mm

Code	*d1 mm	d2h6 mm	rp mm	l1 mm	l2 mm	L mm	d3 mm	Z no.
200GD.004	**0.4**	3	-	0.6	-	50	-	2
200GDL.004	**0.4**	3	-	0.6	1.5	50	0.35	2
200GD.005	**0.5**	3	0.05	0.7	2.5	50	0.45	2
200GDL.005	**0.5**	3	0.05	0.7	4.0	50	0.45	2
200GDXL.005	**0.5**	3	0.05	0.7	7.5	50	0.45	2
200GD.006	**0.6**	3	0.05	0.9	5.0	50	0.55	2
200GDL.006	**0.6**	3	0.05	0.9	9.0	50	0.55	2
200GD.008	**0.8**	3	0.05	1.2	4.0	50	0.75	2
200GDL.008	**0.8**	3	0.05	1.2	7.0	50	0.75	2
200GDXL.008	**0.8**	3	0.05	1.2	12.0	50	0.75	2
200GD.010	**1.0**	3	0.10	1.5	5.0	50	0.95	2
200GDL.010	**1.0**	3	0.10	1.5	8.5	50	0.95	2
200GD.012	**1.2**	3	0.10	1.8	7.5	50	1.15	2
200GDL.012	**1.2**	3	0.10	1.8	12.0	50	1.15	2
200GD.015	**1.5**	3	0.15	2.2	7.5	50	1.45	2
200GDL.015	**1.5**	3	0.15	2.2	12.0	50	1.45	2
200GD.020	**2.0**	3	0.15	2.2	10.0	50	1.95	2
200GDL.020	**2.0**	3	0.15	2.2	16.0	50	1.95	2
200GD.025	**2.5**	3	0.15	3.5	-	50	-	2
200GDL.025	**2.5**	3	0.15	3.5	15.0	50	2.45	2

→ Help 180



Graphyte

MICRO GRAIN

DIN 6535 Form HA

20°

HSC

rp

DIAMOND 1

Z 2

d1 -0.01 -0.02

< Ø1 rp ±0.005

< Ø3 rp ± 0.01

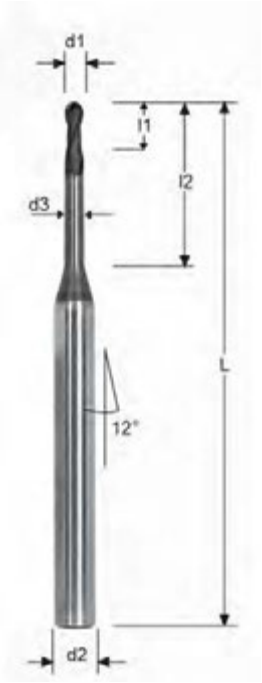
Microfresa testa sferica 3D in metallo duro integrale gambo Ø 3 mm

Solid carbide miniature ball nose end mill, shank Ø 3 mm

VHM - 3D Mini Radiusfräser, Schaft Ø 3 mm - Microfraise carbure mini 3D hémisphérique, queue Ø 3 mm
Мини-фреза концевая твердосплавная полусферическая 3D, хвостовик Ø 3 mm
Sk miniaturní kulová fréza se stopkou Ø 3 mm

CODE	*d1 mm	d2h6 mm	l1 mm	l2 mm	L mm	d3 mm	Z no.
200GRD.004	**0.4**	3	0.4	-	50	-	2
200GRDL.004	**0.4**	3	0.4	1.5	50	0.35	2
200GRD.005	**0.5**	3	0.5	2.5	50	0.45	2
200GRDL.005	**0.5**	3	0.5	4.0	50	0.45	2
200GRDXL.005	**0.5**	3	0.5	7.5	50	0.45	2
200GRD.006	**0.6**	3	0.6	5.0	50	0.55	2
200GRDL.006	**0.6**	3	0.6	9.0	50	0.55	2
200GRD.008	**0.8**	3	0.8	4.0	50	0.75	2
200GRDL.008	**0.8**	3	0.8	7.0	50	0.75	2
200GRDXL.008	**0.8**	3	0.8	12.0	50	0.75	2
200GRD.010	**1.0**	3	1.0	8.5	50	0.95	2
200GRDL.010	**1.0**	3	1.0	15.0	50	0.95	2
200GRD.012	**1.2**	3	1.2	6.0	50	1.15	2
200GRDL.012	**1.2**	3	1.2	10.0	50	1.15	2
200GRD.015	**1.5**	3	1.5	12.0	50	1.45	2
200GRDL.015	**1.5**	3	1.5	20.0	50	1.45	2
200GRD.020	**2.0**	3	2.0	10.0	50	1.95	2
200GRDL.020	**2.0**	3	2.0	16.0	50	1.95	2
200GRD.025	**2.5**	3	2.5	15.0	50	2.45	2

→ Help 180



Graphyte

MICRO GRAIN

DIN 6535 Form HA

20°

HSC

DIAMOND 1

Z 2

d1 -0.01 -0.02

< Ø1 rp ±0.005

< Ø3 rp ± 0.01

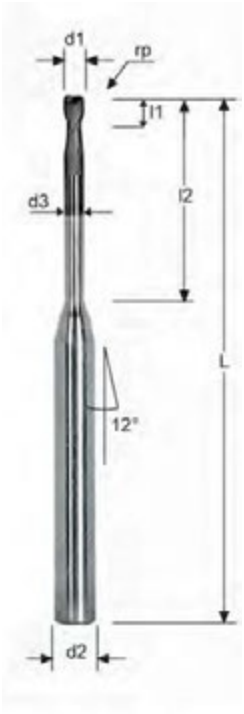
Microfresa testa torica in metallo duro integrale gambo Ø 4 mm

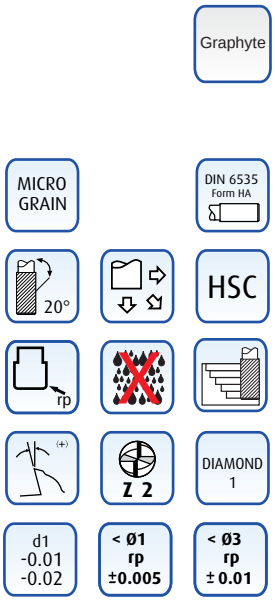
Solid carbide miniature corner radius end mill, shank Ø 4 mm

VHM - Mini Schaftfräser mit Eckenradius, Schaft Ø 4 mm - Microfraise carbure avec rayon d'angle, queue Ø 4 mm
Мини-фреза концевая твердосплавная 3 с угловым радиусом, хвостовик Ø 4 mm
Sk miniaturní fréza s rohovým rádiusem se stopkou Ø 4 mm

CODE	*d1 mm	d2h6 mm	rp mm	l1 mm	l2 mm	L mm	d3 mm	Z no.
204GD.004	**0.4**	4	0.05	0.6	2.5	50	0.37	2
204GD.004.1	**0.4**	4	0.05	0.6	5	50	0.37	2
204GD.005	**0.5**	4	0.05	0.8	-	50	-	2
204GD.005.1	**0.5**	4	0.05	0.8	3.5	50	0.45	2
204GD.005.2	**0.5**	4	0.05	0.8	5	50	0.45	2
204GD.005.3	**0.5**	4	0.05	0.8	7	50	0.45	2
204GD.005.4	**0.5**	4	0.05	0.8	10	50	0.45	2
204GD.006	**0.6**	4	0.05	0.9	3.5	50	0.55	2
204GD.006.1	**0.6**	4	0.05	0.9	7	50	0.55	2
204GD.008	**0.8**	4	0.05	1.2	5	50	0.75	2
204GD.008.1	**0.8**	4	0.05	1.2	10	50	0.75	2
204GD.010	**1.0**	4	0.1	1.5	-	50	-	2
204GD.010.1	**1.0**	4	0.05	1.5	5	50	0.95	2
204GD.010.2	**1.0**	4	0.1	1.5	5	50	0.95	2
204GD.010.3	**1.0**	4	0.05	1.5	10	50	0.95	2
204GD.010.4	**1.0**	4	0.1	1.5	10	50	0.95	2
204GD.010.5	**1.0**	4	0.2	1.5	10	50	0.95	2
204GD.010.6	**1.0**	4	0.1	1.5	15	50	0.95	2
204GD.010.7	**1.0**	4	0.2	1.5	15	50	0.95	2
204GD.010.8	**1.0**	4	0.1	1.5	20	75	0.95	2
204GD.015	**1.5**	4	0.15	2.3	-	50	-	2
204GD.015.1	**1.5**	4	0.15	2.3	10	50	1.40	2
204GD.015.2	**1.5**	4	0.2	2.3	10	50	1.40	2
204GD.015.3	**1.5**	4	0.15	2.3	15	50	1.40	2
204GD.015.4	**1.5**	4	0.2	2.3	15	50	1.40	2
204GD.015.5	**1.5**	4	0.2	2.3	25	75	1.40	2
204GD.020	**2.0**	4	0.2	3.0	-	50	-	2
204GD.020.1	**2.0**	4	0.2	3.0	5	50	1.95	2
204GD.020.2	**2.0**	4	0.1	3.0	10	50	1.95	2
204GD.020.3	**2.0**	4	0.2	3.0	10	50	1.95	2
204GD.020.4	**2.0**	4	0.3	3.0	10	50	1.95	2
204GD.020.5	**2.0**	4	0.3	3.0	15	50	1.95	2
204GD.020.6	**2.0**	4	0.2	3.0	20	75	1.95	2
204GD.020.7	**2.0**	4	0.3	3.0	20	75	1.95	2
204GD.020.8	**2.0**	4	0.2	3.0	25	75	1.95	2
204GD.030	**3.0**	4	0.2	4.5	15	75	2.95	2

→ Help 180





In questa sezione il rivestimento in diamante 2 nano cristallino multi-layer è specifico per la lavorazione della fibra di carbonio. Lo spessore di rivestimento è di 8+2 Micron. L'esecuzione lucida del rivestimento consente di limitare gli attriti durante la lavorazione. L'innovantiva geometria anti vibrante da noi ideata è particolarmente indicata per le lavorazioni dal pieno.

Nano-crystalline diamond coating 2 multi-layer specific to the processing of carbon fiber. Coating thickness 8 + 2 microns. Shiny execution of the coating to reduce friction during the processing. The innovantive anti vibrating geometry designed by us is particularly suitable for machining full diameter.

In diesem Abschnitt wird die nanokristalline Diamantschicht 2 mehrschichtigen spezifisch ist für die Bearbeitung der Kohlenstofffaser. Die Schichtdicke beträgt 8 +2 Micron. Die Ausführung der glänzenden Beschichtung hilft Limit Reibung während der Verarbeitung. L'innovantiva Geometrie anti Vibrieren von uns entwickelt ist besonders geeignet für die Bearbeitung aus dem Vollen

Dans cette section le multicouche de revêtement nano diamant 2 cristallin est spécifique pour le freisage de la fibre de carbone. L'épaisseur du revêtement est 8 + 2 microns. La surface lisse de revêtement permet de limiter la friction pendant le traitement. La géométrie innovante antivibration que nous avons conçu convient particulièrement pour le fraisage.

Нано-кристаллическое алмазное многослойное покрытие предназначенное для обработки карбонной фибры. Толщина покрытия 8 + 2 микрон. Полированная поверхность для уменьшения трения при обработке. Инновационная антивибрационная геометрия для обработки общим диаметром фрезы.

Nano-krystalická diamantová 2 vícevrstvá-vrstva specifická pro zpracování uhlíkových vláken. Tloušťka vrstvy 8 + 2 mikronů. Lesklé provedení povrchové úpravy pro snížení tření při obrábění.Innovativní protivibrační geometrie, je vhodný zejména pro obrábění plným průměrem.

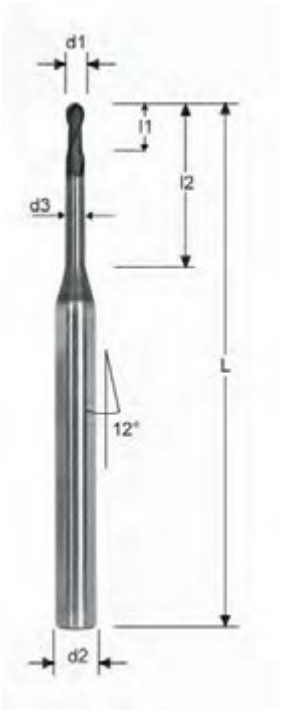
Microfresa testa sferica 3D in metallo duro integrale gambo Ø 4 mm

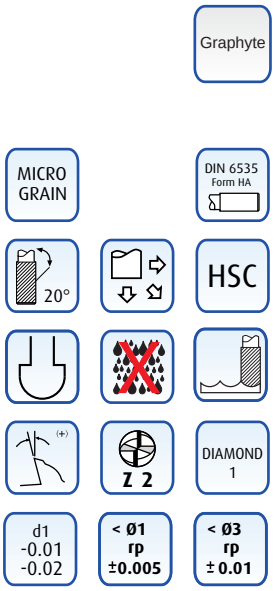
Solid carbide miniature ball nose end mills, shank Ø 4 mm

VHM - 3D Mini Radiusfräser, Schaft Ø 4 mm - Microfraise carbure mini 3D hémisphérique, queue Ø 4 mm
Мини-фреза концевая твердосплавная полусферическая, хвостовик Ø 4 mm
Sk miniaturní kulová fréza se stopkou Ø 4 mm

CODE	*d1 mm	d2h6 mm	l1 mm	l2 mm	L mm	d3 mm	Z no.
204GRD.004	**0.4**	4	0.6	2.5	50	0.37	2
204GRD.004.1	**0.4**	4	0.6	5	50	0.37	2
204GRD.005	**0.5**	4	0.8	-	50	-	2
204GRD.005.1	**0.5**	4	0.8	3.5	50	0.45	2
204GRD.005.2	**0.5**	4	0.8	5	50	0.45	2
204GRD.005.3	**0.5**	4	0.8	7	50	0.45	2
204GRD.005.4	**0.5**	4	0.8	10	50	0.45	2
204GRD.006	**0.6**	4	0.9	3.5	50	0.55	2
204GRD.006.1	**0.6**	4	0.9	7	50	0.55	2
204GRD.008	**0.8**	4	1.2	5	50	0.75	2
204GRD.008.1	**0.8**	4	1.2	10	50	0.75	2
204GRD.010	**1.0**	4	1.5	-	50	-	2
204GRD.010.1	**1.0**	4	1.5	5	50	0.95	2
204GRD.010.2	**1.0**	4	1.5	10	50	0.95	2
204GRD.010.3	**1.0**	4	1.5	15	50	0.95	2
204GRD.010.4	**1.0**	4	1.5	20	50	0.95	2
204GRD.015	**1.5**	4	2.3	-	50	-	2
204GRD.015.1	**1.5**	4	2.3	10	50	1.40	2
204GRD.015.2	**1.5**	4	2.3	25	75	1.40	2
204GRD.020	**2.0**	4	3.0	-	50	-	2
204GRD.020.1	**2.0**	4	3.0	5	50	1.90	2
204GRD.020.2	**2.0**	4	3.0	10	50	1.90	2
204GRD.020.3	**2.0**	4	3.0	15	50	1.90	2
204GRD.020.4	**2.0**	4	3.0	20	75	1.90	2
204GRD.020.5	**2.0**	4	3.0	25	75	1.90	2
204GRD.030 5	**3.0**	4	4.5	5	75	2.90	2
204GRD.030.1	**3.0**	4	4.5	10	75	2.90	2
204GRD.030.2	**3.0**	4	4.5	15	75	2.90	2
204GRD.030.3	**3.0**	4	4.5	20	75	2.90	2
204GRD.030.4	**3.0**	4	4.5	25	75	2.90	2
204GRD.030.5	**3.0**	4	4.5	30	100	2.90	2

→ Help 180

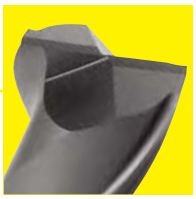




Fresa testa piana in metallo duro integrale

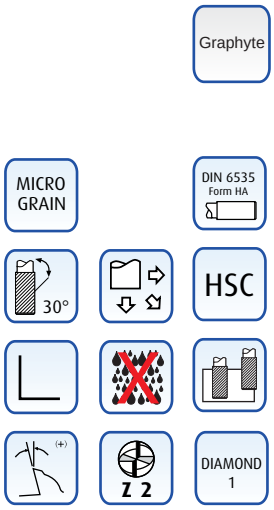
Solid carbide flat nose end mill

VHM - Schaftfräser - Fraise carbure a bout plat
Фреза концевая твердосплавная плоский торец - Sk rohová fréza



CODE	d1h8 mm	d2h6 mm	l1 mm	L mm	Z no.
200G.010	**1**	3	3	40	2
200G.020	**2**	3	9	40	2
200G.030	**3**	3	12	40	2
200G.040	**4**	4	14	50	2
200G.050	**5**	5	14	50	2
200G.060	**6**	6	20	64	2
200G.080	**8**	8	20	60	2
200G.080.1	**8**	8	40	100	2
200G.100	**10**	10	25	70	2
200G.100.1	**10**	10	50	100	2
200G.120	**12**	12	25	75	2
200G.120.1	**12**	12	50	100	2

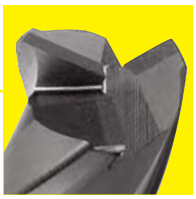
→ Help 180



Fresa testa torica in metallo duro integrale

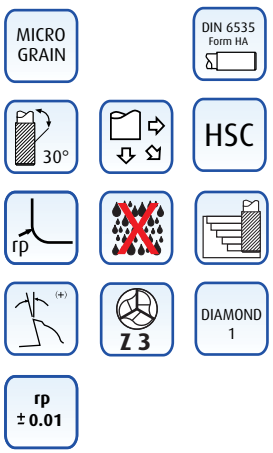
Solid carbide corner radius end mill

VHM - Gesenkfräser mit Eckenradius - Fraise carbure de matrice avec rayon d'angle
Фреза концевая твердосплавная с угловым радиусом 3D длинная - Sk fréza s rohovým rádiusem



CODE	d1h8 mm	d2h6 mm	rp mm	l1 mm	L mm	Z no.
300GD.01060.02	**1**	2	0.2	5	60	3
300GD.02100.02	**2**	2	0.2	10	100	3
300GD.03050.02	**3**	3	0.2	12	50	3
300GD.03100.02	**3**	3	0.2	15	100	3
300GD.03150.02	**3**	3	0.2	20	150	3
300GD.04050.05	**4**	4	0.5	16	50	3
300GD.04100.05	**4**	4	0.5	20	100	3
300GD.04150.05	**4**	4	0.5	20	150	3
300GD.05050.05	**5**	5	0.5	20	50	3
300GD.05100.05	**5**	5	0.5	20	100	3
300GD.05150.05	**5**	5	0.5	20	150	3
300GD.06050.05	**6**	6	0.5	20	50	3
300GD.06100.05	**6**	6	0.5	20	100	3
300GD.06150.05	**6**	6	0.5	30	150	3
300GD.08060.05	**8**	8	0.5	22	60	3
300GD.08100.05	**8**	8	0.5	30	100	3
300GD.08150.05	**8**	8	0.5	30	150	3
300GD.10070.05	**10**	10	0.5	22	70	3
300GD.10100.05	**10**	10	0.5	30	100	3
300GD.10150.05	**10**	10	0.5	40	150	3
300GD.12075.05	**12**	12	0.5	27	75	3
300GD.12100.05	**12**	12	0.5	30	100	3
300GD.12150.05	**12**	12	0.5	40	150	3

→ Help 180



Fresa testa sferica 3D in metallo duro integrale

Solid carbide 3D ball nose end mill

VHM - 3D Radiusfräser - Fraise carbure 3D hémisphérique
Фреза концевая твердосплавная полусферическая 3D - Sk 3D kulová fréza

CODE	d1h8 mm	d2h6 mm	l1 mm	L mm	Z no.
300GRD.01050	**1**	2	6	50	3
300GRD.02060	**2**	2	8	60	3
300GRD.02100.1	**2**	2	12	100	3
300GRD.02100	**2**	2	20	100	3
300GRD.03040	**3**	3	12	40	3
300GRD.03100	**3**	3	15	100	3
300GRD.03150	**3**	3	20	150	3
300GRD.04050	**4**	4	16	50	3
300GRD.04100	**4**	4	20	100	3
300GRD.04150	**4**	4	20	150	3
300GRD.05050	**5**	5	20	50	3
300GRD.05100	**5**	5	20	100	3
300GRD.05150	**5**	5	20	150	3
300GRD.06050	**6**	6	20	50	3
300GRD.06100	**6**	6	35	100	3
300GRD.06150	**6**	6	35	150	3
300GRD.08060	**8**	8	22	60	3
300GRD.08100	**8**	8	35	100	3
300GRD.08150	**8**	8	40	100	3
300GRD.10070	**10**	10	20	70	3
300GRD.10100	**10**	10	35	100	3
300GRD.10150	**10**	10	40	150	3
300GRD.12075	**12**	12	27	75	3
300GRD.12100	**12**	12	35	100	3
300GRD.12150	**12**	12	45	150	3

→ Help 180

Graphyte

MICRO GRAIN

DIN 6535 Form HA

30°

HSC

Z 3

DIAMOND 1

R ± 0.01

Fresa testa sferica 3D rastremata extralunga in metallo duro integrale

Solid carbide 3D ball nose end mill, extra long tapered neck

VHM-3D- Radiusfräser mit Kugelstirn, überlang - Fraise carbure 3D hémisphérique, ultra-longue
Фреза концевая твердосплавная полусферическая 3D длинная
Sk 3D kulová fréza s extra dlouhým zužením stopky

CODE	d1h8 mm	d2h6 mm	l1 mm	l2 mm	L mm	Z no.
200GRL.010	**1**	3	2	30	100	2
200GRL.015	**1.5**	3	3	30	100	2
200GRL.020	**2**	3	4	30	100	2
200GRL.020.1	**2**	4	4	70	150	2
200GRL.030	**3**	5	6	70	150	2
200GRL.040	**4**	6	8	70	150	2
200GRL.050	**5**	6	10	50	150	2
200GRL.060	**6**	8	10	70	150	2
200GRL.080	**8**	10	10	70	150	2
200GRL.100	**10**	12	10	70	150	2

→ Help 180

Graphyte

MICRO GRAIN

DIN 6535 Form HA

30°

HSC

Z 2
Ø1-Ø6

Z 3
Ø8-Ø10

DIAMOND 1

R ± 0.01

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	Z no.
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	-

→ Help 188

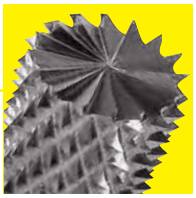
HRC < 60 | Graphyte | CARBON FIBER | GLASS FIBER

SUB MICRO GRAIN | DIN 6535 Form HA | 30° | HSC | UNCOATED | Z 2 | d1 -0 -0.1

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	Z no.
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 188

HRC < 60 | Graphyte | CARBON FIBER | GLASS FIBER

SUB MICRO GRAIN | DIN 6535 Form HA | 30° | HSC | UNCOATED | d1 -0 -0.1

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 percage, profilage et finition
Sk fréza pro profilování a dokončování s možností zavrtání

CODE	*d1 mm	d2h6 mm	l1 mm	L mm	Z no.
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 188

HRC < 60 | Graphyte | CARBON FIBER | GLASS FIBER

SUB MICRO GRAIN | DIN 6535 Form HA | 30° | HSC | 135° | UNCOATED | Z 2 | d1 -0 -0.1

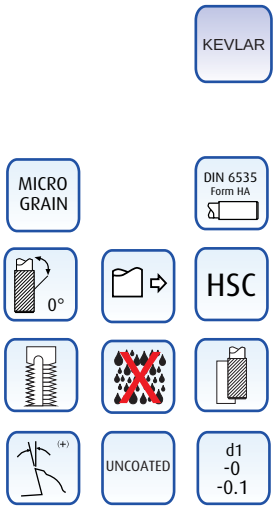
Fresa per kevlar in metallo duro integrale

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.047	**4.7**	4.7	20	60	2
200K.050	**5.0**	5.0	20	60	2
200K.055	**5.5**	5.5	25	75	2
200K.060	**6.0**	6.0	25	75	2
200K.063	**6.3**	6.3	25	75	2
200K.080	**8.0**	8.0	25	75	2
200K.095	**9.5**	9.5	25	75	2
200K.100	**10.0**	10.0	25	75	2
200K.120	**12.0**	12.0	25	75	2
200K.127	**12.7**	12.7	25	75	2

Vc =250~450m/min
Fz =0.4~2.0mm

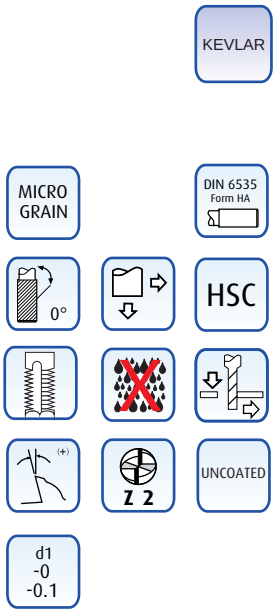


Fresa a forare e fresare per kevlar in metallo duro integrale

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 obbrábění kevlaru s možností vrtání

CODE	d1h6 mm	d2h6 mm	l1 mm	l2 mm	L mm	Z no.
200KF.0317	**3.17**	3.17	1.2	15	40	2
200KF.047	**4.7**	4.7	2.0	20	60	2
200KF.050	**5.0**	5.0	2.0	20	60	2
200KF.055	**5.5**	5.5	2.0	25	75	2
200KF.060	**6.0**	6.0	2.0	25	75	2
200KF.063	**6.3**	6.3	2.0	25	75	2
200KF.080	**8.0**	8.0	2.0	25	75	2
200KF.095	**9.5**	9.5	2.5	25	75	2
200KF.100	**10.0**	10.0	2.5	25	75	2
200KF.120	**12.0**	12.0	2.5	25	75	2
200KF.127	**12.7**	12.7	2.5	25	75	2



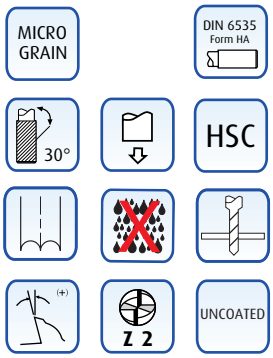
Punta per kevlar in metallo duro integrale

Solid carbide kevlar drill

VHM - Spiralböhrer 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
170.028	**2.8**	2.8	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
170.034	**3.4**	3.4	18	53	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
170.039	**3.9**	3.9	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
170.049	**4.9**	4.9	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
170.058	**5.8**	5.8	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
170.067	**6.7**	6.7	34	74	2
170.070	**7.0**	7.0	34	74	2
170.075	**7.5**	7.5	34	74	2
170.0793	**7.93**	7.93	37	79	2
170.080	**8.0**	8.0	37	79	2
170.084	**8.4**	8.4	37	79	2
170.085	**8.5**	8.5	37	79	2
170.090	**9.0**	9.0	40	84	2
170.095	**9.5**	9.5	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

KEVLAR



Vc = 120~160m/min
Fz = 0.04~0.16mm

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 резистенности к абразивным материалам.

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

Formulas

Formel - Formules
Формулы

Fz (mm) = Avanzamento per Dente
Feed per tooth
Vorschub pro Zain
Avance par dent
Подача на зуб
Posuv na zub

N (1/min) = Velocità di rotazione
Rotation number
Drehzahl
Frequence de rotation
Частота вращения шпинделя
Otáčky

Vc (m/min) = Velocità di taglio
Cutting speed
Schnittgeschwindigkeit
Vitesse de coupe
Скорость резания
Řezná rychlost

Vf (mm/min) = Velocità di avanzamento
Feed Speed
Vorschubgeschwindigkeit
Vitesse d'avance
Скорость подачи
Rychlost posuvu

Q (cm3/min) = Volume truciolo asportato
Quantity of removed chip
Swarf Volumen
Coupeau volume
Количество снимаемой стружки
Množství odebraného materiálu

$$Fz = \frac{Vf}{Z \times N} \text{ mm}$$

$$N = \frac{Vc \times 1000}{\pi \times Ø} \text{ 1/min.}$$

$$Vf = Z \times N \times fz \text{ mm/min.}$$

$$Vc = \frac{\pi \times Ø \times N}{1000} \text{ m/min.}$$

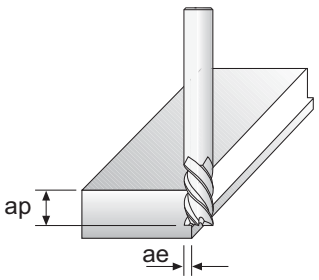
$$Q = \frac{a\,e \times a\,p \times V\,f}{1000} \text{ cm3/min.}$$

Cutting speed

Richtwerte - Paramétres - Режимы обработки - Řezná rychlost

CODE: 5010 - 5020 - 5030 ROUGHING HIGH SPEED CUTTING

MATERIAL	Construction Steel - КОНСТРУКЦИОННАЯ СТАЛЬ							
HARDNESS	< 500 N/mm2				< 850 N/mm2			
Ø	Vc	Fz	ae	ap	Vc	Fz	ae	ap
3	100	0.032	0.1 x d	1.5 x d	90	0.032	0.1 x d	1.5 x d
	190	0.032	0.1 x d	1.5 x d	170	0.032	0.1 x d	1.5 x d
4	100	0.032	0.1 x d	1.5 x d	90	0.032	0.1 x d	1.5 x d
	190	0.032	0.1 x d	1.5 x d	170	0.032	0.1 x d	1.5 x d
5	100	0.054	0.1 x d	1.5 x d	90	0.054	0.1 x d	1.5 x d
	190	0.054	0.1 x d	1.5 x d	170	0.054	0.1 x d	1.5 x d
6	100	0.054	0.1 x d	1.5 x d	90	0.054	0.1 x d	1.5 x d
	190	0.054	0.1 x d	1.5 x d	170	0.054	0.1 x d	1.5 x d
8	100	0.063	0.1 x d	1.5 x d	90	0.063	0.1 x d	1.5 x d
	190	0.063	0.1 x d	1.5 x d	170	0.063	0.1 x d	1.5 x d
10	100	0.072	0.1 x d	1.5 x d	90	0.072	0.1 x d	1.5 x d
	190	0.072	0.1 x d	1.5 x d	170	0.072	0.1 x d	1.5 x d
12	100	0.080	0.1 x d	1.5 x d	90	0.080	0.1 x d	1.5 x d
	190	0.080	0.1 x d	1.5 x d	170	0.080	0.1 x d	1.5 x d



CODE: 5010 - 5020 - 5030

MATERIAL	Tooling Steel - ИНСТРУМЕНТАЛЬНАЯ СТАЛЬ				Steel - СТАЛЬ			
HARDNESS	1100-1400 N/mm2				HRC 48-45			
Ø	Vc	Fz	ae	ap	Vc	Fz	ae	ap
3	45	0.020	0.1 x d	1.5 x d	25	0.020	0.1 x d	1.5 x d
	85	0.020	0.1 x d	1.5 x d	65	0.020	0.1 x d	1.5 x d
4	45	0.020	0.1 x d	1.5 x d	25	0.020	0.1 x d	1.5 x d
	85	0.020	0.1 x d	1.5 x d	65	0.020	0.1 x d	1.5 x d
5	45	0.030	0.1 x d	1.5 x d	25	0.030	0.1 x d	1.5 x d
	85	0.030	0.1 x d	1.5 x d	65	0.030	0.1 x d	1.5 x d
6	45	0.030	0.1 x d	1.5 x d	25	0.030	0.1 x d	1.5 x d
	85	0.030	0.1 x d	1.5 x d	65	0.030	0.1 x d	1.5 x d
8	45	0.040	0.1 x d	1.5 x d	25	0.040	0.1 x d	1.5 x d
	85	0.040	0.1 x d	1.5 x d	65	0.040	0.1 x d	1.5 x d
10	45	0.050	0.1 x d	1.5 x d	25	0.050	0.1 x d	1.5 x d
	85	0.050	0.1 x d	1.5 x d	65	0.050	0.1 x d	1.5 x d
12	45	0.060	0.1 x d	1.5 x d	25	0.060	0.1 x d	1.5 x d
	85	0.060	0.1 x d	1.5 x d	65	0.060	0.1 x d	1.5 x d

MATERIAL	Steel - СТАЛЬ								Graphite/Carbon Fibre/Glass Fibre			
HARDNESS	HRC 55-60				HRC 60-70							
Ø	Vc	Fz	ae	ap	Vc	Fz	ae	ap	Vc	Fz	ae	ap
3	50	0.016	0.1 x d	1.5 x d	30	0.012	0.1 x d	1.5 x d	90	0.020	0.1 x d	1.5 x d
									150	0.020	0.1 x d	1.5 x d
4	50	0.016	0.1 x d	1.5 x d	30	0.012	0.1 x d	1.5 x d	90	0.020	0.1 x d	1.5 x d
									150	0.020	0.1 x d	1.5 x d
5	50	0.023	0.1 x d	1.5 x d	30	0.018	0.1 x d	1.5 x d	90	0.027	0.1 x d	1.5 x d
									150	0.027	0.1 x d	1.5 x d
6	50	0.023	0.1 x d	1.5 x d	30	0.018	0.1 x d	1.5 x d	90	0.027	0.1 x d	1.5 x d
									150	0.027	0.1 x d	1.5 x d
8	50	0.030	0.1 x d	1.5 x d	30	0.025	0.1 x d	1.5 x d	90	0.054	0.1 x d	1.5 x d
									150	0.054	0.1 x d	1.5 x d
10	50	0.038	0.1 x d	1.5 x d	30	0.030	0.1 x d	1.5 x d	90	0.072	0.1 x d	1.5 x d
									150	0.072	0.1 x d	1.5 x d
12	50	0.045	0.1 x d	1.5 x d	30	0.038	0.1 x d	1.5 x d	90	0.089	0.1 x d	1.5 x d
									150	0.089	0.1 x d	1.5 x d

Cutting speed

Richtwerte - Paramétres - Режимы обработки - Řezná rychlost

CODE: 200G - 200GD - 200GRD - 300GD - 300GRD - 200GRL ROUGHING

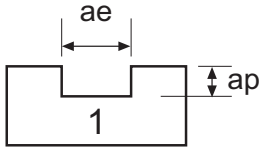
Ø	FZ mm/tooth		N = RPM											
			8000		15000		24000		30000		36000		45000	
	1	2	1	2	1	2	1	2	1	2	1	2	1	2
0.4	0.004	0.005	-	-	-	-	-	-	240	300	288	360	360	450
0.5	0.005	0.007	-	-	-	-	240	316	300	420	360	504	450	630
0.6	0.006	0.008	-	-	-	-	288	384	360	480	432	576	540	720
0.8	0.008	0.010	-	-	240	300	384	480	480	600	576	720	720	900
1.0	0.010	0.012	-	-	300	360	480	576	600	720	720	864	900	1.080
1.2	0.012	0.015	-	-	360	450	576	720	720	900	864	1.080	1.080	1.350
1.5	0.014	0.018	224	288	420	540	672	864	840	1.080	1.080	1.296	1.260	1.620
2.0	0.016	0.020	256	320	480	600	768	960	960	1.200	1.152	1.440	1.440	1.800
3.0	0.024	0.025	384	400	720	750	1.152	1.200	1.440	1.500	1.728	1.800	2.160	2.250
4.0	0.032	0.040	512	640	960	960	1.536	1.920	1.920	2.400	2.300	2.880	2.880	3.600
5.0	0.040	0.050	640	800	1.200	1.500	1.920	2.400	2.400	3.000	2.880	3.600	3.600	4.500
6.0	0.048	0.065	768	1.040	1.440	1.950	2.304	3.120	2.880	3.900	2.456	4.680	4.320	5.850
8.0	0.064	0.080	1.024	1.280	1.920	2.400	3.072	3.840	3.840	4.800	4.608	5.760	5.760	7.200
10.0	0.080	0.100	1.280	1.600	2.400	3.000	3.840	4.800	4.800	6.000	5.760	7.200	7.200	-
12.0	0.100	0.120	1.600	1.920	3.000	3.600	4.800	5.760	6.000	7.200	7.200	-	-	-

CODE: 200G - 200GD - 200GRD - 300GD - 300GRD - 200GRL FINISHING

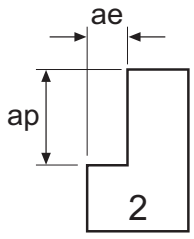
Ø	FZ mm/tooth	N = RPM					
		8000	15000	24000	30000	36000	45000
		VF	VF	VF	VF	VF	VF
0.4	0.006	-	-	-	360	432	540
0.5	0.008	-	-	384	480	576	720
0.6	0.010	-	-	480	600	720	900
0.8	0.012	-	360	576	720	864	1.080
1.0	0.015	-	450	720	900	1.080	1.350
1.2	0.018	-	540	864	1.080	1.296	1.620
1.5	0.020	320	600	960	1.200	1.440	1.800
2.0	0.025	400	750	1.200	1.500	1.800	2.250
3.0	0.035	560	1.050	1.680	2.100	2.520	3.150
4.0	0.050	800	1.500	2.400	3.000	3.600	4.500
5.0	0.060	960	1.800	2.880	3.600	4.320	5.400
6.0	0.070	1.120	2.100	3.360	4.200	5.040	6.300
8.0	0.085	1.360	2.550	4.080	5.100	6.120	7.650
10.0	0.110	1.760	3.300	5.280	6.600	-	-
12.0	0.130	2.080	3.900	6.240	7.800	-	-

CODE: 204GD - 204GRD

MATERIAL	Graphyte - ГРАФИТ		
HARDNESS			
Ø	VC	FZ	ap
0.4 - 0.8	300-500	0.01-0.03	0.01-0.30
1 - 2	300-500	0.02-0.08	0.10-0.50
3 - 4	300-500	0.04-0.10	0.15-1.00
5 - 6	300-500	0.06-0.15	0.20-1.50



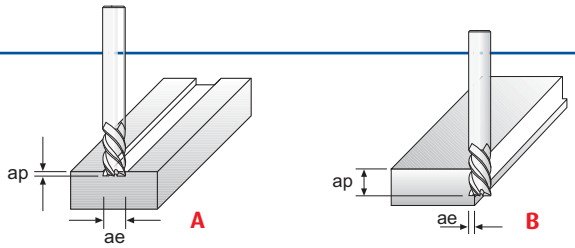
ae = 1 x d
ap = d x 0,5



ap = 0,5 x d
ap = 0,5 x d

Cutting speed

Richtwerte - Paramétres
Режимы обработки - Řezná rychlost



CODE: 5040 - Y5040 - 5040R (A)

MATERIAL	ROUGHING																					
	Fine Grain Graphite					Mean Grain Graphite					Coarse Grain Graphite					Carbon Fibre					
Hardned	Vc	n	Vf	ae	ap	Vc	n	Vf	ae	ap	Vc	n	Vf	ae	ap	Vc	Fz	n	Vf	ae	ap
Ø	m/min	min/'	mm/min	mm	mm	m/min	min/'	mm/min	mm	mm	m/min	min/'	mm/min	mm	mm	m/min	mm	min/'	mm/min	mm	mm
3	520	55202	3900-6500	3	10	780	24841	3900-6500	3	10	1040	33121	3900-6500	3	10	150	0.010	15924	955	3	1.5
4	520	41401	4550-7150	4	10	780	24841	4550-7150	4	10	1040	33121	4550-7150	4	10	150	0.015	11943	1075	4	2.5
5	520	33121	4875-8125	5	10	780	24841	4875-8125	5	10	1040	33121	4875-8125	5	10	150	0.020	9554	1146	5	3.1
6	520	27601	5200-9100	6	20	780	12420	5200-9100	6	20	1040	16561	5200-9100	6	20	150	0.020	7962	955	6	3.7
8	520	20701	5850-10400	8	20	780	12420	5850-10400	8	20	1040	16561	5850-10400	8	20	150	0.025	5971	1200	8	5
10	520	16561	6500-11050	10	25	780	9936	6500-11050	10	25	1040	13248	6500-11050	10	25	150	0.040	4777	1529	10	6.2
12	520	13800	7800-11700	12	30	780	8280	7800-11700	12	30	1040	11040	7800-11700	12	30	150	0.050	3981	1990	12	7.5

CODE: 6010D - 6010RD (A)

MATERIAL	ROUGHING														
	Fine Grain Graphite					Mean Grain Graphite					Coarse Grain Graphite				
Hardned	Vc	n	Vf	ae	ap	Vc	n	Vf	ae	ap	Vc	n	Vf	ae	ap
Ø	m/min	min/'	mm/min	mm	mm	m/min	min/'	mm/min	mm	mm	m/min	min/'	mm/min	mm	mm
3	400	42463	3000-5000	3	10	600	19108	3000-5000	3	10	800	25478	3000-5000	3	10
4	400	31847	3500-5500	4	10	600	19108	3500-5500	4	10	800	25478	3500-5500	4	10
5	400	25478	3750-6250	5	10	600	19108	3750-6250	5	10	800	25478	3750-6250	5	10
6	400	21231	4000-7000	6	20	600	9554	4000-7000	6	20	800	12739	4000-7000	6	20
8	400	15924	4500-8000	8	20	600	9554	4500-8000	8	20	800	12739	4500-8000	8	20
10	400	12739	5000-8500	10	25	600	7643	5000-8500	10	25	800	10191	5000-8500	10	25
12	400	10616	6000-9000	12	30	600	6369	6000-9000	12	30	800	8493	6000-9000	12	30

CODE: Y507 (B)

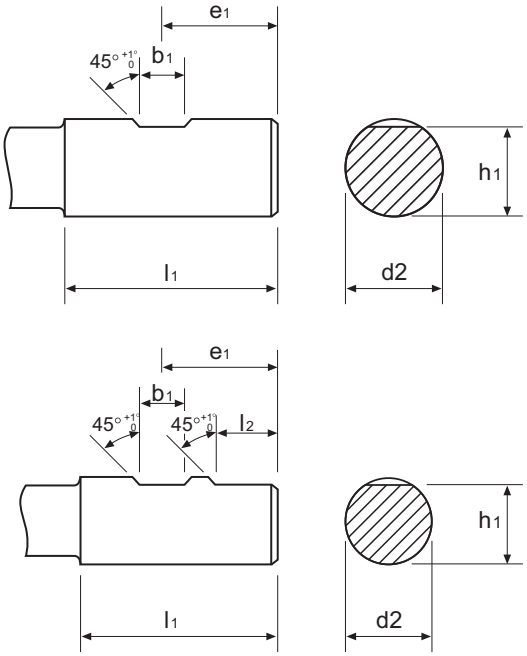
MATERIAL	SIDE MILLING																					
	Stainless Steel Cr-Ni НЕРЖАВЕЮЩАЯ СТАЛЬ						Stainless Steel Cr-Ni-Mo НЕРЖАВЕЮЩАЯ СТАЛЬ						Super Alloy СУПЕР СПЛАВ						Inconel 718 ИНКОНЕЛЬ					
Hardned	Vc	FZ	n	Vf	ae	ap	Vc	Fz	n	Vf	ae	ap	Vc	Fz	n	Vf	ae	ap	Vc	Fz	n	Vf	ae	ap
Ø	m/min	mm	min/'	mm/min	mm	mm	m/min	mm	min/'	mm/min	mm	mm	m/min	mm	min/'	mm/min	mm	mm	m/min	mm	min/'	mm/min	mm	mm
3	80	0.010	8493	340	1.2	3	40	0.010	4246	170	2.40	3	25	0.010	2654	106	2.4	9	15	0.010	1592	64	2.4	3
4	80	0.015	6369	382	1.6	4	40	0.015	3185	191	2.40	4	25	0.015	1990	119	3.2	12	15	0.015	1194	72	2.4	4
6	80	0.020	4246	510	2.4	6	40	0.020	2123	255	2.40	6	25	0.020	1327	159	2.4	12	15	0.020	796	96	2.4	6
8	80	0.030	3185	573	3.2	8	40	0.030	1592	287	3.20	8	25	0.030	995	179	3.2	12	15	0.030	597	107	3.2	8
10	80	0.035	2548	713	4.0	10	40	0.035	1274	357	4.00	10	25	0.035	796	223	4.0	15	15	0.035	478	134	4.0	10
12	80	0.040	2123	679	4.8	12	40	0.040	1062	340	4.80	12	25	0.040	663	212	4.8	18	15	0.040	398	127	4.8	12
16	80	0.065	1592	828	3.2	16	40	0.065	796	518	6.40	16	25	0.065	498	323	6.4	24	15	0.065	299	194	6.4	16
20	80	0.070	1274	713	3.2	20	40	0.070	637	446	6.40	20	25	0.070	398	279	6.4	24	15	0.070	239	167	6.4	20
25	80	0.080	1019	652	3.2	25	40	0.080	510	408	6.40	25	25	0.080	318	255	6.4	24	15	0.080	191	153	6.4	25

Dimensioni gambi weldon DIN 6535 HB a richiesta

Weldon shank dimentions DIN 6535 HB on request

Dimension Weldon DIN 6535 HB auf Anfrage - Dimensions queue weldon DIN 6535 HB sur demande
Хвостовик типа Weldon DIN 6535 HB

d2 mm	b1 mm	e1 mm	h1 mm	l1 mm	l2 mm
6	4.2	18.0	5.1	36	-
8	5.5	18.0	6.9	36	-
10	7.0	20.0	8.5	40	-
12	8.0	22.5	10.4	45	-
14	8.0	22.5	12.7	45	-
16	10.0	24.0	14.2	48	-
18	10.0	24.0	16.2	48	-
20	11.0	25.0	18.2	50	-
25	12.0	32.0	23.0	56	17
32	14.0	36.0	30.0	60	19



Dimensioni gambi flat DIN 6535 HE a richiesta

Whistle notch shank dimentions DIN 6535 HE on request

Dimension spannflache DIN 6535 HE auf anfrage - Dimensions queue flat DIN 6535 HE sur demande
ХвостовиктипаHEWeldon DIN 6535

d2 mm	b1 mm	b2 mm	h2 mm	h1 mm	l1 mm	l3 mm	l2 mm	r mm
6	3.5	4.8	5.4	4.8	36	25	18	1.2
8	4.7	6.1	7.2	6.6	36	25	18	1.2
10	5.7	7.3	9.1	8.4	40	28	20	1.2
12	6.0	8.2	11.2	10.4	45	33	22.5	1.2
16	7.6	10.1	15.0	14.2	48	36	24	1.6
20	8.4	11.5	19.1	18.2	50	38	25	1.6
25	9.3	13.6	24.1	23.0	56	44	32	1.6
32	9.4	15.5	31.2	30.0	60	48	35	1.6