


Nuova
C.U.M.E.T.
s.r.l.



Power 2

 **Fresa per rame testa piana in metallo duro integrale**

 Solid carbide flat nose end mill for copper

 VHM-Schatfraser für Kupfer

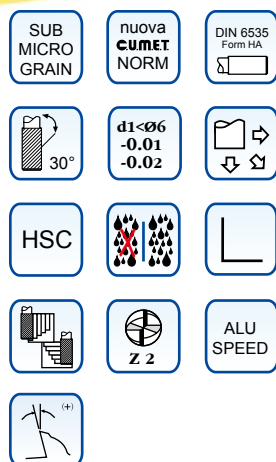
 Fraise carbure pour cuivre à bout plat

 Фреза концевая твердосплавная для меди

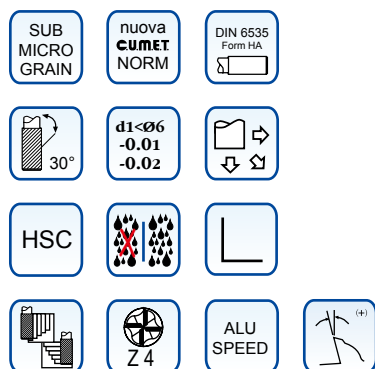
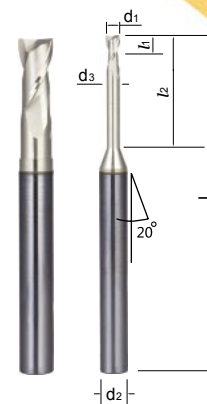
 铜电极加工 - 硬质合金平底铣刀



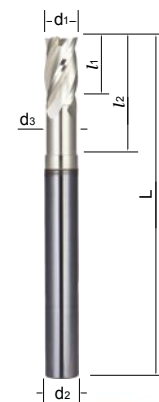
AL Alloy Copper



CODE	d1 mm	d2h6 mm	L1 mm	L2 mm	L mm	d3 mm	Z no.
Y800.004.02540S4	0.4	4	0.5	2.5	40	0.35	2
Y800.004.02550S4	0.4	4	0.5	2.5	50	0.35	2
Y800.005.0340S4	0.5	4	0.6	3	40	0.45	2
Y800.005.0640S4	0.5	4	0.6	6	40	0.45	2
Y800.005.0350S4	0.5	4	0.6	3	50	0.45	2
Y800.005.0650S4	0.5	4	0.6	6	50	0.45	2
Y800.006.0340S4	0.6	4	0.7	3	40	0.55	2
Y800.006.0640S4	0.6	4	0.7	6	40	0.55	2
Y800.006.0350S4	0.6	4	0.7	3	50	0.55	2
Y800.006.0650S4	0.6	4	0.7	6	50	0.55	2
Y800.008.0440S4	0.8	4	1	4	40	0.75	2
Y800.008.0740S4	0.8	4	1	7	40	0.75	2
Y800.008.0450S4	0.8	4	1	4	50	0.75	2
Y800.008.0750S4	0.8	4	1	7	50	0.75	2
Y800.010.0440S4	1	4	2	4	40	0.95	2
Y800.010.0840S4	1	4	2	8	40	0.95	2
Y800.010.1240S4	1	4	2	12	40	0.95	2
Y800.010.0450S4	1	4	2	4	50	0.95	2
Y800.010.0850S4	1	4	2	8	50	0.95	2
Y800.010.1250S4	1	4	2	12	50	0.95	2
Y800.015.0540S4	1.5	4	2.5	5	40	1.45	2
Y800.015.1040S4	1.5	4	2.5	10	40	1.45	2
Y800.015.0550S4	1.5	4	2.5	5	50	1.45	2
Y800.015.1050S4	1.5	4	2.5	10	50	1.45	2
Y800.015.1550S4	1.5	4	2.5	15	50	1.45	2
Y800.020.0650S4	2	4	3	6	50	1.95	2
Y800.020.1250S4	2	4	3	12	50	1.95	2
Y800.020.1650S4	2	4	3	16	50	1.95	2
Y800.030.1250S4	3	4	5	12	50	2.90	2
Y800.030.1860S4	3	4	5	18	60	2.90	2
Y800.040.1660S6	4	6	8	16	60	3.8	2
Y800.050.1760S6	5	6	10	17	60	4.5	2
Y800.06.21.60	6	6	12	21	60	5.5	2



CODE	d1h8 mm	d2h6 mm	L1 mm	L2 mm	L mm	d3 mm	Z no.
Y804.040.1660S6	4	6	8	16	60	3.8	4
Y804.050.1760S6	5	6	10	17	60	4.5	4
Y804.06.21.60	6	6	12	21	60	5.5	4
Y804.08.25.63	8	8	16	25	63	7.8	4
Y804.08.25.75	8	8	16	25	75	7.8	4
Y804.10.30.72	10	10	20	30	72	9.5	4
Y804.10.30.100	10	10	20	30	100	9.5	4
Y804.12.38.83	12	12	22	38	83	11.5	4
Y804.12.38.100	12	12	22	38	100	11.5	4
Y804.16.40.100	16	16	26	40	100	15.5	4





Fresa per rame testa torica in metallo duro integrale

Solid carbide corner radius end mill for copper

VHM-torusfraser für Kupfer

Fraise carbure pour cuivre avec rayon d'angle

Фреза концевая твердосплавная с угловым радиусом для меди

铜电极加工 - 硬质合金圆弧角铣刀



AL Alloy Copper

SUB MICRO GRAIN
nuova CUMET NORM
DIN 6535 Form HA

$d_1 < \phi 6$
-0.01
-0.02

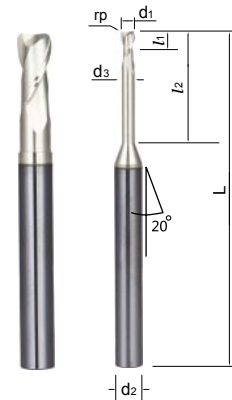
HSC

ALU SPEED

$< \phi 1$
rp
 ± 0.005

$< \phi 16$
rp
 ± 0.01

CODE	d1h8 mm	d2h6 mm	rp mm	L1 mm	L2 mm	L mm	d3 mm	Z no.
Y800M010.0440R01	1	4	0.1	1.2	4	40	0.95	2
Y800M010.0840R01	1	4	0.1	1.2	8	40	0.95	2
Y800M010.1240R01	1	4	0.1	1.2	12	40	0.95	2
Y800M010.0450R01	1	4	0.1	1.2	4	50	0.95	2
Y800M010.0850R01	1	4	0.1	1.2	8	50	0.95	2
Y800M010.1250R01	1	4	0.1	1.2	12	50	0.95	2
Y800M015.0540R01	1.5	4	0.1	1.8	5	40	1.45	2
Y800M015.1040R01	1.5	4	0.1	1.8	10	40	1.45	2
Y800M015.0550R01	1.5	4	0.1	1.8	5	50	1.45	2
Y800M015.1050R01	1.5	4	0.1	1.8	10	50	1.45	2
Y800M015.1550R01	1.5	4	0.1	1.8	15	50	1.45	2
Y800M020.0650R01	2	4	0.1	2.2	6	50	1.95	2
Y800M020.1250R01	2	4	0.1	2.2	12	50	1.95	2
Y800M020.1650R01	2	4	0.1	2.2	16	50	1.95	2
Y800M030.1250R02	3	4	0.2	7	12	50	2.90	2
Y800M030.1860R02	3	4	0.2	7	18	60	2.90	2
Y800M030.2560R02	3	4	0.2	7	25	60	2.90	2
Y800M040.1660R05	4	6	0.5	8	16	60	3.80	2
Y800M040.2060R05	4	6	0.5	8	20	60	3.80	2
Y800M050.1760R05	5	6	0.5	10	17	60	4.50	2
Y800M06.21.60R1	6	6	1	12	21	60	5.50	2
Y800M08.25.63R1	8	8	1	16	25	63	7.80	2
Y800M10.30.72R1	10	10	1	20	30	72	9.50	2
Y800M12.38.83R15	12	12	1.5	23	38	83	11.5	2
Y800M16.40100R15	16	16	1.5	26	40	100	15.5	2



SUB MICRO GRAIN
nuova CUMET NORM
DIN 6535 Form HA

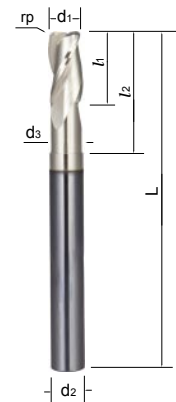
$d_1 < \phi 6$
-0.01
-0.02

HSC

ALU SPEED

rp
 ± 0.01

CODE	d1h8 mm	d2h6 mm	rp mm	L1 mm	L2 mm	L mm	d3 mm	Z no.
Y803M040.2060R05	4	6	0.5	8	20	60	3.80	3
Y803M050.1760R05	5	6	0.5	10	17	60	4.50	3
Y803M06.21.60R1	6	6	1	12	21	60	5.50	3
Y803M08.25.63R1	8	8	1	16	25	63	7.80	3
Y803M10.30.72R1	10	10	1	20	30	72	9.50	3
Y803M12.38.83R15	12	12	1.5	23	38	83	11.5	3
Y803M16.40100R15	16	16	1.5	26	40	100	15.5	3



 **Fresa per rame testa sferica 3D in metallo duro integrale**

 Solid carbide 3D ball nose end mill for copper

 VHM-3D Radiusfräser für Kupfer

 Fraise carbure 3D pour cuivre à bout hémisphérique

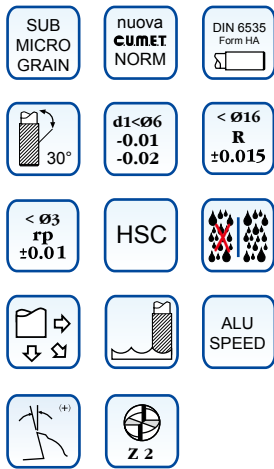
 Фреза концевая твердосплавная радиусная 3D для меди

 铜电极加工 - 硬质合金平球头铣刀

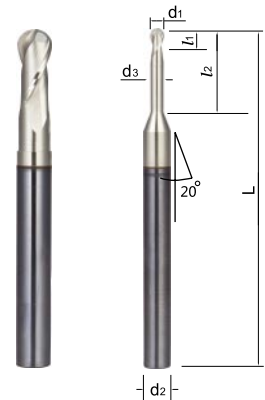


AL
Alloy

Copper



CODE	d1h8 mm	d2h6 mm	L1 mm	L2 mm	L mm	d3 mm	Z no.
Y800R003.0240S4	0.3	4	0.4	2	40	0.25	2
Y800R003.0440S4	0.3	4	0.4	4	40	0.25	2
Y800R003.0250S4	0.3	4	0.4	2	50	0.25	2
Y800R003.0450S4	0.3	4	0.4	4	50	0.25	2
Y800R004.01540S4	0.4	4	0.4	1.5	40	0.35	2
Y800R004.01550S4	0.4	4	0.4	1.5	50	0.35	2
Y800R005.0240S4	0.5	4	0.6	2	40	0.45	2
Y800R005.0540S4	0.5	4	0.6	5	40	0.45	2
Y800R005.0250S4	0.5	4	0.6	2	50	0.45	2
Y800R005.0550S4	0.5	4	0.6	5	50	0.45	2
Y800R006.0240S4	0.6	4	0.7	2	40	0.55	2
Y800R006.0540S4	0.6	4	0.7	5	40	0.55	2
Y800R006.0250S4	0.6	4	0.7	2	50	0.55	2
Y800R006.0550S4	0.6	4	0.7	5	50	0.55	2
Y800R008.0440S4	0.8	4	0.8	4	40	0.75	2
Y800R008.0840S4	0.8	4	0.8	8	40	0.75	2
Y800R008.0450S4	0.8	4	0.8	4	50	0.75	2
Y800R008.0850S4	0.8	4	0.8	8	50	0.75	2
Y800R010.0440S4	1	4	1.2	4	40	0.95	2
Y800R010.0840S4	1	4	1.2	8	40	0.95	2
Y800R010.1240S4	1	4	1.2	12	40	0.95	2
Y800R010.0450S4	1	4	1.2	4	50	0.95	2
Y800R010.0850S4	1	4	1.2	8	50	0.95	2
Y800R010.1250S4	1	4	1.2	12	50	0.95	2
Y800R015.0540S4	1.5	4	1.8	5	40	1.45	2
Y800R015.1040S4	1.5	4	1.8	10	40	1.45	2
Y800R015.0550S4	1.5	4	1.8	5	50	1.45	2
Y800R015.1050S4	1.5	4	1.8	10	50	1.45	2
Y800R015.1550S4	1.5	4	1.8	15	50	1.45	2
Y800R020.0650S4	2	4	4	6	50	1.95	2
Y800R020.1250S4	2	4	4	12	50	1.95	2
Y800R020.1650S4	2	4	4	16	50	1.95	2
Y800R030.1250S4	3	4	6	12	50	2.9	2
Y800R030.1860S4	3	4	6	18	60	2.9	2
Y800R040.1660S6	4	6	8	16	60	3.8	2
Y800R050.1760S6	5	6	10	17	60	4.5	2
Y800R06.21.60	6	6	12	21	60	5.5	2
Y800R08.25.63	8	8	16	25	63	7.5	2
Y800R10.30.72	10	10	20	30	72	9.5	2
Y800R12.38.83	12	12	24	38	83	11.5	2
Y800R16.40.100	16	16	26	40	100	15.5	2





Microfresa testa piana in metallo duro integrale gambo Ø 4-6mm

Solid carbide mini flat nose end mill shank Ø 4-6mm

VHM – Mini gesenkfraser, shaft Ø 4-6mm

Microfraise carbure à bout plat queue Ø 4-6mm

Микро фреза концевая твердосплавная с плоским торцом, хвостовик Ø 4-6mm

迷你型整体硬质合金平底铣刀，柄径Ø4-6mm



- HRC < 70
- STEEL
- CAST IRON
- INOX
- NI-Alloy

SUB MICRO GRAIN

nuova CUMET NORM



d1
-0.01
-0.02

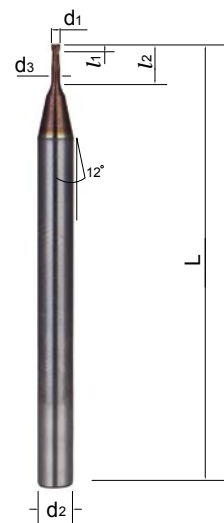
HSC HHC



GOLD




CODE	*d1 mm	d2h6 mm	L1 mm	L2 mm	L mm	d3 mm	Z no.
205PM001.002S4	0.1	4	0.2	-	50	-	2
205PM001.01S4	0.1	4	0.15	1	50	0.07	2
205PM001.02S4	0.1	4	0.15	2	50	0.07	2
205PM0015.002S4	0.15	4	0.2	-	50	-	2
205PM002.004S4	0.2	4	0.4	-	50	-	2
205PM002.01S4	0.2	4	0.3	1	50	0.15	2
205PM002.02S4	0.2	4	0.3	2	50	0.15	2
205PM003.005S4	0.3	4	0.5	-	50	-	2
205PM003.01S4	0.3	4	0.4	1	50	0.25	2
205PM003.02S4	0.3	4	0.4	2	50	0.25	2
205PM003.03S4	0.3	4	0.4	3	50	0.25	2
205PM004.008S4	0.4	4	0.8	-	50	-	2
205PM004.01S4	0.4	4	0.6	1	50	0.35	2
205PM004.02S4	0.4	4	0.6	2	50	0.35	2
205PM004.03S4	0.4	4	0.6	3	50	0.35	2
205PM004.04S4	0.4	4	0.6	4	50	0.35	2
205PM004.05S4	0.4	4	0.6	5	50	0.35	2
205PM005.01S4	0.5	4	1.0	-	50	-	2
205PM005.02S4	0.5	4	0.8	2	50	0.45	2
205PM005.03S4	0.5	4	0.8	3	50	0.45	2
205PM005.04S4	0.5	4	0.8	4	50	0.45	2
205PM005.05S4	0.5	4	0.8	5	50	0.45	2
205PM005.06S4	0.5	4	0.8	6	50	0.45	2
205PM005.08S4	0.5	4	0.8	8	50	0.45	2
205PM005.10S4	0.5	4	0.8	10	50	0.45	2
205PM006.012S4	0.6	4	1.2	-	50	-	2
205PM006.02S4	0.6	4	0.9	2	50	0.55	2
205PM006.03S4	0.6	4	0.9	3	50	0.55	2
205PM006.04S4	0.6	4	0.9	4	50	0.55	2
205PM006.05S4	0.6	4	0.9	5	50	0.55	2
205PM006.06S4	0.6	4	0.9	6	50	0.55	2
205PM006.08S4	0.6	4	0.9	8	50	0.55	2
205PM006.10S4	0.6	4	0.9	10	50	0.55	2
205PM008.02S4	0.8	4	1.2	2	50	0.75	2
205PM008.04S4	0.8	4	1.2	4	50	0.75	2
205PM008.06S4	0.8	4	1.2	6	50	0.75	2
205PM008.08S4	0.8	4	1.2	8	50	0.75	2
205PM008.10S4	0.8	4	1.2	10	50	0.75	2




 **Microfresa testa piana in metallo duro integrale gambo Ø 4-6mm**

 Solid carbide mini flat nose end mill shank Ø 4-6mm

 VHM – Mini gesenkfraser, shaft Ø 4-6mm

 Microfraise carbure à bout plat queue Ø 4-6mm

 Микро фреза концевая твердосплавная с плоским торцом, хвостовик Ø 4-6mm

 迷你型整体硬质合金平底铣刀，柄径Ø4-6mm

Nuova
C.U.M.E.T.
s.r.l.

HRC
< 70

STEEL

CAST
IRON

INOX

NI-Alloy

SUB
MICRO
GRAIN

nuova
CUMET
NORM



DIN 6535
Form HA

d1
-0.01
-0.02

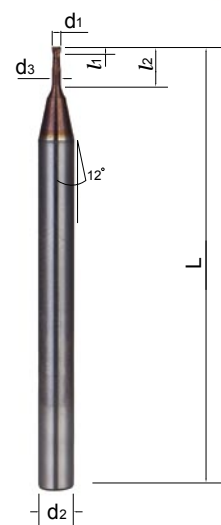
HSC
HHC



GOLD



CODE	*d1 mm	d2h6 mm	L1 mm	L2 mm	L mm	d3 mm	Z no.
205PM010.02S4	1.0	4	1.5	2	50	0.95	2
205PM010.02S6	1.0	6	1.5	2.5	50	0.95	2
205PM010.03S4	1.0	4	1.5	3	50	0.95	2
205PM010.04S4	1.0	4	1.5	4	50	0.95	2
205PM010.05S4	1.0	4	1.5	5	50	0.95	2
205PM010.06S4	1.0	4	1.5	6	50	0.95	2
205PM010.08S4	1.0	4	1.5	8	50	0.95	2
205PM010.10S4	1.0	4	1.5	10	50	0.95	2
205PM010.12S4	1.0	4	1.5	12	50	0.95	2
205PM010.14S4	1.0	4	1.5	14	50	0.95	2
205PM010.16S4	1.0	4	1.5	16	60	0.95	2
205PM010.18S4	1.0	4	1.5	18	60	0.95	2
205PM010.20S4	1.0	4	1.5	20	60	0.95	2
205PM012.004S4	1.2	4	4	-	50	-	2
205PM012.03S4	1.2	4	1.8	3	50	1.15	2
205PM012.04S4	1.2	4	1.8	4	50	1.15	2
205PM012.06S4	1.2	4	1.8	6	50	1.15	2
205PM012.08S4	1.2	4	1.8	8	50	1.15	2
205PM012.10S4	1.2	4	1.8	10	50	1.15	2
205PM012.12S4	1.2	4	1.8	12	50	1.15	2
205PM012.16S4	1.2	4	1.8	16	60	1.15	2
205PM013.04S4	1.3	4	4	-	50	-	2
205PM015.004S4	1.5	4	4	-	50	-	2
205PM015.04S6	1.5	6	4	-	50	1.45	2
205PM015.04S4	1.5	4	2.2	4	50	1.45	2
205PM015.05S4	1.5	4	2.2	5	50	1.45	2
205PM015.06S4	1.5	4	2.2	6	50	1.45	2
205PM015.08S4	1.5	4	2.2	8	50	1.45	2
205PM015.10S4	1.5	4	2.2	10	50	1.45	2
205PM015.12S4	1.5	4	2.2	12	50	1.45	2
205PM015.14S4	1.5	4	2.2	14	50	1.45	2
205PM015.16S4	1.5	4	2.2	16	60	1.45	2
205PM015.18S4	1.5	4	2.2	18	60	1.45	2
205PM015.20S4	1.5	4	2.2	20	60	1.45	2
205PM018.05S4	1.8	4	5.0	-	50	-	2



Help 28

Help 29



Microfresa testa piana in metallo duro integrale gambo Ø 4-6mm

Solid carbide mini flat nose end mill shank Ø 4-6mm

VHM – Mini gesenkfraser, shaft Ø 4-6mm

Microfraise carbure à bout plat queue Ø 4-6mm

Микро фреза концевая твердосплавная с плоским торцом, хвостовик Ø 4-6mm

迷你型整体硬质合金平底铣刀，柄径Ø4-6mm



- HRC < 70
- STEEL
- CAST IRON
- INOX
- NI-Alloy

SUB MICRO GRAIN

nuova CUMET NORM



DIN 6535 Form HA

d1 -0.01 -0.02

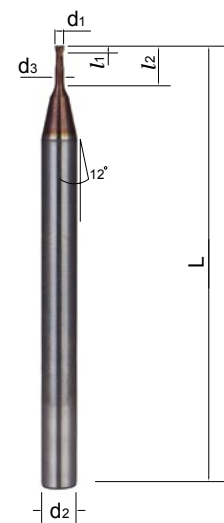
HSC HHC



GOLD



CODE	*d1 mm	d2h6 mm	L1 mm	L2 mm	L mm	d3 mm	Z no.
205PM020.006S4	2.0	4	6.0	-	50	-	2
205PM020.04S4	2.0	4	3.0	4	50	1.95	2
205PM020.06S4	2.0	4	3.0	6	50	1.95	2
205PM020.08S4	2.0	4	3.0	8	50	1.95	2
205PM020.10S4	2.0	4	3.0	10	50	1.95	2
205PM020.12S4	2.0	4	3.0	12	50	1.95	2
205PM020.14S4	2.0	4	3.0	14	50	1.95	2
205PM020.16S4	2.0	4	3.0	16	60	1.95	2
205PM020.18S4	2.0	4	3.0	18	60	1.95	2
205PM020.20S4	2.0	4	3.0	20	60	1.95	2
205PM020.22S4	2.0	4	3.0	22	60	1.95	2
205PM020.25S4	2.0	4	3.0	25	70	1.95	2
205PM020.30S4	2.0	4	3.0	30	70	1.95	2
205PM025.08S4	2.5	4	8.0	-	50	-	2
205PM025.08S6	2.5	6	8.0	-	50	-	2
205PM025.10S6	2.5	6	3.5	10	50	2.45	2
205PM025.12S6	2.5	6	3.5	12	50	2.45	2
205PM025.14S6	2.5	6	3.5	14	60	2.45	2
205PM025.16S6	2.5	6	3.5	16	60	2.45	2
205PM025.20S6	2.5	6	3.5	20	60	2.45	2
205PM025.25S6	2.5	6	3.5	25	70	2.45	2
205PM030.08S4	3.0	4	8.0	-	50	-	2
205PM030.06S6	3.0	6	4.0	6	50	2.95	2
205PM030.08S6	3.0	6	4.0	8	50	2.95	2
205PM030.10S6	3.0	6	4.0	10	50	2.95	2
205PM030.12S6	3.0	6	4.0	12	50	2.95	2
205PM030.14S6	3.0	6	4.0	14	60	2.95	2
205PM030.16S6	3.0	6	4.0	16	60	2.95	2
205PM030.18S6	3.0	6	4.0	18	60	2.95	2
205PM030.20S6	3.0	6	4.0	20	60	2.95	2
205PM030.25S6	3.0	6	4.0	25	70	2.95	2
205PM030.30S6	3.0	6	4.0	30	70	2.95	2
205PM030.35S6	3.0	6	4.0	35	80	2.95	2
205PM030.40S6	3.0	6	4.0	40	80	2.95	2
205PM040.10S4	4.0	4	10.0	-	50	-	2
205PM040.08S6	4.0	6	6.0	8	50	3.85	2
205PM040.10S6	4.0	6	6.0	10	50	3.85	2
205PM040.12S6	4.0	6	6.0	12	50	3.85	2
205PM040.14S6	4.0	6	6.0	14	60	3.85	2
205PM040.16S6	4.0	6	6.0	16	60	3.85	2
205PM040.18S6	4.0	6	6.0	18	60	3.85	2
205PM040.20S6	4.0	6	6.0	20	60	3.85	2
205PM040.25S6	4.0	6	6.0	25	70	3.85	2
205PM040.30S6	4.0	6	6.0	30	70	3.85	2
205PM040.35S6	4.0	6	6.0	35	80	3.85	2
205PM040.40S6	4.0	6	6.0	40	80	3.85	2
205PM040.45S6	4.0	6	6.0	45	90	3.85	2
205PM040.50S6	4.0	6	6.0	50	90	3.85	2



 **Microfresa testa torica in metallo duro integrale gambo Ø 4-6mm**

 Solid carbide mini corner radius end mill shank Ø 4-6mm

 VHM – Mini torusfraser, shaft Ø 4-6mm

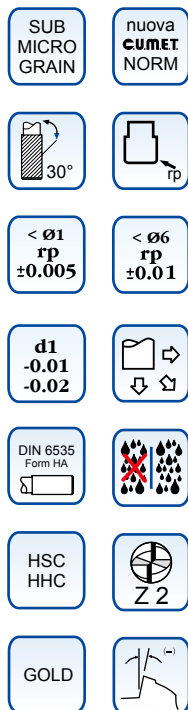
 Microfraise carbure avec rayon d'angle, queue Ø 4-6mm

 Микро фреза концевая твердосплавная с угловым радиусом, хвостовик Ø 4-6mm

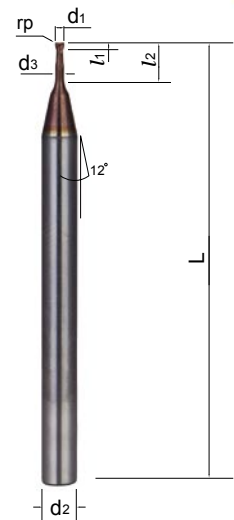
 迷你型整体硬质合金圆弧角铣刀，柄径Ø4-6mm



HRC < 70 STEEL CAST IRON INOX Ni-Alloy



CODE	*d1 mm	d2h6 mm	rp mm	L1 mm	L2 mm	L mm	d3 mm	Z no.
205M005.03R005S4	0.5	4	0.05	1.0	3	50	0.45	2
205M006.01R005S4	0.6	4	0.05	1.0	-	50	-	2
205M007.012R005S4	0.7	4	0.05	1.2	-	50	-	2
205M008.014R005S4	0.8	4	0.05	1.4	-	50	-	2
205M009.015R005S4	0.9	4	0.05	1.5	-	50	-	2
205M010.025R01S4	1.0	4	0.1	2.5	-	50	-	2
205M010.025R02S4	1.0	4	0.2	2.5	-	50	-	2
205M010.025R03S4	1.0	4	0.3	2.5	-	50	-	2
205M010.04R01S4	1.0	4	0.1	1.5	4	50	0.95	2
205M010.04R02S4	1.0	4	0.2	1.5	4	50	0.95	2
205M010.06R01S4	1.0	4	0.1	1.5	6	50	0.95	2
205M010.06R02S4	1.0	4	0.2	1.5	6	50	0.95	2
205M010.06R03S4	1.0	4	0.3	1.5	6	50	0.95	2
205M010.08R01S4	1.0	4	0.1	1.5	8	50	0.95	2
205M010.08R02S4	1.0	4	0.2	1.5	8	50	0.95	2
205M010.10R01S4	1.0	4	0.1	1.5	10	50	0.95	2
205M010.10R02S4	1.0	4	0.2	1.5	10	50	0.95	2
205M010.10R03S4	1.0	4	0.3	1.5	10	50	0.95	2
205M010.12R01S4	1.0	4	0.1	1.5	12	50	0.95	2
205M010.12R02S4	1.0	4	0.2	1.5	12	50	0.95	2
205M010.12R03S4	1.0	4	0.3	1.5	12	50	0.95	2
205M015.03R01S4	1.5	4	0.1	3.0	-	50	-	2
205M015.03R02S4	1.5	4	0.2	3.0	-	50	-	2
205M015.03R03S4	1.5	4	0.3	3.0	-	50	-	2
205M015.03R05S4	1.5	4	0.5	3.0	-	50	-	2
205M015.06R01S4	1.5	4	0.1	2.2	6	50	1.45	2
205M015.06R02S4	1.5	4	0.2	2.2	6	50	1.45	2
205M015.06S03S4	1.5	4	0.3	2.2	6	50	1.45	2
205M015.08R01S4	1.5	4	0.1	2.2	8	50	1.45	2
205M015.08R02S4	1.5	4	0.2	2.2	8	50	1.45	2
205M015.08R03S4	1.5	4	0.3	2.2	8	50	1.45	2
205M015.10R01S4	1.5	4	0.1	2.2	10	50	1.45	2
205M015.10R02S4	1.5	4	0.2	2.2	10	50	1.45	2
205M015.10R03S4	1.5	4	0.3	2.2	10	50	1.45	2
205M015.12R02S4	1.5	4	0.2	2.2	12	50	1.45	2



Help 30



Microfresa testa torica in metallo duro integrale gambo Ø 4-6mm

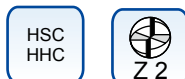
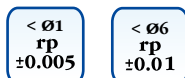
Solid carbide mini corner radius end mill shank Ø 4-6mm

VHM – Mini torusfraser, shaft Ø 4-6mm

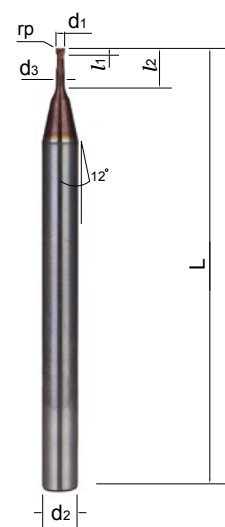
Microfraise carbure avec rayon d'angle, queue Ø 4-6mm

Микро фреза концевая твердосплавная с угловым радиусом, хвостовик Ø 4-6mm

迷你型整体硬质合金圆弧角铣刀，柄径Ø4-6mm



CODE	*d1 mm	d2h6 mm	rp mm	L1 mm	L2 mm	L mm	d3 mm	Z no.
205M020.05R01S4	2.0	4	0.1	5.0	-	50	-	2
205M020.05R02S4	2.0	4	0.2	5.0	-	50	-	2
205M020.05R03S4	2.0	4	0.3	5.0	-	50	-	2
205M020.05R05S4	2.0	4	0.5	5.0	-	50	-	2
205M020.06R01S4	2.0	4	0.1	3.0	6	50	1.95	2
205M020.06R02S4	2.0	4	0.2	3.0	6	50	1.95	2
205M020.06R03S4	2.0	4	0.3	3.0	6	50	1.95	2
205M020.06R05S4	2.0	4	0.5	3.0	6	50	1.95	2
205M020.08R01S4	2.0	4	0.1	3.0	8	50	1.95	2
205M020.08R02S4	2.0	4	0.2	3.0	8	50	1.95	2
205M020.08R03S4	2.0	4	0.3	3.0	8	50	1.95	2
205M020.08R05S4	2.0	4	0.5	3.0	8	50	1.95	2
205M020.10R01S4	2.0	4	0.1	3.0	10	50	1.95	2
205M020.10R02S4	2.0	4	0.2	3.0	10	50	1.95	2
205M020.10R03S4	2.0	4	0.3	3.0	10	50	1.95	2
205M020.10R05S4	2.0	4	0.5	3.0	10	50	1.95	2
205M020.12R01S4	2.0	4	0.1	3.0	12	50	1.95	2
205M020.12R02S4	2.0	4	0.2	3.0	12	50	1.95	2
205M020.12R03S4	2.0	4	0.3	3.0	12	50	1.95	2
205M020.12R05S4	2.0	4	0.5	3.0	12	50	1.95	2
205M020.16R05S4	2.0	4	0.5	3.0	16	60	1.95	2
205M025.06R02S6	2.5	6	0.2	6.0	-	50	-	2
205M025.06R03S6	2.5	6	0.3	6.0	-	50	-	2
205M025.06R05S6	2.5	6	0.5	6.0	-	50	-	2
205M030.08R01S6	3.0	6	0.1	8.0	-	50	-	2
205M030.08R02S6	3.0	6	0.2	8.0	-	50	-	2
205M030.08R03S6	3.0	6	0.3	8.0	-	50	-	2
205M030.08R05S6	3.0	6	0.5	8.0	-	50	-	2
205M030.08R1S6	3.0	6	1.0	8.0	-	50	-	2
205M030.10R01S6	3.0	6	0.1	4.0	10	60	2.85	2
205M030.10R02S6	3.0	6	0.2	4.0	10	60	2.85	2
205M030.10R03S6	3.0	6	0.3	4.0	10	60	2.85	2
205M030.10R05S6	3.0	6	0.5	4.0	10	60	2.85	2
205M030.12R01S6	3.0	6	0.1	4.0	12	60	2.85	2
205M030.12R02S6	3.0	6	0.2	4.0	12	60	2.85	2
205M030.12R03S6	3.0	6	0.3	4.0	12	60	2.85	2
205M030.12R05S6	3.0	6	0.5	4.0	12	60	2.85	2
205M030.16R01S6	3.0	6	0.1	4.0	16	60	2.85	2
205M030.16R02S6	3.0	6	0.2	4.0	16	60	2.85	2
205M030.16R03S6	3.0	6	0.3	4.0	16	60	2.85	2
205M030.16R05S6	3.0	6	0.5	4.0	16	60	2.85	2
205M030.20R02S6	3.0	6	0.2	4.0	20	60	2.85	2
205M030.20R03S6	3.0	6	0.3	4.0	20	60	2.85	2
205M030.20R05S6	3.0	6	0.5	4.0	20	60	2.85	2



 **Microfresa testa torica in metallo duro integrale gambo Ø 4-6mm**

 Solid carbide mini corner radius end mill shank Ø 4-6mm

 VHM – Mini torusfraser, shaft Ø 4-6mm

 Microfraise carbure avec rayon d'angle, queue Ø 4-6mm

 Микро фреза концевая твердосплавная с угловым радиусом, хвостовик Ø 4-6mm

 迷你型整体硬质合金圆弧角铣刀，柄径Ø4-6mm



HRC < 70 STEEL CAST IRON INOX NI-Alloy

SUB MICRO GRAIN nuova cumet NORM



< Ø1 rp ±0.005 < Ø6 rp ±0.01

d1 -0.01 -0.02



DIN 6535 Form HA

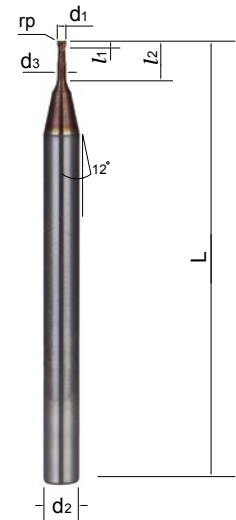


HSC HHC Z 2

GOLD



CODE	*d1 mm	d2h6 mm	rp mm	L1 mm	L2 mm	L mm	d3 mm	Z no.
205M040.08R01S6	4.0	6	0.1	8.0	-	50	-	2
205M040.08R02S6	4.0	6	0.2	8.0	-	50	-	2
205M040.08R03S6	4.0	6	0.3	8.0	-	50	-	2
205M040.08R05S6	4.0	6	0.5	8.0	-	50	-	2
205M040.08R1S6	4.0	6	1.0	8.0	-	50	-	2
205M040.10R01S6	4.0	6	0.1	6.0	10	50	3.85	2
205M040.12R01S6	4.0	6	0.1	6.0	12	50	3.85	2
205M040.12R02S6	4.0	6	0.2	6.0	12	50	3.85	2
205M040.12R03S6	4.0	6	0.3	6.0	12	50	3.85	2
205M040.12R05S6	4.0	6	0.5	6.0	12	50	3.85	2
205M040.16R01S6	4.0	6	0.1	6.0	16	60	3.85	2
205M040.16R02S6	4.0	6	0.2	6.0	16	60	3.85	2
205M040.16R03S6	4.0	6	0.3	6.0	16	60	3.85	2
205M040.16R05S6	4.0	6	0.5	6.0	16	60	3.85	2
205M040.20R02S6	4.0	6	0.2	6.0	20	60	3.85	2
205M040.20R03S6	4.0	6	0.3	6.0	20	60	3.85	2
205M040.20R05S6	4.0	6	0.5	6.0	20	60	3.85	2
205M040.25R02S6	4.0	6	0.2	6.0	25	70	3.85	2
205M040.25R03S6	4.0	6	0.3	6.0	25	70	3.85	2
205M040.25R05S6	4.0	6	0.5	6.0	25	70	3.85	2
205M050.10R05S6	5.0	6	0.5	10.0	-	60	-	2
205M060.12R01S6	6.0	6	0.1	12.0	-	60	-	2
205M060.12R02S6	6.0	6	0.2	12.0	-	60	-	2
205M060.12R03S6	6.0	6	0.3	12.0	-	60	-	2
205M060.12R05S6	6.0	6	0.5	12.0	-	60	-	2
205M060.12R1S6	6.0	6	1.0	12.0	-	60	-	2
205M060.12R15S6	6.0	6	1.5	12.0	-	60	-	2
205M060.12R2S6	6.0	6	2.0	12.0	-	60	-	2
205M060.16R01S6	6.0	6	0.1	8.0	16	60	5.85	2
205M060.16R02S6	6.0	6	0.2	8.0	16	60	5.85	2
205M060.16R03S6	6.0	6	0.3	8.0	16	60	5.85	2
205M060.16R05S6	6.0	6	0.5	8.0	16	60	5.85	2
205M060.16R1S6	6.0	6	1.0	8.0	16	60	5.85	2
205M060.16R15S6	6.0	6	1.5	8.0	16	60	5.85	2
205M060.20R01S6	6.0	6	0.1	8.0	20	60	5.85	2
205M060.20R02S6	6.0	6	0.2	8.0	20	60	5.85	2
205M060.20R03S6	6.0	6	0.3	8.0	20	60	5.85	2
205M060.20R05S6	6.0	6	0.5	8.0	20	60	5.85	2
205M060.20R1S6	6.0	6	1.0	8.0	20	60	5.85	2
205M060.20R15S6	6.0	6	1.5	8.0	20	60	5.85	2
205M060.25R1S6	6.0	6	1.0	8.0	25	70	5.85	2
205M060.25R15S6	6.0	6	1.5	8.0	25	70	5.85	2
205M060.30R1S6	6.0	6	1.0	8.0	30	70	5.85	2
205M060.30R15S6	6.0	6	1.5	8.0	30	70	5.85	2



Help 31 Help 32



Microfresa testa sferica 3D in metallo duro integrale gambo Ø 4-6mm

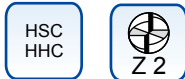
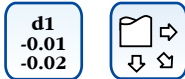
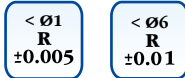
Solid carbide mini 3D ball nose end mill shank Ø 4-6mm

VHM – 3D Mini Radiusfraser, shaft Ø 4-6mm

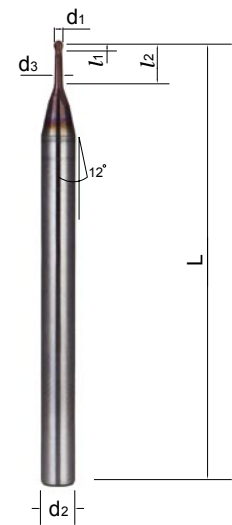
Microfraise carbure mini 3D hemispherique, queue Ø 4-6mm

Микро фреза концевая твердосплавная радиусная 3D, хвостовик Ø 4-6mm


迷你型整体硬质合金球头铣刀, 柄径Ø4-6mm



CODE	*d1 mm	d2h6 mm	L1 mm	L2 mm	L mm	d3 mm	Z no.
205RM001.0012S4	0.1	4	0.12	-	50	-	2
205RM001.01S4	0.1	4	0.12	1	50	0.07	2
205RM001.02S4	0.1	4	0.12	2	50	0.07	2
205RM0015.0018S4	0.15	4	0.18	-	50	-	2
205RM002.0025S4	0.2	4	0.25	-	50	-	2
205RM002.01S4	0.2	4	0.25	1	50	0.15	2
205RM002.02S4	0.2	4	0.25	2	50	0.15	2
205RM003.004S4	0.3	4	0.4	-	50	0.25	2
205RM003.01S4	0.3	4	0.4	1	50	0.25	2
205RM003.02S4	0.3	4	0.4	2	50	0.25	2
205RM003.03S4	0.3	4	0.4	3	50	0.25	2
205RM004.005S4	0.4	4	0.5	-	50	-	2
205RM004.01S4	0.4	4	0.5	1	50	0.35	2
205RM004.02S4	0.4	4	0.5	2	50	0.35	2
205RM004.03S4	0.4	4	0.5	3	50	0.35	2
205RM004.04S4	0.4	4	0.5	4	50	0.35	2
205RM004.05S4	0.4	4	0.5	5	50	0.35	2
205RM005.01S4	0.5	4	0.6	1	50	0.45	2
205RM005.02S4	0.5	4	0.6	2	50	0.45	2
205RM005.03S4	0.5	4	0.6	3	50	0.45	2
205RM005.04S4	0.5	4	0.6	4	50	0.45	2
205RM005.05S4	0.5	4	0.6	5	50	0.45	2
205RM005.06S4	0.5	4	0.6	6	50	0.45	2
205RM005.08S4	0.5	4	0.6	8	50	0.45	2
205RM005.10S4	0.5	4	0.6	10	50	0.45	2
205RM006.01S4	0.6	4	0.7	1	50	-	2
205RM006.02S4	0.6	4	0.7	2	50	0.55	2
205RM006.03S4	0.6	4	0.7	3	50	0.55	2
205RM006.04S4	0.6	4	0.7	4	50	0.55	2
205RM006.05S4	0.6	4	0.7	5	50	0.55	2
205RM006.06S4	0.6	4	0.7	6	50	0.55	2
205RM006.08S4	0.6	4	0.7	8	50	0.55	2
205RM006.10S4	0.6	4	0.7	10	50	0.55	2
205RM007.01S4	0.7	4	0.8	1	50	-	2
205RM007.02S4	0.7	4	0.8	2	50	0.65	2
205RM007.03S4	0.7	4	0.8	3	50	0.65	2
205RM007.04S4	0.7	4	0.8	4	50	0.65	2
205RM007.05S4	0.7	4	0.8	5	50	0.65	2
205RM007.06S4	0.7	4	0.8	6	50	0.65	2
205RM007.08S4	0.7	4	0.8	8	50	0.65	2
205RM007.10S4	0.7	4	0.8	10	50	0.65	2
205RM008.01S4	0.8	4	0.9	1	50	-	2
205RM008.02S4	0.8	4	0.9	2	50	0.75	2
205RM008.03S4	0.8	4	0.9	3	50	0.75	2
205RM008.04S4	0.8	4	0.9	4	50	0.75	2
205RM008.05S4	0.8	4	0.9	5	50	0.75	2
205RM008.06S4	0.8	4	0.9	6	50	0.75	2
205RM008.08S4	0.8	4	0.9	8	50	0.75	2
205RM008.10S4	0.8	4	0.9	10	50	0.75	2




 **Microfresa testa sferica 3D in metallo duro integrale gambo Ø 4-6mm**

 Solid carbide mini 3D ball nose end mill shank Ø 4-6mm

 VHM – 3D Mini Radiusfraser, shaft Ø 4-6mm

 Microfraise carbure mini 3D hemispherique, queue Ø 4-6mm

 Микро фреза концевая твердосплавная радиусная 3D, хвостовик Ø 4-6mm

 迷你型整体硬质合金球头铣刀，柄径Ø4-6mm



HRC < 70 STEEL CAST IRON INOX NI-Alloy

SUB MICRO GRAIN nuova CUMET NORM



< Ø1 R ±0.005

< Ø6 R ±0.01

d1 -0.01 -0.02



DIN 6535 Form HA



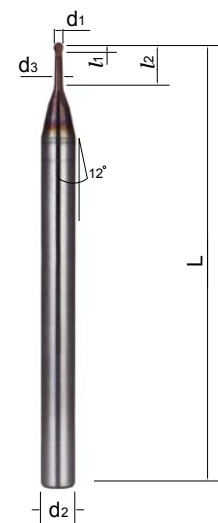
HSC HHC



GOLD



CODE	*d1 mm	d2h6 mm	L1 mm	L2 mm	L mm	d3 mm	Z no.
205RM010.002S4	1.0	4	2.0	-	50	-	2
205RM010.02S6	1.0	6	2.0	-	50	-	2
205RM010.02S4	1.0	4	1.2	2	50	0.95	2
205RM010.03S4	1.0	4	1.2	3	50	0.95	2
205RM010.04S4	1.0	4	1.2	4	50	0.95	2
205RM010.05S4	1.0	4	1.2	5	50	0.95	2
205RM010.06S4	1.0	4	1.2	6	50	0.95	2
205RM010.08S4	1.0	4	1.2	8	50	0.95	2
205RM010.10S4	1.0	4	1.2	10	50	0.95	2
205RM010.12S4	1.0	4	1.2	12	50	0.95	2
205RM010.14S4	1.0	4	1.2	14	50	0.95	2
205RM010.16S4	1.0	4	1.2	16	60	0.95	2
205RM010.18S4	1.0	4	1.2	18	60	0.95	2
205RM010.20S4	1.0	4	1.2	20	60	0.95	2
205RM012.003S4	1.2	4	3.0	-	50	-	2
205RM012.03S4	1.2	4	1.4	3	50	1.15	2
205RM012.04S4	1.2	4	1.4	4	50	1.15	2
205RM012.05S4	1.2	4	1.4	5	50	1.15	2
205RM012.06S4	1.2	4	1.4	6	50	1.15	2
205RM012.08S4	1.2	4	1.4	8	50	1.15	2
205RM012.10S4	1.2	4	1.4	10	50	1.15	2
205RM012.12S4	1.2	4	1.4	12	50	1.15	2
205RM012.14S4	1.2	4	1.4	14	50	1.15	2
205RM012.16S4	1.2	4	1.4	16	60	1.15	2
205RM014.03S4	1.4	4	3.0	-	50	-	2
205RM014.04S4	1.4	4	1.7	4	50	1.35	2
205RM014.05S4	1.4	4	1.7	5	50	1.35	2
205RM014.06S4	1.4	4	1.7	6	50	1.35	2
205RM014.08S4	1.4	4	1.7	8	50	1.35	2
205RM014.10S4	1.4	4	1.7	10	50	1.35	2
205RM014.12S4	1.4	4	1.7	12	50	1.35	2





Microfresa testa sferica 3D in metallo duro integrale gambo Ø 4-6mm

Solid carbide mini 3D ball nose end mill shank Ø 4-6mm

VHM – 3D Mini Radiusfraser, shaft Ø 4-6mm

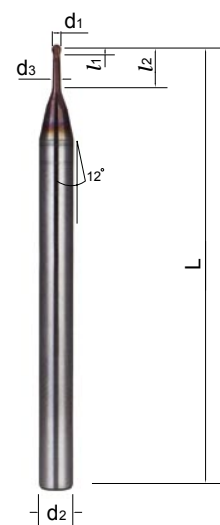
Microfraise carbure mini 3D hemispherique, queue Ø 4-6mm

Микро фреза концевая твердосплавная радиусная 3D, хвостовик Ø 4-6mm


迷你型整体硬质合金球头铣刀, 柄径Ø4-6mm




CODE	*d1 mm	d2h6 mm	L1 mm	L2 mm	L mm	d3 mm	Z no.
205RM015.03S4	1.5	4	1.8	3	50	1.45	2
205RM015.03S6	1.5	6	3.0	-	50	1.45	2
205RM015.04S4	1.5	4	1.8	4	50	1.45	2
205RM015.05S4	1.5	4	1.8	5	50	1.45	2
205RM015.06S4	1.5	4	1.8	6	50	1.45	2
205RM015.08S4	1.5	4	1.8	8	50	1.45	2
205RM015.10S4	1.5	4	1.8	10	50	1.45	2
205RM015.12S4	1.5	4	1.8	12	50	1.45	2
205RM015.14S4	1.5	6	1.8	14	50	1.45	2
205RM015.16S4	1.5	4	1.8	16	60	1.45	2
205RM015.18S4	1.5	4	1.8	18	60	1.45	2
205RM015.20S4	1.5	4	1.8	20	60	1.45	2
205RM016.03S4	1.6	4	3.0	-	50	-	2
205RM016.04S4	1.6	4	1.9	4	50	1.55	2
205RM016.05S4	1.6	4	1.9	5	50	1.55	2
205RM016.06S4	1.6	4	1.9	6	50	1.55	2
205RM016.08S4	1.6	4	1.9	8	50	1.55	2
205RM016.10S4	1.6	4	1.9	10	50	1.55	2
205RM016.12S4	1.6	4	1.9	12	50	1.55	2
205RM016.14S4	1.6	4	1.9	14	50	1.55	2
205RM016.16S4	1.6	4	1.9	16	60	1.55	2
205RM016.18S4	1.6	4	1.9	18	60	1.55	2
205RM016.20S4	1.6	4	1.9	20	60	1.55	2
205RM018.04S4	1.8	4	4.0	-	50	-	2
205RM019.04S4	1.9	4	4.0	-	50	-	2
205RM020.05S4	2.0	4	5.0	-	50	-	2
205RM020.05S6	2.0	6	5.0	-	50	-	2
205RM020.04S4	2.0	4	2.2	4	50	1.95	2
205RM020.06S4	2.0	4	2.2	6	50	1.95	2
205RM020.08S4	2.0	4	2.2	8	50	1.95	2
205RM020.10S4	2.0	4	2.2	10	50	1.95	2
205RM020.12S4	2.0	4	2.2	12	50	1.95	2
205RM020.14S4	2.0	4	2.2	14	50	1.95	2
205RM020.16S4	2.0	4	2.2	16	60	1.95	2
205RM020.18S4	2.0	4	2.2	18	60	1.95	2
205RM020.20S4	2.0	4	2.2	20	60	1.95	2
205RM020.22S4	2.0	4	2.2	22	60	1.95	2
205RM020.25S4	2.0	4	2.2	25	70	1.95	2
205RM020.30S4	2.0	4	2.2	30	70	1.95	2



 **Microfresa testa sferica 3D in metallo duro integrale gambo Ø 4-6mm**

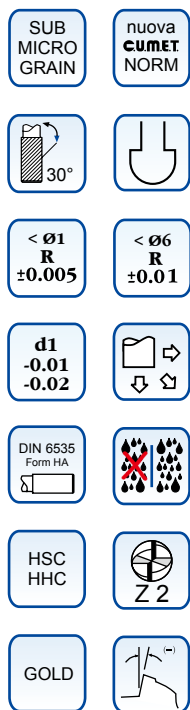
 Solid carbide mini 3D ball nose end mill shank Ø 4-6mm

 VHM – 3D Mini Radiusfraser, shaft Ø 4-6mm

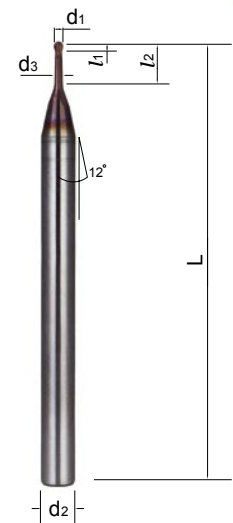
 Microfraise carbure mini 3D hemispherique, queue Ø 4-6mm

 Микро фреза концевая твердосплавная радиусная 3D, хвостовик Ø 4-6mm

 迷你型整体硬质合金球头铣刀，柄径Ø4-6mm



CODE	*d1 mm	d2h6 mm	L1 mm	L2 mm	L mm	d3 mm	Z no.
205RM025.06S4	2.5	4	6.0	-	50	-	2
205RM025.06S6	2.5	6	6.0	-	50	-	2
205RM025.10S6	2.5	6	3.0	10	50	2.45	2
205RM025.12S6	2.5	6	3.0	12	50	2.45	2
205RM025.14S6	2.5	6	3.0	14	60	2.45	2
205RM025.16S6	2.5	6	3.0	16	60	2.45	2
205RM025.20S6	2.5	6	3.0	20	60	2.45	2
205RM025.25S6	2.5	6	3.0	25	70	2.45	2
205RM030.08S4	3.0	4	8.0	-	60	-	2
205RM030.08S6	3.0	6	8.0	-	60	-	2
205RM030.06S6	3.0	6	3.6	6	50	2.95	2
205RM030.08S6	3.0	6	3.6	8	50	2.95	2
205RM030.10S6	3.0	6	3.6	10	50	2.95	2
205RM030.12S6	3.0	6	3.6	12	50	2.95	2
205RM030.14S6	3.0	6	3.6	14	60	2.95	2
205RM030.16S6	3.0	6	3.6	16	60	2.95	2
205RM030.18S6	3.0	6	3.6	18	60	2.95	2
205RM030.20S6	3.0	6	3.6	20	60	2.95	2
205RM030.25S6	3.0	6	3.6	25	70	2.95	2
205RM030.30S6	3.0	6	3.6	30	70	2.95	2
205RM030.35S6	3.0	6	3.6	35	80	2.95	2
205RM030.40S6	3.0	6	3.6	40	80	2.95	2
205RM040.08S4	4.0	4	8.0	-	50	-	2
205RM040.08S6	4.0	6	8.0	-	50	-	2
205RM040.08S6	4.0	6	5.0	8	50	3.85	2
205RM040.10S6	4.0	6	5.0	10	50	3.85	2
205RM040.12S6	4.0	6	5.0	12	50	3.85	2
205RM040.14S6	4.0	6	5.0	14	60	3.85	2
205RM040.16S6	4.0	6	5.0	16	60	3.85	2
205RM040.18S6	4.0	6	5.0	18	60	3.85	2
205RM040.20S6	4.0	6	5.0	20	60	3.85	2
205RM040.25S6	4.0	6	5.0	25	70	3.85	2
205RM040.30S6	4.0	6	5.0	30	70	3.85	2
205RM040.35S6	4.0	6	5.0	35	80	3.85	2
205RM040.40S6	4.0	6	5.0	40	80	3.85	2
205RM040.45S6	4.0	6	5.0	45	90	3.85	2
205RM040.50S6	4.0	6	5.0	50	90	3.85	2





Fresa testa sferica 3D in metallo duro integrale Hard Cut

Solid carbide 3D ball nose end mill Hard Cut

VHM –3D Radiusfraser Hard Cut

Fraise carbure 3D hemispherique Hard Cut

Фреза концевая твердосплавная радиусная 3D для труднообрабатываемых материалов

两刃硬质合金球头铣刀



HRC < 70 STEEL CAST IRON

SUB MICRO GRAIN nuova CUMET NORM



R ±0.01

< Ø6 d1 -0.01 -0.02



DIN 6535 Form HA



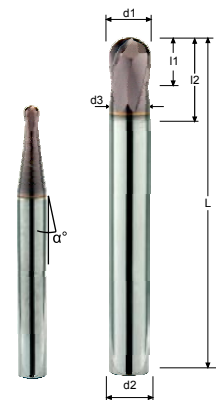
HSC HHC



GOLD








CODE	d1h8 mm	d2h6 mm	d3 mm	L1 mm	L3 mm	L mm	Z no.	α°
200DRJ.01050S	1	6	0.95	1	3	50	2	20°
200DRJ.02050S	2	6	1.95	3	6	50	2	10°
200DRJ.02057	2	6	1.95	3	6	57	2	10°
200DRJ.02075	2	6	1.95	2	6	75	2	10°
200DRJ.03050S	3	6	2.9	4	9	50	2	8°
200DRJ.03057	3	6	2.9	4	9	57	2	8°
200DRJ.03075	3	6	2.9	3	9	75	2	8°
200DRJ.04050S	4	6	3.9	5	12	50	2	6°
200DRJ.04057	4	6	3.9	5	12	57	2	6°
200DRJ.04075	4	6	3.9	4	12	75	2	6°
200DRJ.05057	5	6	4.9	6	16	57	2	3°
200DRJ.05075	5	6	4.9	6	16	75	2	3°
200DRJ.06057	6	6	5.9	7	20	57	2	-
200DRJ.06075	6	6	5.9	7	20	75	2	-
200DRJ.06100	6	6	5.9	6	20	100	2	-
200DRJ.08060S	8	8	7.8	9	16	60	2	-
200DRJ.08075	8	8	7.8	9	29	75	2	-
200DRJ.08100	8	8	7.8	9	29	100	2	-
200DRJ.10070S	10	10	9.8	10	20	70	2	-
200DRJ.10080	10	10	9.8	10	35	80	2	-
200DRJ.10100	10	10	9.8	10	35	100	2	-
200DRJ.12075S	12	12	11.8	12	24	75	2	-
200DRJ.12100	12	12	11.8	12	37	100	2	-











Help 35

Fresa Forante testa piana in metallo duro integrale alto avanzamento

-  Solid carbide Drilling end mill flat nose for High Feed
-  VHM – schaftfraser Bohren fur Hoch Vorschub
-  Fraise à Piercer en carbure a bout plat pour Haut avances
-  Фреза концевая твердосплавная с опцией сверления и высокими параметрами подачи
-  四刃超硬加工高效大进给硬质合金铣刀



- HRC < 55
- ALLOY STEEL
- CAST IRON
- INOX

-  SUB
MICRO
GRAIN
-  nuova
CUMET
NORM
-  45°
-  DIN 6535
Form HA
-  HSC
HHC
-  Z 3
-  HYPER
-  K

CODE	d1h8 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	60	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 36



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

四刃大进给整体硬质合金铣刀



- HRC < 50
- ALLOY STEEL
- CAST IRON
- INOX
- Ti-Alloy

SUB MICRO GRAIN

nuova CUMET NORM



rp ±0.01



HSC HHC



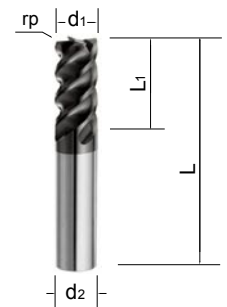
HYPER



CODE	d1h8 mm	d2h6 mm	rp mm	L1 mm	L mm	Z no.
Y400.030	3	6	-	8	60	4
Y400.040	4	6	-	11	60	4
Y400.050	5	6	-	13	60	4
Y400.060	6	6	-	13	60	4
Y400.080	8	8	-	19	75	4
Y400.100	10	10	-	22	80	4
Y400.120	12	12	-	25	100	4
Y400.160	16	16	-	30	100	4
Y400.200	20	20	-	40	100	4



CODE	d1h8 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
Y400.160.1	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



 **Fresa a divisione irregolare in metallo duro integrale**

 Solid carbide irregular division end mill

 VHM-Ungleiche Teilung Fräser

 Fraise carbure avec division irregular

 Фреза концевая твердосплавная с переменным углом наклона винтовой канавки

 四刃不等分-硬质合金平底及圆弧角铣刀



HRC
< 50

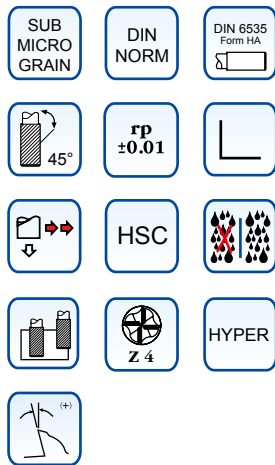
CAST
IRON

ALLOY
STEEL

INOX

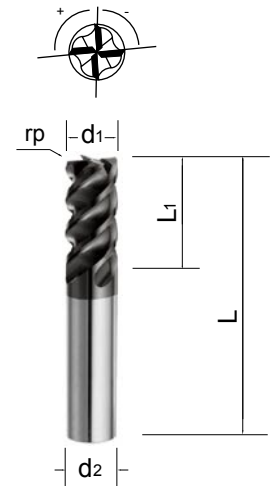
Ti-Alloy

Ni-Alloy



CODE	d1h8 mm	d2h6 mm	rp mm	L1 mm	L mm	Z no.
400V.030	3	6	-	8	60	4
400V.040	4	6	-	11	60	4
400V.050	5	6	-	13	60	4
400V.060	6	6	-	13	60	4
400V.080	8	8	-	19	75	4
400V.100	10	10	-	22	80	4
400V.120	12	12	-	25	100	4
400V.160	16	16	-	30	100	4
400V.200	20	20	-	40	100	4

CODE	d1h8 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	19	75	4
Y400V.080.05	8	8	0.5	19	75	4
Y400V.080.1	8	8	1.0	19	75	4
Y400V.080.15	8	8	1.5	19	75	4
Y400V.080.2	8	8	2.0	19	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





Fresa testa torica per lavorazioni estreme in metallo duro integrale

Solid carbide extreme milling corner radius end mill

VHM-Eckenradius fraser für extremerspannung

Fraise end carbure avec rayon pour extreme fraises

Фреза концевая твердосплавная с угловым радиусом для тяжелого фрезерования

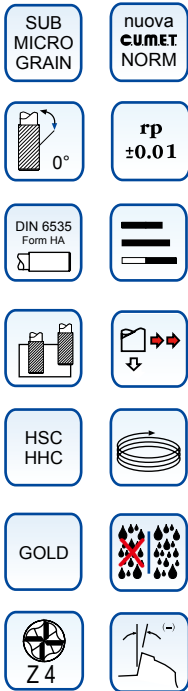
四刃超硬加工高效大进给硬质合金铣刀



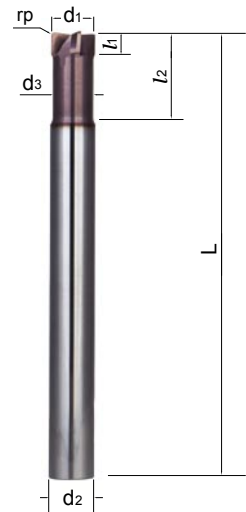
HRC < 65

ALLOY STEEL


CAST IRON




CODE	d1h8 mm	d2h6 mm	rp mm	L1 mm	L2 mm	L mm	d3 mm	Z no.
Y400D.02060.03	2	6	0.3	0.8	5	60	1.8	4
Y400D.02060.05	2	6	0.5	0.8	5	60	1.8	4
Y400D.03060.05	3	6	0.5	1.2	6	60	2.7	4
Y400D.03060.075	3	6	0.75	1.2	6	60	2.7	4
Y400D.03060.1	3	6	1	1.2	6	60	2.7	4
Y400D.04075.05	4	6	0.5	1.6	9	75	3.6	4
Y400D.04075.1	4	6	1	1.6	9	75	3.6	4
Y400D.05075.05	5	6	0.5	2	12	75	4.6	4
Y400D.05075.1	5	6	1	2	12	75	4.6	4
Y400D.05075.12	5	6	1.2	2	12	75	4.6	4
Y400D.06100.05	6	6	0.5	2.5	13	100	5.4	4
Y400D.06100.1	6	6	1	2.5	13	100	5.4	4
Y400D.06100.15	6	6	1.5	2.5	13	100	5.4	4
Y400D.08100.05	8	8	0.5	3.5	16	100	7.2	4
Y400D.08100.1	8	8	1	3.5	16	100	7.2	4
Y400D.08100.15	8	8	1.5	3.5	16	100	7.2	4
Y400D.08100.2	8	8	2	3.5	16	100	7.2	4
Y400D.10100.05	10	10	0.5	4	20	100	9.0	4
Y400D.10100.1	10	10	1	4	20	100	9.0	4
Y400D.10100.15	10	10	1.5	4	20	100	9.0	4
Y400D.10100.2	10	10	2	4	20	100	9.0	4
Y400D.12100.05	12	12	0.5	5	25	100	11.0	4
Y400D.12100.1	12	12	1	5	25	100	11.0	4
Y400D.12100.15	12	12	1.5	5	25	100	11.0	4
Y400D.12100.2	12	12	2	5	25	100	11.0	4
Y400D.16100.05	16	16	0.5	7	32	100	15.0	4
Y400D.16100.1	16	16	1	7	32	100	15.0	4
Y400D.16100.15	16	16	1.5	7	32	100	15.0	4
Y400D.16100.2	16	16	2	7	32	100	15.0	4
Y400D.16100.3	16	16	3	7	32	100	15.0	4




 **Fresa testa torica in metallo duro integrale Hard Cut**

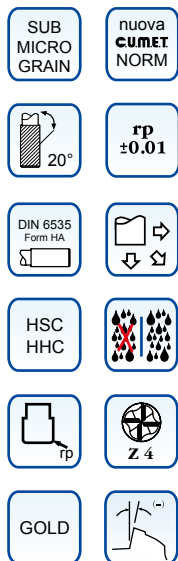
 Solid carbide corner radius end mill Hard Cut

 VHM-Gesenkfraser mit Eckenradius Hard Cut

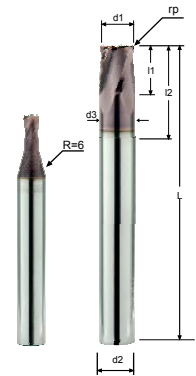
 Fraise carbure avec rayon d'angle Hard Cut

 Фреза концевая твердосплавная с угловым радиусом для тяжелого фрезерования

 四刃硬质合金圆弧角铣刀



CODE	d1h8 mm	d2h6 mm	rp mm	L1 mm	L2 mm	L mm	d3 mm	Z no.	R mm
Y400RS.02057.02	2	6	0.2	3	6	57	1.95	4	6
Y400RS.02075.02	2	6	0.2	3	6	75	1.95	4	6
Y400RS.03057.02	3	6	0.2	4	9	57	2.95	4	6
Y400RS.03075.03	3	6	0.3	4	9	75	2.95	4	6
Y400RS.03057.05	3	6	0.5	4	9	57	2.95	4	6
Y400RS.03075.1	3	6	1	4	9	75	2.95	4	6
Y400RS.04057.02	4	6	0.2	5	12	57	3.9	4	6
Y400RS.04057.05	4	6	0.5	5	12	57	3.9	4	6
Y400RS.04075.05	4	6	0.5	5	12	75	3.9	4	6
Y400RS.04075.1	4	6	1	5	12	75	3.9	4	6
Y400RS.05057.05	5	6	0.5	6	16	57	4.9	4	6
Y400RS.05075.05	5	6	0.5	6	16	75	4.9	4	6
Y400RS.05057.1	5	6	1	6	16	57	4.9	4	6
Y400RS.05075.1	5	6	1	6	16	75	4.9	4	6
Y400RS.06057.05	6	6	0.5	7	20	57	5.8	4	-
Y400RS.06075.058	6	6	0.5	7	20	75	5.8	4	-
Y400RS.06100.05	6	6	0.5	7	20	100	5.8	4	-
Y400RS.06057.1	6	6	1	7	20	57	5.8	4	-
Y400RS.06075.1	6	6	1	7	20	75	5.8	4	-
Y400RS.06100.1	6	6	1	7	20	100	5.8	4	-
Y400RS.06057.15	6	6	1.5	7	20	57	5.8	4	-
Y400RS.06075.15	6	6	1.5	7	20	75	5.8	4	-
Y400RS.06100.15	6	6	1.5	7	20	100	5.8	4	-
Y400RS.08075.03	8	8	0.3	10	29	75	7.8	4	-
Y400RS.08075.05	8	8	0.5	10	29	75	7.8	4	-
Y400RS.08100.05	8	8	0.5	10	29	100	7.8	4	-
Y400RS.08075.1	8	8	1	10	29	75	7.8	4	-
Y400RS.08100.1	8	8	1	10	29	100	7.8	4	-
Y400RS.08075.15	8	8	1.5	10	29	75	7.8	4	-
Y400RS.08100.15	8	8	1.5	10	29	100	7.8	4	-
Y400RS.08075.2	8	8	2	10	29	75	7.8	4	-
Y400RS.08100.2	8	8	2	10	29	100	7.8	4	-
Y400RS.10080.05	10	10	0.5	11	35	80	9.8	4	-
Y400RS.10100.05	10	10	0.5	11	35	100	9.8	4	-
Y400RS.10080.1	10	10	1	11	35	80	9.8	4	-
Y400RS.10100.1	10	10	1	11	35	100	9.8	4	-
Y400RS.10080.15	10	10	1.5	11	35	80	9.8	4	-
Y400RS.10100.15	10	10	1.5	11	35	100	9.8	4	-
Y400RS.10100.2	10	10	2	11	35	100	9.8	4	-
Y400RS.12100.05	12	12	0.5	15	37	100	11.8	4	-
Y400RS.12100.1	12	12	1	15	37	100	11.8	4	-
Y400RS.12100.15	12	12	1.5	15	37	100	11.8	4	-
Y400RS.12100.2	12	12	2	15	37	100	11.8	4	-





Fresa per lavorazioni estreme in metallo duro integrale

Solid carbide extreme milling end mill

VHM-Fraser für extremerspannung

Fraise end carbure pour extreme fraises

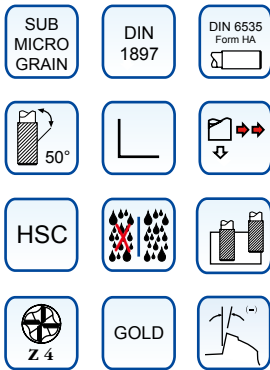
Фреза концевая твердосплавная для тяжелого фрезерования

四刃硬质合金平底铣刀 - 粗, 精加工

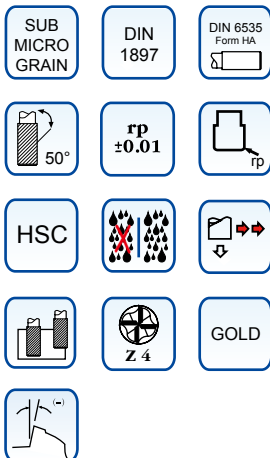
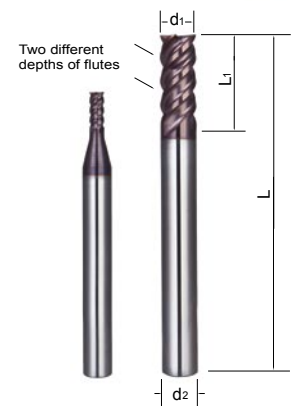
HRC < 70

STEEL

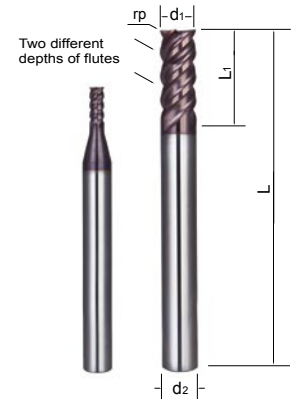
CAST IRON



CODE	d1h8 mm	d2h6 mm	rp mm	L1 mm	L mm	Z no.
406.02057	2	6	-	4	57	4
406.025057	2.5	6	-	5	57	4
406.03057	3.	6	-	8	57	4
406.035057	3.5	6	-	7	57	4
406.04057	4	6	-	12	57	4
406.045057	4.5	6	-	9	57	4
406.05057	5	6	-	15	57	4
406.06057	6	6	-	18	57	4
406.06075	6	6	-	18	75	4
406.08063	8	8	-	16	63	4
406.08075	8	8	-	20	75	4
406.08100	8	8	-	24	100	4
406.09072	9	10	-	18	72	4
406.10072	10	10	-	20	72	4
406.10100	10	10	-	30	100	4
406.12083	12	12	-	24	83	4
406.12100	12	12	-	30	100	4
406.12120	12	12	-	40	120	4
406.16092	16	16	-	32	92	4
406.16140	16	16	-	48	140	4
406.20100	20	20	-	40	100	4
406.20150	20	20	-	60	150	4



CODE	d1h8 mm	d2h6 mm	rp mm	L1 mm	L mm	Z no.
Y406.03057.02	3	6	0.2	8	57	4
Y406.04057.02	4	6	0.2	12	57	4
Y406.05057.02	5	6	0.2	15	57	4
Y406.06057.02	6	6	0.2	18	57	4
Y406.06057.05	6	6	0.5	18	57	4
Y406.06057.1	6	6	1.0	18	57	4
Y406.06075.02	6	6	0.2	18	75	4
Y406.06075.05	6	6	0.5	18	75	4
Y406.06075.1	6	6	1.0	18	75	4
Y406.08075.02	8	8	0.2	20	75	4
Y406.08075.05	8	8	0.5	20	75	4
Y406.08075.1	8	8	1.0	20	75	4
Y406.08100.02	8	8	0.2	24	100	4
Y406.08100.05	8	8	0.5	24	100	4
Y406.08100.1	8	8	1.0	24	100	4
Y406.10072.05	10	10	0.5	20	72	4
Y406.10080.02	10	10	0.2	25	80	4
Y406.10080.05	10	10	0.5	25	80	4
Y406.10080.1	10	10	1	25	80	4
Y406.10100.02	10	10	0.2	30	100	4
Y406.10100.05	10	10	0.5	30	100	4
Y406.10100.1	10	10	1	30	100	4
Y406.12100.05	12	12	0.5	30	100	4
Y406.12100.1	12	12	1	30	100	4
Y406.16100.05	16	16	0.5	40	100	4
Y406.16100.1	16	16	1	40	100	4
Y406.16140.1	16	16	1	60	140	4
Y406.20100.05	20	20	0.5	40	100	4
Y406.20100.1	20	20	1	40	100	4
Y406.20150.1	20	20	1	60	150	4



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

 Solid carbide corner radius end mill, with Irregular Division- Variable Helix

 VHM-Torusfraser Ungleiche Teilung-Helix Variable

 Fraise end carbur avec rayon d'angle, Irrégulière Division-Hélice Variable

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

 四刃高效硬质合金圆弧角铣刀



HRC
< 50

CAST
IRON

ALLOY
STEEL

INOX

TI-Alloy

NI-Alloy

SUB
MICRO
GRAIN

DIN
NORM



HSC



HYPER



CODE	d1h8 mm	d2h6 mm	rp mm	L1 mm	L mm	Z no.
500RV03.50R03	3	6	0.3	10	50	4
500RV03.50R05	3	6	0.5	10	50	4
500RV04.50R05	4	6	0.5	12	50	4
500RV05.50R05	5	6	0.5	14	50	4
500RV06.50R05	6	6	0.5	20	50	4
500RV06.75R1	6	6	1	20	75	4
500RV06.75R15	6	6	1.5	20	75	4
500RV06.100R05	6	6	0.5	40	100	4
500RV08.60R05	8	8	0.5	22	60	4
500RV08.100R05	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
500RV08.100R05.1	8	8	0.5	40	100	4
500RV10.070R05	10	10	0.5	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
500RV10.100R05.1	10	10	0.5	45	100	4
500RV12.070R05	12	12	0.5	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
500RV12.100R05.1	12	12	0.5	45	100	4
500RV16.085R05	16	16	0.5	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
500RV16.100R05	16	16	0.5	45	100	4
500RV16.150R05	16	16	0.5	65	150	4
500RV20.100R05	20	20	0.5	40	100	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
500RV20.150R05	20	20	0.5	65	150	4



VARIABLE
HELIX





Fresa multitagliente, testa torica in metallo duro integrale

Solid carbide corner radius multy flutes end mill

VHM-Eckradiusfraser 6 Zähne

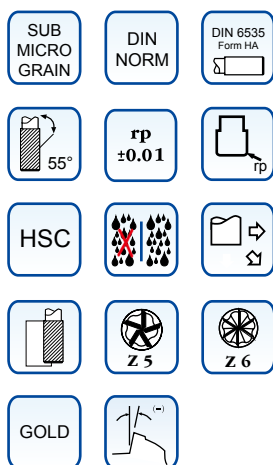
Fraise carbure avec rayon d'angle, multi dents

Фреза концевая твердосплавная с угловым радиусом многозубая

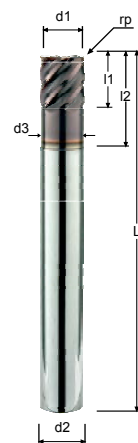
六刃精加工-硬质合金圆弧角铣刀









HRC < 72
CAST IRON
















CODE	d1h9 mm	d2h6 mm	rp mm	L1 mm	L2 mm	L mm	d3 mm	Z no.
Y508.06057.02	6	6	0.2	7	20	57	5.80	6
Y508.06057.05	6	6	0.5	7	20	57	5.80	6
Y508.06057.1	6	6	1.0	7	20	57	5.80	6
Y508.06075.02	6	6	0.2	7	20	75	5.80	6
Y508.06075.05	6	6	0.5	7	20	75	5.80	6
Y508.06075.1	6	6	1.0	7	20	75	5.80	6
Y508.08075.02	8	8	0.2	9	29	75	7.80	6
Y508.08075.05	8	8	0.5	9	29	75	7.80	6
Y508.08075.1	8	8	1.0	9	29	75	7.80	6
Y508.08100.02	8	8	0.2	8	29	100	7.80	6
Y508.08100.05	8	8	0.5	8	29	100	7.80	6
Y508.08100.1	8	8	1.0	8	29	100	7.80	6
Y508.10080.02	10	10	0.2	11	35	80	9.80	6
Y508.10080.05	10	10	0.5	11	35	80	9.80	6
Y508.10080.1	10	10	1.0	11	35	80	9.80	6
Y508.10100.02	10	10	0.2	10	35	100	9.70	6
Y508.10100.05	10	10	0.5	10	35	100	9.70	6
Y508.10100.1	10	10	1.0	10	35	100	9.70	6
Y508.12100.02	12	12	0.2	13	37	100	11.7	6
Y508.12100.05	12	12	0.5	13	37	100	11.7	6
Y508.12100.1	12	12	1.0	13	37	100	11.7	6
Y508.16100.05	16	16	0.5	16	37	100	15.7	6
Y508.16100.1	16	16	1.0	16	37	100	15.7	6
Y508.20100.05	20	20	0.5	20	40	100	19.7	6
Y508.20100.1	20	20	1.0	20	40	100	19.7	6



-  **Fresa rompitruciolo in metallo duro integrale**
-  Solid carbide roughing end mill
-  VHM - Schruppfraser
-  Fraise carbure ébauche
-  Фреза концевая твердосплавная для черновой обработки
-  硬质合金平底粗铣刀

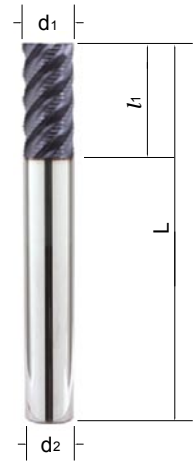


HRC < 50 STEEL CAST IRON

-  SUB MICRO GRAIN
-  DIN NORM
-  45°
-  1.04 FINE
-  45°
-  DIN 6535 Form HA
-  HSC
-  Microstructure
-  Z 3
-  HYPER
-  Z 3 Ø5 - Ø6
-  Z 4 Ø8 - Ø20
-  Z 6 Ø16 - Ø25

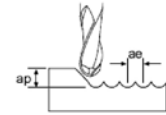
CODE	d1h11 mm	d2h6 mm	L1 mm	L mm	Z no.
T22040308057	3	6	8	57	3
T22040412057	4	6	12	57	3
T22040616057	6	6	16	57	4
T22040816063	8	8	16	63	4
T22041022070	10	10	22	70	4
T22041226075	12	12	26	75	4
T22041632092	16	16	32	92	6
T22042038100	20	20	38	100	6
T22042545121	25	25	45	121	6

Help 43



Cutting Data





High Speed Cutting

CODE: Y800R

Hardness		AL Si<6%				Copper				Plastic			
Dia.	L2	Vc	Fz	ae	ap	Vc	Fz	ae	ap	Vc	Fz	ae	ap
0.5	2	80-600	0.009-0.011	0.150-1.0 x d	0.200 x d	60-400	0.009-0.011	0.10-1.0 x d	0.200 x d	60-600	0.009-0.017	0.10-1.0 x d	0.200 x d
	4	80-600	0.008-0.010	0.150-1.0 x d	0.120 x d	55-400	0.008-0.010	0.10-1.0 x d	0.120 x d	55-600	0.008-0.015	0.10-1.0 x d	0.120 x d
	6	80-600	0.008-0.010	0.150-1.0 x d	0.060 x d	50-400	0.008-0.010	0.10-1.0 x d	0.060 x d	50-600	0.008-0.013	0.10-1.0 x d	0.060 x d
0.6	2	90-600	0.014-0.016	0.150-1.0 x d	0.200 x d	70-400	0.014-0.016	0.10-1.0 x d	0.200 x d	70-600	0.018-0.024	0.10-1.0 x d	0.200 x d
	4	90-600	0.013-0.015	0.150-1.0 x d	0.120 x d	60-400	0.013-0.015	0.10-1.0 x d	0.120 x d	60-600	0.016-0.122	0.10-1.0 x d	0.120 x d
	6	90-600	0.013-0.015	0.150-1.0 x d	0.060 x d	60-400	0.013-0.015	0.10-1.0 x d	0.060 x d	60-600	0.016-0.022	0.10-1.0 x d	0.060 x d
0.8	4	120-600	0.016-0.019	0.150-1.0 x d	0.200 x d	70-400	0.016-0.019	0.10-1.0 x d	0.200 x d	90-600	0.018-0.024	0.10-1.0 x d	0.200 x d
	6	120-600	0.015-0.017	0.150-1.0 x d	0.120 x d	60-400	0.015-0.017	0.10-1.0 x d	0.120 x d	90-600	0.016-0.022	0.10-1.0 x d	0.120 x d
	8	120-600	0.015-0.017	0.150-1.0 x d	0.060 x d	60-400	0.015-0.017	0.10-1.0 x d	0.060 x d	90-600	0.016-0.022	0.10-1.0 x d	0.060 x d
1.0	6	150-600	0.022-0.026	0.150-1.0 x d	0.200 x d	100-400	0.022-0.026	0.10-1.0 x d	0.200 x d	100-600	0.028-0.035	0.10-1.0 x d	0.200 x d
	8	150-600	0.020-0.024	0.150-1.0 x d	0.120 x d	90-400	0.020-0.024	0.10-1.0 x d	0.120 x d	90-600	0.026-0.032	0.10-1.0 x d	0.120 x d
	12	150-600	0.018-0.022	0.150-1.0 x d	0.060 x d	80-400	0.018-0.022	0.10-1.0 x d	0.060 x d	80-600	0.022-0.028	0.10-1.0 x d	0.060 x d
1.5	6	190-600	0.028-0.035	0.150-1.0 x d	0.200 x d	120-400	0.028-0.035	0.10-1.0 x d	0.200 x d	120-600	0.028-0.035	0.10-1.0 x d	0.200 x d
	8	190-600	0.026-0.032	0.150-1.0 x d	0.120 x d	120-400	0.026-0.032	0.10-1.0 x d	0.120 x d	110-600	0.026-0.032	0.10-1.0 x d	0.120 x d
	10	190-600	0.025-0.030	0.150-1.0 x d	0.060 x d	110-400	0.025-0.030	0.10-1.0 x d	0.060 x d	100-600	0.022-0.028	0.10-1.0 x d	0.060 x d
2.0	6	190-600	0.042-0.048	0.150-1.0 x d	0.200 x d	120-400	0.042-0.048	0.10-1.0 x d	0.200 x d	120-600	0.042-0.047	0.10-1.0 x d	0.200 x d
	10	190-600	0.032-0.038	0.150-1.0 x d	0.120 x d	110-400	0.032-0.038	0.10-1.0 x d	0.120 x d	110-600	0.038-0.043	0.10-1.0 x d	0.120 x d
3.0	9	200-600	0.030-0.070	0.150-1.0 x d	0.200 x d	100-400	0.040-0.080	0.10-1.0 x d	0.200 x d	150-600	0.040-0.060	0.10-1.0 x d	0.200 x d
4.0	12	200-600	0.050-0.100	0.150-1.0 x d	0.200 x d	100-400	0.050-0.100	0.10-1.0 x d	0.200 x d	150-600	0.050-0.100	0.10-1.0 x d	0.200 x d
6.0	21	200-600	0.050-0.100	0.150-1.0 x d	0.200 x d	100-400	0.080-0.120	0.10-1.0 x d	0.200 x d	150-600	0.080-0.120	0.10-1.0 x d	0.200 x d
8.0	26	200-600	0.060-0.120	0.150-1.0 x d	0.200 x d	100-400	0.100-0.120	0.10-1.0 x d	0.200 x d	150-600	0.100-0.120	0.10-1.0 x d	0.200 x d
10.0	31	200-600	0.070-0.130	0.150-1.0 x d	0.200 x d	100-400	0.100-0.140	0.10-1.0 x d	0.200 x d	150-600	0.100-0.140	0.10-1.0 x d	0.200 x d
12.0	37	200-600	0.070-0.140	0.150-1.0 x d	0.200 x d	100-400	0.100-0.150	0.10-1.0 x d	0.200 x d	150-600	0.100-0.150	0.10-1.0 x d	0.200 x d
16.0	66	200-600	0.090-0.160	0.150-1.0 x d	0.200 x d	100-400	0.120-0.160	0.10-1.0 x d	0.200 x d	150-600	0.120-0.160	0.10-1.0 x d	0.200 x d
20.0	78	200-600	0.160-0.200	0.150-1.0 x d	0.200 x d	100-400	0.160-0.200	0.10-1.0 x d	0.200 x d	150-600	0.160-0.200	0.10-1.0 x d	0.200 x d

205PM	Dia. mm	L2 mm	ap	Steel HRC<25		Stainless Steel HRC<25-35		Heat Resistant Steel HRC<35-50		Tempered Steel HRC<50-65	
				Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
205PM001.002S4	0.1	-	0.02-0.07xd	16	0.0050	16	0.0048	15	0.0036	13	0.0030
205PM001.01S4	0.1	1	0.02-0.07xd	16	0.0050	16	0.0048	15	0.0036	13	0.0030
205PM001.02S4	0.1	2	0.02-0.07xd	16	0.0046	15	0.0045	14	0.0036	12	0.0030
205PM0015.002S4	0.15	-	0.02-0.07xd	24	0.0050	24	0.0475	23	0.0036	20	0.0030
205PM002.004S4	0.2	-	0.02-0.07xd	28	0.0071	25	0.0071	24	0.0053	21	0.0045
205PM002.01S4	0.2	1	0.02-0.07xd	28	0.0071	25	0.0071	24	0.0053	21	0.0045
205PM002.02S4	0.2	2	0.02-0.07xd	25	0.0065	23	0.0065	22	0.0053	19	0.0045
205PM003.005S4	0.3	-	0.02-0.07xd	38	0.0071	34	0.0071	32	0.0053	28	0.0045
205PM003.01S4	0.3	1	0.02-0.07xd	38	0.0071	34	0.0071	32	0.0053	28	0.0045
205PM003.02S4	0.3	2	0.02-0.07xd	34	0.0065	31	0.0065	29	0.0053	25	0.0045
205PM003.03S4	0.3	3	0.02-0.07xd	34	0.0065	31	0.0065	29	0.0053	25	0.0045
205PM004.008S4	0.4	-	0.02-0.07xd	40	0.0110	36	0.0110	34	0.0082	30	0.0069
205PM004.01S4	0.4	1	0.02-0.07xd	40	0.0110	36	0.0110	34	0.0082	30	0.0069
205PM004.02S4	0.4	2	0.02-0.07xd	40	0.0110	36	0.0110	34	0.0074	30	0.0062
205PM004.03S4	0.4	3	0.02-0.07xd	36	0.0101	33	0.0101	31	0.0074	27	0.0062
205PM004.04S4	0.4	4	0.02-0.07xd	36	0.0101	33	0.0101	31	0.0074	27	0.0062
205PM004.05S4	0.4	5	0.02-0.07xd	32	0.0088	29	0.0088	27	0.0060	24	0.0060
205PM005.01S4	0.5	-	0.02-0.07xd	50	0.0110	45	0.0110	43	0.0082	38	0.0069
205PM005.02S4	0.5	2	0.02-0.07xd	50	0.0110	45	0.0110	43	0.0082	38	0.0069
205PM005.03S4	0.5	3	0.02-0.07xd	45	0.0101	45	0.0091	38	0.0082	34	0.0069
205PM005.04S4	0.5	4	0.02-0.07xd	45	0.0101	41	0.0101	38	0.0082	34	0.0069
205PM005.05S4	0.5	5	0.02-0.07xd	45	0.0101	41	0.0101	38	0.0082	34	0.0069
205PM005.06S4	0.5	6	0.02-0.07xd	40	0.0088	36	0.0113	34	0.0060	30	0.0060
205PM005.08S4	0.5	8	0.02-0.07xd	40	0.0076	36	0.0088	34	0.0057	30	0.0051
205PM005.10S4	0.5	10	0.02-0.07xd	35	0.0060	32	0.0060	30	0.0052	26	0.0040
205PM006.012S4	0.6	-	0.02-0.07xd	60	0.0158	54	0.0157	51	0.0117	45	0.0099
205PM006.02S4	0.6	2	0.02-0.07xd	60	0.0158	54	0.0157	51	0.0117	45	0.0099
205PM006.03S4	0.6	3	0.02-0.07xd	54	0.0144	49	0.0144	46	0.0117	41	0.0099
205PM006.04S4	0.6	4	0.02-0.07xd	54	0.0144	49	0.0144	46	0.0117	41	0.0099
205PM006.05S4	0.6	5	0.02-0.07xd	54	0.0144	49	0.0144	46	0.0117	41	0.0099
205PM006.06S4	0.6	6	0.02-0.07xd	54	0.0144	49	0.0144	46	0.0117	41	0.0099
205PM006.08S4	0.6	8	0.02-0.07xd	48	0.0126	43	0.0126	41	0.0085	36	0.0085
205PM006.10S4	0.6	10	0.02-0.07xd	48	0.0126	43	0.0126	41	0.0085	36	0.0085
205PM007.012S4	0.7	-	0.02-0.07xd	70	0.0158	63	0.0157	60	0.0117	53	0.0099
205PM007.02S4	0.7	2	0.02-0.07xd	70	0.0158	63	0.0157	60	0.0117	53	0.0099
205PM007.04S4	0.7	4	0.02-0.07xd	63	0.0144	57	0.0144	54	0.0117	47	0.0099
205PM007.06S4	0.7	6	0.02-0.07xd	63	0.0144	57	0.0144	54	0.0117	47	0.0099
205PM007.08S4	0.7	8	0.02-0.07xd	56	0.0126	51	0.0126	48	0.0085	42	0.0085
205PM007.10S4	0.7	10	0.02-0.07xd	56	0.0126	51	0.0126	48	0.0085	42	0.0085
205PM008.02S4	0.8	2	0.02-0.07xd	80	0.0158	72	0.0157	68	0.0117	60	0.0099
205PM008.04S4	0.8	4	0.02-0.07xd	80	0.0158	72	0.0157	68	0.0117	60	0.0099
205PM008.06S4	0.8	6	0.02-0.07xd	72	0.0144	65	0.0144	61	0.0117	54	0.0099
205PM008.08S4	0.8	8	0.02-0.07xd	72	0.0144	65	0.0144	61	0.0117	54	0.0099
205PM008.10S4	0.8	10	0.02-0.07xd	64	0.0126	58	0.0126	55	0.0085	48	0.0085
205PM009.015S4	0.9	-	0.02-0.07xd	81	0.0144	73	0.0144	69	0.0117	61	0.0099
205PM009.03S4	0.9	3	0.02-0.07xd	81	0.0144	73	0.0144	69	0.0117	61	0.0099
205PM009.05S4	0.9	5	0.02-0.07xd	81	0.0144	73	0.0144	69	0.0117	61	0.0099
205PM009.08S4	0.9	8	0.02-0.07xd	81	0.0144	73	0.0144	69	0.0117	61	0.0099
205PM009.10S4	0.9	10	0.02-0.07xd	72	0.0126	65	0.0126	61	0.0085	54	0.0085

205PM	Dia. mm	L2 mm	ap	Steel HRC<25		Stainless Steel HRC<25-35		Heat Resistant Steel HRC<35-50		Tempered Steel HRC<50-70	
				Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
205PM010.02S4	1.0	2	0.02-0.07xd	90	0.0235	81	0.0236	77	0.0191	68	0.0162
205PM010.03S4	1.0	3	0.02-0.07xd	90	0.0235	81	0.0236	77	0.0191	68	0.0162
205PM010.04S4	1.0	4	0.02-0.07xd	90	0.0235	81	0.0236	77	0.0191	68	0.0162
205PM010.05S4	1.0	5	0.02-0.07xd	81	0.0216	73	0.0216	69	0.0175	61	0.0148
205PM010.06S4	1.0	6	0.02-0.07xd	81	0.0216	73	0.0216	69	0.0175	61	0.0148
205PM010.08S4	1.0	8	0.02-0.07xd	81	0.0216	73	0.0216	69	0.0175	61	0.0148
205PM010.10S4	1.0	10	0.02-0.07xd	81	0.0216	73	0.0216	69	0.0175	61	0.0148
205PM010.12S4	1.0	12	0.02-0.07xd	72	0.0189	65	0.0189	61	0.0128	54	0.0128
205PM010.14S4	1.0	14	0.02-0.07xd	72	0.0189	65	0.0189	61	0.0128	54	0.0128
205PM010.16S4	1.0	16	0.02-0.07xd	72	0.0162	65	0.0162	61	0.0122	54	0.0108
205PM010.18S4	1.0	18	0.02-0.07xd	72	0.0162	65	0.0162	61	0.0122	54	0.0108
205PM010.20S4	1.0	20	0.02-0.07xd	63	0.0131	57	0.0129	54	0.0096	48	0.0086
205PM011.025S4	1.1	-	0.02-0.07xd	99	0.0235	90	0.0236	85	0.0191	75	0.0162
205PM012.04S4	1.2	-	0.02-0.07xd	96	0.0236	87	0.0236	82	0.0176	72	0.0148
205PM012.03S4	1.2	3	0.02-0.07xd	96	0.0236	87	0.0236	82	0.0176	72	0.0148
205PM012.04S4	1.2	4	0.02-0.07xd	96	0.0236	87	0.0236	82	0.0176	72	0.0148
205PM012.05S4	1.2	5	0.02-0.07xd	96	0.0236	87	0.0236	82	0.0176	72	0.0148
205PM012.06S4	1.2	6	0.02-0.07xd	96	0.0236	87	0.0236	82	0.0176	72	0.0148
205PM012.08S4	1.2	8	0.02-0.07xd	87	0.0216	78	0.0216	74	0.0175	65	0.0148
205PM012.10S4	1.2	10	0.02-0.07xd	87	0.0216	78	0.0216	74	0.0175	65	0.0148
205PM012.12S4	1.2	12	0.02-0.07xd	87	0.0216	78	0.0216	74	0.0175	65	0.0148
205PM012.14S4	1.2	14	0.02-0.07xd	77	0.0216	69	0.0216	66	0.0175	58	0.0148
205PM012.16S4	1.2	16	0.02-0.07xd	77	0.0216	69	0.0216	66	0.0175	58	0.0148
205PM013.04S4	1.3	-	0.02-0.07xd	91	0.0236	82	0.0236	78	0.0175	69	0.0149
205PM014.04S4	1.4	-	0.02-0.07xd	98	0.0236	89	0.0236	84	0.0175	74	0.0149
205PM014.04S4	1.4	4	0.02-0.07xd	98	0.0236	89	0.0236	84	0.0175	74	0.0149
205PM014.05S4	1.4	5	0.02-0.07xd	98	0.0236	89	0.0236	84	0.0175	74	0.0149
205PM014.06S4	1.4	6	0.02-0.07xd	98	0.0236	89	0.0236	84	0.0175	74	0.0149
205PM014.08S4	1.4	8	0.02-0.07xd	89	0.0216	80	0.0216	75	0.0175	66	0.0165
205PM014.10S4	1.4	10	0.02-0.07xd	89	0.0216	80	0.0216	75	0.0175	66	0.0165
205PM014.12S4	1.4	12	0.02-0.07xd	89	0.0216	80	0.0216	75	0.0175	66	0.0165
205PM015.04S4	1.5	4	0.02-0.07xd	106	0.0236	95	0.0236	90	0.0175	79	0.0149
205PM015.05S4	1.5	5	0.02-0.07xd	106	0.0236	95	0.0236	90	0.0175	79	0.0149
205PM015.06S4	1.5	6	0.02-0.07xd	106	0.0236	95	0.0236	90	0.0175	79	0.0149
205PM015.08S4	1.5	8	0.02-0.07xd	95	0.0216	85	0.0216	81	0.0175	71	0.0148
205PM015.10S4	1.5	10	0.02-0.07xd	95	0.0216	85	0.0216	81	0.0175	71	0.0148
205PM015.12S4	1.5	12	0.02-0.07xd	95	0.0216	85	0.0216	81	0.0175	71	0.0148
205PM015.14S4	1.5	14	0.02-0.07xd	95	0.0216	85	0.0216	81	0.0175	71	0.0148
205PM015.16S4	1.5	16	0.02-0.07xd	84	0.0189	76	0.0189	72	0.0128	63	0.0128
205PM015.18S4	1.5	18	0.02-0.07xd	84	0.0189	76	0.0189	72	0.0128	63	0.0128
205PM015.20S4	1.5	20	0.02-0.07xd	84	0.0189	76	0.0189	72	0.0128	63	0.0128
205PM016.016S4	1.6	-	0.02-0.07xd	104	0.0263	94	0.0263	89	0.0195	78	0.0165
205PM016.04S4	1.6	4	0.02-0.07xd	104	0.0263	94	0.0263	89	0.0195	78	0.0165
205PM016.05S4	1.6	5	0.02-0.07xd	104	0.0263	94	0.0263	89	0.0195	78	0.0165
205PM016.06S4	1.6	6	0.02-0.07xd	104	0.0263	94	0.0263	89	0.0195	78	0.0165
205PM016.08S4	1.6	8	0.02-0.07xd	104	0.0263	94	0.0263	89	0.0195	78	0.0165
205PM016.10S4	1.6	10	0.02-0.07xd	94	0.0240	85	0.0240	80	0.0195	71	0.0165
205PM016.12S4	1.6	12	0.02-0.07xd	94	0.0240	85	0.0240	80	0.0195	71	0.0165
205PM016.14S4	1.6	14	0.02-0.07xd	94	0.0240	85	0.0240	80	0.0195	71	0.0165
205PM016.16S4	1.6	16	0.02-0.07xd	94	0.0240	85	0.0240	80	0.0195	71	0.0165
205PM016.18S4	1.6	18	0.02-0.07xd	84	0.0210	75	0.0210	71	0.0142	63	0.0143
205PM016.20S4	1.6	20	0.02-0.07xd	84	0.0210	75	0.0210	71	0.0142	63	0.0143

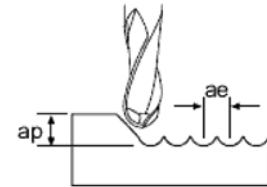
205PM	Dia. mm	L2 mm	ap	Steel HRC<25		Stainless Steel HRC<25-35		Heat Resistant Steel HRC<35-50		Tempered Steel HRC<50-70	
				Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
205PM017.05S4	1.7	-	0.02-0.07xd	111	0.0263	100	0.0263	94	0.0195	83	0.0165
205PM018.05S4	1.8	-	0.02-0.07xd	118	0.0263	106	0.0263	100	0.0195	88	0.0165
205PM019.05S4	1.9	-	0.02-0.07xd	100	0.0315	90	0.0315	85	0.0234	75	0.0198
205PM020.04S4	2.0	4	0.02-0.07xd	106	0.0315	95	0.0315	90	0.0234	79	0.0198
205PM020.06S4	2.0	6	0.02-0.07xd	106	0.0315	95	0.0315	90	0.0234	79	0.0198
205PM020.08S4	2.0	8	0.02-0.07xd	106	0.0315	95	0.0315	90	0.0234	79	0.0198
205PM020.10S4	2.0	10	0.02-0.07xd	106	0.0315	95	0.0315	90	0.0234	79	0.0198
205PM020.12S4	2.0	12	0.02-0.07xd	95	0.0288	85	0.0288	81	0.0234	71	0.0198
205PM020.14S4	2.0	14	0.02-0.07xd	95	0.0288	85	0.0288	81	0.0234	71	0.0198
205PM020.16S4	2.0	16	0.02-0.07xd	95	0.0288	85	0.0288	81	0.0234	71	0.0198
205PM020.18S4	2.0	18	0.02-0.07xd	95	0.0288	85	0.0288	81	0.0234	71	0.0198
205PM020.20S4	2.0	20	0.02-0.07xd	95	0.0288	85	0.0288	81	0.0234	71	0.0198
205PM020.22S4	2.0	22	0.02-0.07xd	84	0.0252	76	0.0252	72	0.0171	63	0.0171
205PM020.25S4	2.0	25	0.02-0.07xd	84	0.0252	76	0.0252	72	0.0171	63	0.0171
205PM020.30S4	2.0	30	0.02-0.07xd	84	0.0252	76	0.0252	72	0.0171	63	0.0171
205PM025.08S4	2.5	-	0.02-0.07xd	113	0.0394	102	0.0394	96	0.0292	85	0.0248
205PM025.08S6	2.5	-	0.02-0.07xd	113	0.0394	102	0.0394	96	0.0292	85	0.0248
205PM025.10S6	2.5	10	0.02-0.07xd	113	0.0394	102	0.0394	96	0.0292	85	0.0248
205PM025.12S6	2.5	12	0.02-0.07xd	113	0.0394	102	0.0394	96	0.0292	85	0.0248
205PM025.14S6	2.5	14	0.02-0.07xd	102	0.0360	92	0.0360	86	0.0292	76	0.0247
205PM025.16S6	2.5	16	0.02-0.07xd	102	0.0360	92	0.0360	86	0.0292	76	0.0247
205PM025.20S6	2.5	20	0.02-0.07xd	102	0.0360	92	0.0360	86	0.0292	76	0.0247
205PM025.25S6	2.5	25	0.02-0.07xd	89	0.0286	81	0.0287	76	0.0232	67	0.0197
205PM030.08S4	3.0	-	0.02-0.07xd	121	0.0394	109	0.0394	102	0.0292	90	0.0247
205PM030.06S6	3.0	6	0.02-0.07xd	121	0.0394	109	0.0394	102	0.0292	90	0.0247
205PM030.08S6	3.0	8	0.02-0.07xd	121	0.0394	109	0.0394	102	0.0292	90	0.0247
205PM030.10S6	3.0	10	0.02-0.07xd	121	0.0394	109	0.0394	102	0.0292	90	0.0247
205PM030.12S6	3.0	12	0.02-0.07xd	121	0.0394	109	0.0394	102	0.0292	90	0.0247
205PM030.14S6	3.0	14	0.02-0.07xd	109	0.0360	98	0.0360	92	0.0293	81	0.0248
205PM030.16S6	3.0	16	0.02-0.07xd	109	0.0360	98	0.0360	92	0.0293	81	0.0248
205PM030.18S6	3.0	18	0.02-0.07xd	109	0.0360	98	0.0360	92	0.0293	81	0.0248
205PM030.20S6	3.0	20	0.02-0.07xd	109	0.0360	98	0.0360	92	0.0293	81	0.0248
205PM030.25S6	3.0	25	0.02-0.07xd	109	0.0360	98	0.0360	92	0.0293	81	0.0248
205PM030.30S6	3.0	30	0.02-0.07xd	109	0.0360	98	0.0360	92	0.0293	81	0.0248
205PM030.35S6	3.0	35	0.02-0.07xd	96	0.0360	87	0.0360	82	0.0292	72	0.0247
205PM030.40S6	3.0	40	0.02-0.07xd	96	0.0360	87	0.0360	82	0.0292	72	0.0247
205PM040.04S4	4.0	-	0.02-0.07xd	118	0.1000	106	0.0900	100	0.0850	89	0.0640
205PM040.08S6	4.0	8	0.02-0.07xd	118	0.1000	106	0.0900	100	0.0850	89	0.0640
205PM040.10S6	4.0	10	0.02-0.07xd	118	0.1000	106	0.0900	100	0.0850	89	0.0640
205PM040.12S6	4.0	12	0.02-0.07xd	118	0.1000	106	0.0900	100	0.0850	89	0.0640
205PM040.14S6	4.0	14	0.02-0.07xd	118	0.1000	106	0.0900	100	0.0850	89	0.0640
205PM040.16S6	4.0	16	0.02-0.07xd	118	0.1000	106	0.0900	100	0.0850	89	0.0640
205PM040.18S6	4.0	18	0.02-0.07xd	106	0.0900	96	0.0810	90	0.0765	80	0.0640
205PM040.20S6	4.0	20	0.02-0.07xd	106	0.0900	96	0.0810	90	0.0765	80	0.0640
205PM040.25S6	4.0	25	0.02-0.07xd	106	0.0900	96	0.0810	90	0.0765	80	0.0640
205PM040.30S6	4.0	30	0.02-0.07xd	106	0.0900	96	0.0810	90	0.0765	80	0.0640
205PM040.35S6	4.0	35	0.02-0.07xd	96	0.0900	86	0.0810	81	0.0765	72	0.0640
205PM040.40S6	4.0	40	0.02-0.07xd	96	0.0900	86	0.0810	81	0.0765	72	0.0640
205PM040.45S6	4.0	45	0.02-0.07xd	84	0.0716	76	0.0644	70	0.0619	63	0.0509
205PM040.50S6	4.0	50	0.02-0.07xd	84	0.0716	76	0.0644	70	0.0619	63	0.0509

205M	Dia. mm	L2 mm	rp mm	ap	Steel HRC < 25		Stainless HRC < 25-35		Heat Resistant Steel HRC < 35-50		Tempered Steel HRC < 50-70	
					Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
205M030.08R01S6	3.0	-	0.1	0.02-0.07xd	136	0.0491	122	0.0492	115	0.0491	102	0.0393
205M030.10R01S6	3.0	10	0.1	0.02-0.07xd	136	0.0491	122	0.0492	115	0.0491	102	0.0393
205M030.12R01S6	3.0	12	0.1	0.02-0.07xd	122	0.0491	110	0.0491	104	0.0491	92	0.0393
205M030.16R01S6	3.0	16	0.1	0.02-0.07xd	122	0.0491	110	0.0491	104	0.0491	92	0.0393
205M030.08R02S6	3.0	-	0.2	0.02-0.07xd	136	0.0491	122	0.0492	115	0.0491	102	0.0393
205M030.10R02S6	3.0	10	0.2	0.02-0.07xd	136	0.0491	122	0.0492	115	0.0491	102	0.0393
205M030.12R02S6	3.0	12	0.2	0.02-0.07xd	122	0.0491	110	0.0491	104	0.0491	92	0.0393
205M030.16R02S6	3.0	16	0.2	0.02-0.07xd	122	0.0491	110	0.0491	104	0.0491	92	0.0393
205M030.20R02S6	3.0	20	0.2	0.02-0.07xd	110	0.0491	99	0.0492	93	0.0491	82	0.0393
205M030.08R03S6	3.0	-	0.3	0.02-0.07xd	136	0.0491	122	0.0492	115	0.0491	102	0.0393
205M030.10R03S6	3.0	10	0.3	0.02-0.07xd	136	0.0491	122	0.0492	115	0.0491	102	0.0393
205M030.12R03S6	3.0	12	0.3	0.02-0.07xd	122	0.0491	110	0.0491	104	0.0491	92	0.0393
205M030.16R03S6	3.0	16	0.3	0.02-0.07xd	122	0.0491	110	0.0491	104	0.0491	92	0.0393
205M030.20R03S6	3.0	20	0.3	0.02-0.07xd	110	0.0491	99	0.0492	93	0.0491	82	0.0393
205M030.08R05S6	3.0	-	0.5	0.02-0.07xd	136	0.0491	122	0.0492	115	0.0491	102	0.0393
205M030.10R05S6	3.0	10	0.5	0.02-0.07xd	136	0.0491	122	0.0492	115	0.0491	102	0.0393
205M030.12R05S6	3.0	12	0.5	0.02-0.07xd	122	0.0491	110	0.0491	104	0.0491	92	0.0393
205M030.16R05S6	3.0	16	0.5	0.02-0.07xd	122	0.0491	110	0.0491	104	0.0491	92	0.0393
205M030.20R05S6	3.0	20	0.5	0.02-0.07xd	110	0.0491	99	0.0492	93	0.0491	82	0.0393
205M030.08R1S6	3.0	-	1.0	0.02-0.07xd	136	0.0491	122	0.0492	115	0.0491	102	0.0393
205M040.08R01S6	4.0	-	0.1	0.02-0.07xd	131	0.0668	117	0.0677	111	0.0636	98	0.0561
205M040.10R01S6	4.0	10	0.1	0.02-0.07xd	131	0.0668	117	0.0677	111	0.0636	98	0.0561
205M040.12R01S6	4.0	12	0.1	0.02-0.07xd	131	0.0668	117	0.0677	111	0.0636	98	0.0561
205M040.16R01S6	4.0	16	0.1	0.02-0.07xd	131	0.0668	117	0.0677	111	0.0636	98	0.0561
205M040.08R02S6	4.0	-	0.2	0.02-0.07xd	131	0.0668	117	0.0677	111	0.0636	98	0.0561
205M040.12R02S6	4.0	12	0.2	0.02-0.07xd	131	0.0668	117	0.0677	111	0.0636	98	0.0561
205M040.16R02S6	4.0	16	0.2	0.02-0.07xd	131	0.0668	117	0.0677	111	0.0636	98	0.0561
205M040.20R02S6	4.0	20	0.2	0.02-0.07xd	110	0.0668	99	0.0677	93	0.0636	92	0.0561
205M040.25R02S6	4.0	25	0.2	0.02-0.07xd	100	0.0668	90	0.0677	85	0.0636	82	0.0561
205M040.08R03S6	4.0	-	0.3	0.02-0.07xd	131	0.0668	117	0.0677	111	0.0636	98	0.0561
205M040.12R03S6	4.0	12	0.3	0.02-0.07xd	131	0.0668	117	0.0677	111	0.0636	98	0.0561
205M040.16R03S6	4.0	16	0.3	0.02-0.07xd	131	0.0668	117	0.0677	111	0.0636	98	0.0561
205M040.20R03S6	4.0	20	0.3	0.02-0.07xd	131	0.0668	117	0.0677	111	0.0636	98	0.0561
205M040.25R03S6	4.0	25	0.3	0.02-0.07xd	100	0.0668	90	0.0677	85	0.0636	82	0.0561
205M040.08R05S6	4.0	-	0.5	0.02-0.07xd	131	0.0668	117	0.0677	111	0.0636	98	0.0561
205M040.12R05S6	4.0	12	0.5	0.02-0.07xd	131	0.0668	117	0.0677	111	0.0636	98	0.0561
205M040.16R05S6	4.0	16	0.5	0.02-0.07xd	131	0.0668	117	0.0677	111	0.0636	98	0.0561
205M040.20R05S6	4.0	20	0.5	0.02-0.07xd	131	0.0668	117	0.0677	111	0.0636	98	0.0561
205M040.25R05S6	4.0	25	0.5	0.02-0.07xd	100	0.0668	90	0.0677	85	0.0636	82	0.0561
205M040.08R1S6	4.0	-	1.0	0.02-0.07xd	131	0.0668	117	0.0677	111	0.0636	98	0.0561
205M050.10R1S6	5.0	-	0.5	0.02-0.07xd	127	0.0676	115	0.0675	108	0.0638	96	0.0561
205M060.12R01S6	6.0	-	0.1	0.02-0.07xd	136	0.0674	122	0.0673	115	0.0639	102	0.0565
205M060.16R01S6	6.0	16	0.1	0.02-0.07xd	136	0.0674	122	0.0673	115	0.0639	102	0.0565
205M060.20R01S6	6.0	20	0.1	0.02-0.07xd	136	0.0674	122	0.0673	115	0.0639	102	0.0565
205M060.12R02S6	6.0	-	0.2	0.02-0.07xd	136	0.0674	122	0.0673	115	0.0639	102	0.0565
205M060.16R02S6	6.0	16	0.2	0.02-0.07xd	136	0.0674	122	0.0673	115	0.0639	102	0.0565
205M060.20R02S6	6.0	20	0.2	0.02-0.07xd	136	0.0674	122	0.0673	115	0.0639	102	0.0565
205M060.12R03S6	6.0	-	0.3	0.02-0.07xd	136	0.0674	122	0.0673	115	0.0639	102	0.0565
205M060.16R03S6	6.0	16	0.3	0.02-0.07xd	136	0.0674	122	0.0673	115	0.0639	102	0.0565
205M060.20R03S6	6.0	20	0.3	0.02-0.07xd	136	0.0674	122	0.0673	115	0.0639	102	0.0565
205M060.12R05S6	6.0	-	0.5	0.02-0.07xd	136	0.0674	122	0.0673	115	0.0639	102	0.0565
205M060.16R05S6	6.0	16	0.5	0.02-0.07xd	136	0.0674	122	0.0673	115	0.0639	102	0.0565
205M060.20R05S6	6.0	20	0.5	0.02-0.07xd	136	0.0674	122	0.0673	115	0.0639	102	0.0565
205M060.12R1S6	6.0	-	1.0	0.02-0.07xd	136	0.0674	122	0.0673	115	0.0639	102	0.0565
205M060.16R1S6	6.0	16	1.0	0.02-0.07xd	136	0.0674	122	0.0673	115	0.0639	102	0.0565
205M060.20R1S6	6.0	20	1.0	0.02-0.07xd	136	0.0674	122	0.0673	115	0.0639	102	0.0565
205M060.25R1S6	6.0	25	1.0	0.02-0.07xd	136	0.0674	122	0.0673	115	0.0639	102	0.0565

Roughing

CODE: 200DRJ

Material	Steel							
Hardness	< HRC 48				< HRC 55			
Dia.	Vc	Fz	ae	ap	Vc	Fz	ae	ap
1.0	150-250	0.02-0.04	0.100 x d	0.100 x d	100-180	0.02-0.03	0.100 x d	0.100 x d
2.0-3.0	150-250	0.04-0.07	0.100 x d	0.100 x d	100-180	0.03-0.06	0.100 x d	0.100 x d
4.0-6.0	150-250	0.08-0.11	0.100 x d	0.100 x d	100-180	0.07-0.10	0.100 x d	0.100 x d
8.0-10.0	150-250	0.11-0.14	0.100 x d	0.100 x d	100-180	0.10-0.13	0.100 x d	0.100 x d
12.0	150-251	0.12-0.15	0.100 x d	0.100 x d	100-180	0.12-0.14	0.100 x d	0.100 x d
16.0	150-250	0.14-0.16	0.100 x d	0.100 x d	100-180	0.14-0.16	0.100 x d	0.100 x d
20.0	150-250	0.17-0.20	0.100 x d	0.100 x d	100-180	0.16-0.18	0.100 x d	0.100 x d

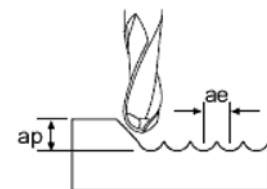


Material	Steel								Cast Iron			
Hardness	< HRC 60				< HRC 65							
Dia.	Vc	Fz	ae	ap	Vc	Fz	ae	ap	Vc	Fz	ae	ap
1.0	80-120	0.02-0.03	0.060 x d	0.060 x d	70-100	0.02-0.03	0.060 x d	0.060 x d	150-300	0.02-0.04	0.200 x d	0.200 x d
2.0-3.0	80-120	0.03-0.05	0.060 x d	0.060 x d	70-100	0.03-0.05	0.060 x d	0.060 x d	150-300	0.04-0.07	0.200 x d	0.200 x d
4.0-6.0	80-120	0.07-0.08	0.060 x d	0.060 x d	70-100	0.07-0.08	0.060 x d	0.060 x d	150-300	0.08-0.11	0.200 x d	0.200 x d
8.0-10.0	80-120	0.09-0.11	0.060 x d	0.060 x d	70-100	0.09-0.11	0.060 x d	0.060 x d	150-300	0.11-0.14	0.200 x d	0.200 x d
12.0	80-120	0.09-0.11	0.060 x d	0.060 x d	70-100	0.09-0.11	0.060 x d	0.060 x d	150-300	0.12-0.15	0.200 x d	0.200 x d
15.0	80-120	0.10-0.13	0.060 x d	0.060 x d	70-100	0.10-0.13	0.060 x d	0.060 x d	150-300	0.14-0.16	0.200 x d	0.200 x d
20.0	80-120	0.12-0.15	0.060 x d	0.060 x d	70-100	0.12-0.15	0.060 x d	0.060 x d	150-300	0.17-0.20	0.200 x d	0.200 x d

Finishing

CODE: 200DRJ

Material	Steel							
Hardness	< HRC 48				< HRC 55			
Dia.	Vc	Fz	ae	ap	Vc	Fz	ae	ap
1.0	200-300	0.02-0.03	0.03-0.05	0.03-0.05	150-200	0.02-0.03	0.03-0.05	0.03-0.05
2.0-3.0	200-300	0.02-0.03	0.07-0.10	0.07-0.10	150-200	0.02-0.03	0.07-0.10	0.07-0.10
4.0-6.0	200-300	0.05-0.06	0.10-0.15	0.10-0.15	150-200	0.05-0.06	0.10-0.15	0.10-0.15
8.0-10.0	200-300	0.06-0.07	0.15-0.20	0.15-0.20	150-200	0.06-0.07	0.15-0.20	0.15-0.20
12.0	200-300	0.07-0.08	0.20-0.24	0.20-0.24	150-200	0.07-0.08	0.20-0.24	0.20-0.24
16.0	200-300	0.08-0.10	0.24-0.28	0.24-0.28	150-200	0.08-0.09	0.24-0.28	0.24-0.28
20.0	200-300	0.10-0.12	0.28-0.32	0.28-0.32	150-200	0.09-0.10	0.28-0.32	0.28-0.32



Material	Steel								Cast Iron			
Hardness	< HRC 60				< HRC 65							
Dia.	Vc	Fz	ae	ap	Vc	Fz	ae	ap	Vc	Fz	ae	ap
1.0	100-130	0.01-0.02	0.03-0.05	0.03-0.05	80-120	0.01-0.02	0.03-0.05	0.03-0.05	200-300	0.02-0.03	0.100 x d	0.100 x d
2.0-3.0	100-130	0.01-0.03	0.07-0.10	0.07-0.10	80-120	0.01-0.03	0.07-0.10	0.07-0.10	200-300	0.02-0.03	0.100 x d	0.100 x d
4.0-6.0	100-130	0.03-0.05	0.10-0.15	0.10-0.15	80-120	0.03-0.05	0.10-0.15	0.10-0.15	200-300	0.05-0.06	0.100 x d	0.100 x d
8.0-10.0	100-130	0.05-0.07	0.15-0.20	0.15-0.20	80-120	0.05-0.07	0.15-0.20	0.15-0.20	200-300	0.06-0.07	0.100 x d	0.100 x d
12.0	100-130	0.06-0.07	0.20-0.24	0.20-0.24	80-120	0.06-0.07	0.20-0.24	0.20-0.24	200-300	0.07-0.08	0.100 x d	0.100 x d
15.0	100-130	0.07-0.08	0.24-0.28	0.24-0.28	80-120	0.07-0.08	0.24-0.28	0.24-0.28	200-300	0.08-0.10	0.100 x d	0.100 x d
20.0	100-130	0.08-0.10	0.28-0.32	0.28-0.32	80-120	0.08-0.10	0.28-0.32	0.28-0.32	200-300	0.10-0.12	0.100 x d	0.100 x d

Side Milling

CODE: Y300

Material	Carbon Steel-Cast Iron		Alloy Steel-Tool Steel		Stainless Steel	
Hardness	<30HRC		<45HRC			
Dia.	RPM	Feed mm/min	RPM	Feed mm/min	RPM	Feed mm/min
ap	ae<0.1 x d (d<3mm) ap<1.5 x d		ae>0.2 x d (d>3mm) ap<1.5 x d			
2	11000	600	7200	310	6000	210
3	8500	770	5300	380	4400	220
4	7200	850	4400	480	3700	250
6	5300	940	3200	490	2700	270
8	4000	1000	2400	560	2000	280
10	3200	1000	1900	480	1600	300
12	2700	950	1600	440	1300	300
16	2000	720	1200	350	1000	260
20	1600	600	1000	290	800	240

Slot Milling

CODE: Y300

Material	Carbon Steel-Cast Iron		Alloy Steel-Tool Steel		Stainless Steel	
Hardness	<30HRC		<45HRC			
Dia.	RPM	Feed mm/min	RPM	Feed mm/min	RPM	Feed mm/min
ap	ae=1 x d	ap<1 x d	ae=1 x d	ap<1 x d	ae=1 x d	ap<0.5 x d
2	11000	500	7200	260	6000	130
3	8500	650	5300	320	4200	130
4	7200	650	4400	370	3400	140
6	5300	720	3200	380	2200	140
8	4000	780	2400	430	1600	140
10	3200	770	1900	370	1300	150
12	2700	730	1600	340	1100	150
16	2000	600	1200	290	800	130
20	1600	500	1000	240	640	120

Drilling & Milling

CODE: Y300

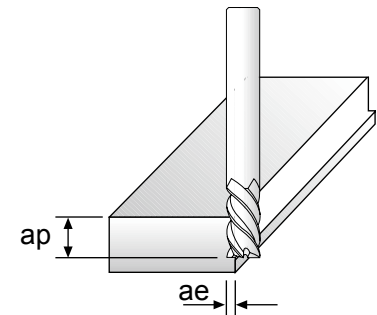
Material	Carbon Steel-Cast Iron		Alloy Steel-Tool Steel		Stainless Steel	
Hardness	<30HRC		<45HRC			
Dia.	RPM	Feed mm/min	RPM	Feed mm/min	RPM	Feed mm/min
ap	ap<1 x d		ap<1 x d		ap>0.5 x d	
2	11000	200	7200	140	6000	30
3	8500	250	5300	180	4400	50
4	7200	300	4400	210	3700	60
6	5300	300	3200	210	2700	70
8	4000	320	2400	220	2000	80
10	3200	340	1900	240	1600	70
12	2700	320	1600	220	1300	70
16	2000	250	1200	180	1000	55
20	1600	200	1000	140	800	55

Slot Milling

CODE: Y400-Y400V

Material	Carbon Steel-Cast Iron			Alloy Steel-Tool Steel			Steel		
Hardness	750N/mm2			<30HRC			<40HRC		
Dia.	Vc	Fz	RPM	Vc	Fz	RPM	Vc	Fz	RPM
ap	ae=0.2xd ap=1.5xd								
3	100	0.02	10600	78	0.02	8280	65	0.02	6900
4	100	0.03	7960	78	0.03	6210	65	0.03	5175
5	100	0.03	6370	78	0.03	4968	65	0.03	4140
6	100	0.06	5300	78	0.06	4140	65	0.06	3450
8	100	0.08	3980	78	0.08	3105	65	0.08	2587
10	100	0.09	3185	78	0.09	2480	65	0.09	2070
12	100	0.10	2650	78	0.10	2070	65	0.10	1720
16	100	0.12	1990	78	0.12	1550	65	0.12	1293
20	100	0.12	1592	78	0.12	1242	65	0.12	1035

Material	Steel					
Hardness	<45HRC			<50HRC		
Dia.	Vc	Fz	RPM	Vc	Fz	RPM
ap	ae=0.1xd ap=1.5xd			ae=0.05xd ap=1xd		
3	62	0.02	6580	60	0.02	6370
4	62	0.03	4936	60	0.03	4780
5	62	0.04	3950	60	0.04	3820
6	62	0.04	3290	60	0.04	3184
8	62	0.06	2468	60	0.06	2388
10	62	0.07	1974	60	0.07	1910
12	62	0.08	1645	60	0.07	1592
16	62	0.09	1234	60	0.08	1194
20	62	0.10	990	60	0.08	955

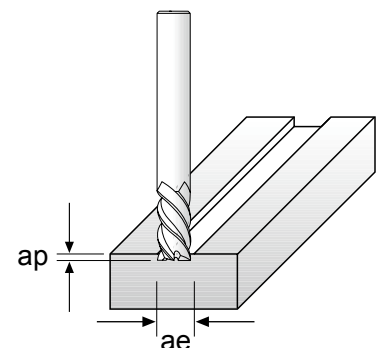


Slot Milling

CODE: Y400-Y400V

Material	Carbon Steel-Cast Iron			Alloy Steel-Tool Steel			Steel		
Hardness	750N/mm2			<30HRC			<40HRC		
Dia.	Vc	Fz	RPM	Vc	Fz	RPM	Vc	Fz	RPM
ap	ap=0.5xd								
3	100	0.02	8500	78	0.03	6350	65	0.02	5850
4	100	0.03	6350	78	0.03	4750	65	0.03	4400
5	100	0.03	5100	78	0.04	3800	65	0.03	3500
6	100	0.04	4250	78	0.04	3200	65	0.06	2900
8	100	0.05	3200	78	0.05	2400	65	0.08	2200
10	100	0.06	2550	78	0.07	1900	65	0.09	1750
12	100	0.07	2100	78	0.07	1600	65	0.10	1450
16	100	0.09	1600	78	0.09	1200	65	0.12	1100
20	100	0.10	1250	78	0.10	955	65	0.12	875

Material	Steel					
Hardness	<45HRC			<50HRC		
Dia.	Vc	Fz	RPM	Vc	Fz	RPM
ap	ap=0.5xd					
3	62	0.02	5500	60	0.02	4450
4	62	0.03	4150	60	0.03	3350
5	62	0.03	3300	60	0.04	2650
6	62	0.04	2750	60	0.05	2250
8	62	0.06	2050	60	0.06	1650
10	62	0.07	1650	60	0.07	1350
12	62	0.08	1400	60	0.09	1100
16	62	0.09	1050	60	0.09	835
20	62	0.10	830	60	0.10	670



CODE: Y400D

low Speed , High Feed

Material	Carbon Steel-Cast Iron			Alloy Steel-Tool Steel			Stainless Steel		
Hardness	750N/mm2			<30HRC			<45HRC		
Dia.	RPM	Vf	Fz	RPM	Vf	Fz	RPM	Vf	Fz
ap	R<2 ap=0.2XR ae=0.5xD 2<R ap=0.4mm ae=0.5xD								
2	15200	4990	0.08	15200	4510	0.07	10450	3180	0.07
3	9970	5940	0.14	9970	5320	0.13	7080	3705	0.13
4	7550	6270	0.20	7550	5700	0.19	5270	3990	0.19
5	6030	6650	0.28	6030	6030	0.25	4230	4230	0.25
6	5030	6650	0.33	5030	6030	0.30	3510	4230	0.30
8	3800	6650	0.43	3800	6030	0.39	2660	4230	0.40
10	3040	6650	0.54	3040	6030	0.49	2140	4230	0.50
12	2520	6650	0.66	2520	6030	0.59	1760	4230	0.60

Material	Carbon Steel-Cast Iron			Heat Resistant Steel-Ti Alloy			Steel		
Hardness	<40HRC			<55HRC			<65HRC		
Dia.	RPM	Vf	Fz	RPM	Vf	Fz	RPM	Vf	Fz
ap	R<2 ap=0.2XR ae=0.5xD 2<R ap=0.4mm ae=0.5xD						R<2 ap=0.1XR ae=0.5xD 2<R ap=0.2mm ae=0.5xD		
2	11870	3610	0.07	7550	2040	0.06	4510	820	0.04
3	8070	4270	0.13	5030	2470	0.12	3040	940	0.08
4	6030	4560	0.19	3800	2610	0.17	2280	1000	0.11
5	4840	4840	0.25	3040	2710	0.22	1800	1090	0.15
6	4040	4840	0.30	2530	2710	0.26	1520	1090	0.18
8	3040	4840	0.40	1900	2710	0.36	1140	1090	0.23
10	2420	4840	0.50	1520	2710	0.44	910	1090	0.30
12	2000	4840	0.60	1280	2710	0.53	750	1090	0.36

The cutting speeds are referred to milling by interpolation. In case to milling without interpolation, reduce the parameters 50%60%

High Speed

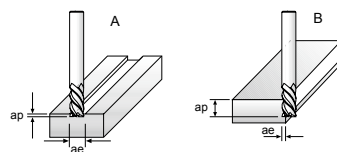
CODE: Y400D

Material	Carbon Steel-Cast Iron			Alloy Steel-Tool Steel			Stainless Steel		
Hardness	750N/mm2			<30HRC			<45HRC		
Dia.	RPM	Vf	Fz	RPM	Vf	Fz	RPM	Vf	Fz
ap	R<2 ap=0.2XR ae=0.5xD 2<R ap=0.4mm ae=0.5xD								
2	30250	9970	0.08	30400	9070	0.07	22800	6800	0.07
3	19950	11870	0.14	19950	11400	0.14	15200	7980	0.13
4	15200	12350	0.20	15200	11400	0.18	11400	8550	0.18
5	11870	13300	0.28	11870	11870	0.25	9070	9070	0.25
6	10070	13300	0.33	10070	12060	0.30	7550	9070	0.30
8	7550	13300	0.44	7550	12060	0.40	5650	9070	0.40
10	6030	13300	0.55	6030	12060	0.50	4510	9070	0.50
12	5030	13300	0.66	5030	12060	0.60	3800	9070	0.60

Material	Carbon Steel-Cast Iron			Heat Resistant Steel-Ti Alloy			Steel		
Hardness	<40HRC			<55HRC			<60HRC		
Dia.	RPM	Vf	Fz	RPM	Vf	Fz	RPM	Vf	Fz
ap	ap=0.1xR ae=0.3xD			R<2 ap=0.2XR ae=0.5xD 2<R ap=0.4mm ae=0.5xD			R<2 ap=0.1XR ae=0.5xD 2<R ap=0.2mm ae=0.5xD		
2	30400	9070	0.07	22800	6130	0.06	15200	2710	0.04
3	19950	11400	0.14	15200	7450	0.12	9980	3130	0.07
4	15200	11400	0.18	11400	7790	0.17	7550	3370	0.11
5	11870	11870	0.25	9070	8170	0.22	6030	3610	0.15
6	10070	12060	0.30	7550	8170	0.27	5030	3610	0.18
8	7550	12060	0.40	5650	8170	0.36	3800	3610	0.23
10	6030	12060	0.50	4510	8170	0.45	3040	3610	0.30
12	5030	12060	0.60	3800	8170	0.53	2520	3610	0.36

The cutting speeds are referred to milling by interpolatin. In case to milling without interpolation, reduce the parameters 50%60%

Roughing-High Speed



CODE: Y400RS-A

Material	Steel								Cast Iron			
Hardness	HRC 48-60				< HRC 70							
Dia.	Vc	Fz	ae	ap	Vc	Fz	ae	ap	Vc	Fz	ae	ap
2.0	160	0.014	1 x d	0.044 x d	75	0.010	1 x d	0.028 x d	150	0.014	1 x d	0.042 x d
3.0	160	0.014	1 x d	0.044 x d	75	0.010	1 x d	0.028 x d	150	0.014	1 x d	0.042 x d
4.0	160	0.027	1 x d	0.044 x d	75	0.020	1 x d	0.028 x d	150	0.028	1 x d	0.042 x d
5.0	160	0.027	1 x d	0.044 x d	75	0.020	1 x d	0.028 x d	150	0.028	1 x d	0.042 x d
6.0	160	0.027	1 x d	0.044 x d	75	0.020	1 x d	0.028 x d	150	0.028	1 x d	0.042 x d
8.0	160	0.055	1 x d	0.044 x d	75	0.043	1 x d	0.028 x d	150	0.058	1 x d	0.042 x d
10.0	160	0.055	1 x d	0.044 x d	75	0.043	1 x d	0.028 x d	150	0.058	1 x d	0.042 x d
12.0	160	0.083	1 x d	0.044 x d	75	0.065	1 x d	0.028 x d	150	0.084	1 x d	0.042 x d

Finishing

Material	Steel								Cast Iron			
Hardness	HRC 48-60				< HRC 70							
Dia.	Vc	Fz	ae	ap	Vc	Fz	ae	ap	Vc	Fz	ae	ap
2.0	200	0.014	1 x d	0.020 x d	85	0.012	1 x d	0.010 x d	175	0.015	1 x d	0.020 x d
3.0	200	0.014	1 x d	0.020 x d	85	0.012	1 x d	0.010 x d	175	0.015	1 x d	0.020 x d
4.0	200	0.029	1 x d	0.020 x d	85	0.023	1 x d	0.010 x d	175	0.031	1 x d	0.020 x d
5.0	200	0.029	1 x d	0.020 x d	85	0.023	1 x d	0.010 x d	175	0.031	1 x d	0.020 x d
6.0	200	0.029	1 x d	0.020 x d	85	0.049	1 x d	0.010 x d	175	0.031	1 x d	0.020 x d
8.0	200	0.059	1 x d	0.020 x d	85	0.049	1 x d	0.010 x d	175	0.062	1 x d	0.020 x d
10.0	200	0.059	1 x d	0.020 x d	85	0.075	1 x d	0.010 x d	175	0.062	1 x d	0.020 x d
12.0	200	0.088	1 x d	0.020 x d	85	0.075	1 x d	0.010 x d	175	0.091	1 x d	0.020 x d

CODE: Y400RS-B

Roughing

Material	Steel								Cast Iron			
Hardness	HRC 48-60				< HRC 70							
Dia.	Vc	Fz	ae	ap	Vc	Fz	ae	ap	Vc	Fz	ae	ap
2.0	275	0.021	0.033 x d	0.820 x d	125	0.015	0.028 x d	0.750 x d	250	0.021	0.021 x d	0.850 x d
3.0	275	0.021	0.033 x d	0.820 x d	125	0.015	0.028 x d	0.750 x d	250	0.021	0.021 x d	0.850 x d
4.0	275	0.042	0.033 x d	0.820 x d	125	0.030	0.028 x d	0.750 x d	250	0.043	0.021 x d	0.850 x d
5.0	275	0.042	0.033 x d	0.820 x d	125	0.030	0.028 x d	0.750 x d	250	0.043	0.021 x d	0.850 x d
6.0	275	0.042	0.033 x d	0.820 x d	125	0.030	0.028 x d	0.750 x d	250	0.043	0.021 x d	0.850 x d
8.0	275	0.085	0.033 x d	0.820 x d	125	0.065	0.028 x d	0.750 x d	250	0.088	0.021 x d	0.850 x d
10.0	275	0.085	0.033 x d	0.820 x d	125	0.065	0.028 x d	0.750 x d	250	0.088	0.021 x d	0.850 x d
12.0	275	0.128	0.033 x d	0.820 x d	125	0.100	0.028 x d	0.750 x d	250	0.129	0.021 x d	0.850 x d

Finishing

Material	Steel								Cast Iron			
Hardness	HRC 48-60				< HRC 70							
Dia.	Vc	Fz	ae	ap	Vc	Fz	ae	ap	Vc	Fz	ae	ap
2.0	340	0.022	0.020 x d	0.650 x d	140	0.018	0.010 x d	0.450 x d	285	0.023	0.010 x d	0.640 x d
3.0	340	0.022	0.020 x d	0.650 x d	140	0.018	0.010 x d	0.450 x d	285	0.023	0.010 x d	0.640 x d
4.0	340	0.045	0.020 x d	0.650 x d	140	0.035	0.010 x d	0.450 x d	285	0.047	0.010 x d	0.640 x d
5.0	340	0.045	0.020 x d	0.650 x d	140	0.035	0.010 x d	0.450 x d	285	0.047	0.010 x d	0.640 x d
6.0	340	0.045	0.020 x d	0.650 x d	140	0.035	0.010 x d	0.450 x d	285	0.047	0.010 x d	0.640 x d
8.0	340	0.090	0.020 x d	0.650 x d	140	0.075	0.010 x d	0.450 x d	285	0.095	0.010 x d	0.640 x d
10.0	340	0.090	0.020 x d	0.650 x d	140	0.075	0.010 x d	0.450 x d	285	0.095	0.010 x d	0.640 x d
12.0	340	0.135	0.020 x d	0.650 x d	140	0.115	0.010 x d	0.450 x d	285	0.140	0.010 x d	0.640 x d

Roughing

CODE: 406 Y406

Material	Free Machining Steel			Tool Steel			Tool Steel & Steel Casting		
Hardness									
Dia.	Vc	Fz	ap	Vc	Fz	ap	Vc	Fz	ap
2	150-250	0.02-0.04	1.0-1.5	150-220	0.02-0.04	1.0-1.5	120-170	0.02-0.04	1.0-1.5
3-4	150-250	0.03-0.06	1.5-2.0	150-220	0.03-0.06	1.5-2.0	120-170	0.03-0.06	1.5-2.0
5-6	150-250	0.05-0.08	2.5-3.0	150-220	0.05-0.08	2.5-3.0	120-170	0.05-0.08	2.5-3.0
8	150-250	0.05-0.08	3.5-4.0	150-220	0.05-0.08	3.5-4.0	120-170	0.05-0.08	3.5-4.0
10	150-250	0.06-0.10	4.5-5.0	150-220	0.06-0.10	4.5-5.0	120-170	0.06-0.10	4.5-5.0
12	150-250	0.07-0.12	5.0-6.0	150-220	0.07-0.12	5.0-6.0	120-170	0.07-0.12	5.0-6.0
16	150-250	0.08-0.12	6.0-8.0	150-220	0.08-0.12	6.0-8.0	120-170	0.08-0.12	6.0-8.0
20	150-250	0.08-0.12	6.0-8.0	150-220	0.08-0.12	6.0-8.0	120-170	0.08-0.12	6.0-8.0
Material	Cast Iron								
Hardness	Grey			Spheroidal			Tempered Casting		
Dia.	Vc	Fz	ap	Vc	Fz	ap	Vc	Fz	ap
2	250-300	0.02-0.04	1.0-1.5	150-200	0.02-0.04	1.0-1.5	100-160	0.02-0.04	1.0-1.5
3-4	250-300	0.03-0.06	1.5-2.0	150-200	0.03-0.06	1.5-2.0	100-160	0.03-0.06	1.5-2.0
5-6	250-300	0.05-0.08	2.5-3.0	150-200	0.05-0.08	2.5-3.0	100-160	0.05-0.08	2.5-3.0
8	250-300	0.05-0.08	3.4-4.0	150-200	0.05-0.08	3.5-4.0	100-160	0.05-0.08	3.5-4.0
10	250-300	0.06-0.10	4.5-5.0	150-200	0.06-0.10	4.5-5.0	100-160	0.06-0.10	4.5-5.0
12	250-300	0.07-0.12	5.0-6.0	150-200	0.07-0.12	5.0-6.0	100-160	0.07-0.12	5.0-6.0
16	250-300	0.08-0.12	6.0-8.0	150-200	0.08-0.12	6.0-8.0	100-160	0.08-0.12	6.0-8.0
20	250-300	0.08-0.12	6.0-8.0	150-200	0.08-0.12	6.0-8.0	100-160	0.08-0.12	6.0-8.0

Finishing

CODE: 406 Y406

Material	Free Machining Steel			Tool Steel			Tool Steel & Steel Casting		
Hardness									
Dia.	Vc	Fz	ap	Vc	Fz	ap	Vc	Fz	ap
2	250-350	0.02-0.04	1.0-1.5	220-300	0.02-0.04	1.0-1.5	170-250	0.02-0.04	1.0-1.5
3-4	250-350	0.03-0.06	1.5-2.0	220-300	0.03-0.06	1.5-2.0	170-250	0.03-0.06	1.5-2.0
5-6	250-350	0.05-0.08	2.5-3.0	220-300	0.05-0.08	2.5-3.0	170-250	0.05-0.08	2.5-3.0
8	250-350	0.05-0.08	3.5-4.0	220-300	0.05-0.08	3.5-4.0	170-250	0.05-0.08	3.5-4.0
10	250-350	0.06-0.10	4.5-5.0	220-300	0.06-0.10	4.5-5.0	170-250	0.06-0.10	4.5-5.0
12	250-350	0.07-0.12	5.0-6.0	220-300	0.07-0.12	5.0-6.0	170-250	0.07-0.12	5.0-6.0
16	250-350	0.08-0.12	6.0-8.0	220-300	0.08-0.12	6.0-8.0	170-250	0.08-0.12	6.0-8.0
20	250-350	0.08-0.12	6.0-8.0	220-300	0.08-0.12	6.0-8.0	170-250	0.08-0.12	6.0-8.0
Material	Steel								
Hardness	<50HRC			<60HRC			<70HRC		
Dia.	Vc	Fz	ap	Vc	Fz	ap	Vc	Fz	ap
2	190-250	0.02-0.04	0.04-0.1	120-250	0.02-0.04	0.04-0.1	80-120	0.02-0.04	0.04-0.1
3-4	190-250	0.03-0.06	0.08-0.2	120-250	0.03-0.06	0.08-0.2	80-120	0.03-0.06	0.08-0.2
5-6	190-250	0.05-0.08	0.1-0.3	120-250	0.05-0.08	0.1-0.3	80-120	0.05-0.08	0.1-0.3
8	190-250	0.05-0.08	0.15-0.4	120-250	0.05-0.08	0.15-0.4	80-120	0.05-0.08	0.15-0.35
10	190-250	0.06-0.10	0.2-0.5	120-250	0.06-0.10	0.2-0.5	80-120	0.06-0.10	0.2-0.45
12	190-250	0.07-0.12	0.2-0.6	120-250	0.07-0.12	0.2-0.6	80-120	0.07-0.12	0.2-0.5
16	190-250	0.08-0.12	0.2-0.8	120-250	0.08-0.12	0.2-0.8	80-120	0.08-0.12	0.2-0.6
20	190-250	0.08-0.12	0.2-0.8	120-250	0.08-0.12	0.2-0.8	80-120	0.08-0.12	0.2-0.6
Material	Cast Iron								
Hardness	Grey			Spheroidal			Tempered Casting		
Dia.	Vc	Fz	ap	Vc	Fz	ap	Vc	Fz	ap
2	300-400	0.02-0.04	1.0-1.5	200-250	0.02-0.04	1.0-1.5	160-200	0.02-0.04	1.0-1.5
3-4	300-400	0.03-0.06	1.5-2.0	200-250	0.03-0.06	1.5-2.0	160-200	0.03-0.06	1.5-2.0
5-6	300-400	0.05-0.08	2.5-3.0	200-250	0.05-0.08	2.5-3.0	160-200	0.05-0.08	2.5-3.0
8	300-400	0.05-0.08	3.5-4.0	200-250	0.05-0.08	3.5-4.0	160-200	0.05-0.08	3.5-4.0
10	300-400	0.06-0.10	4.5-5.0	200-250	0.06-0.10	4.5-5.0	160-200	0.06-0.10	4.5-5.0
12	300-400	0.07-0.12	5.0-6.0	200-250	0.07-0.12	5.0-6.0	160-200	0.07-0.12	5.0-6.0
16	300-400	0.08-0.12	6.0-8.0	200-250	0.08-0.12	6.0-8.0	160-200	0.08-0.12	6.0-8.0
20	300-400	0.08-0.12	6.0-8.0	200-250	0.08-0.12	6.0-8.0	160-200	0.08-0.12	6.0-8.0

ae= 50%-60%-100% of the diameter

Roughing

CODE: 406 Y406

Material	Free Machining Steel			Tool Steel			Tool Steel & Steel Casting		
Hardness									
Dia.	Vc	Fz	ap	Vc	Fz	ap	Vc	Fz	ap
2	150-250	0.02-0.04	1.0-1.5	150-220	0.02-0.04	1.0-1.5	120-170	0.02-0.04	1.0-1.5
3-4	150-250	0.03-0.06	1.5-2.0	150-220	0.03-0.06	1.5-2.0	120-170	0.03-0.06	1.5-2.0
5-6	150-250	0.05-0.08	2.5-3.0	150-220	0.05-0.08	2.5-3.0	120-170	0.05-0.08	2.5-3.0
8	150-250	0.05-0.08	3.5-4.0	150-220	0.05-0.08	3.5-4.0	120-170	0.05-0.08	3.5-4.0
10	150-250	0.06-0.10	4.5-5.0	150-220	0.06-0.10	4.5-5.0	120-170	0.06-0.10	4.5-5.0
12	150-250	0.07-0.12	5.0-6.0	150-220	0.07-0.12	5.0-6.0	120-170	0.07-0.12	5.0-6.0
16	150-250	0.08-0.12	6.0-8.0	150-220	0.08-0.12	6.0-8.0	120-170	0.08-0.12	6.0-8.0
20	150-250	0.08-0.12	6.0-8.0	150-220	0.08-0.12	6.0-8.0	120-170	0.08-0.12	6.0-8.0

Material	Cast Iron								
Hardness	Grey			Spheroidal			Tempered Casting		
Dia.	Vc	Fz	ap	Vc	Fz	ap	Vc	Fz	ap
2	250-300	0.02-0.04	1.0-1.5	150-200	0.02-0.04	1.0-1.5	100-160	0.02-0.04	1.0-1.5
3-4	250-300	0.03-0.06	1.5-2.0	150-200	0.03-0.06	1.5-2.0	100-160	0.03-0.06	1.5-2.0
5-6	250-300	0.05-0.08	2.5-3.0	150-200	0.05-0.08	2.5-3.0	100-160	0.05-0.08	2.5-3.0
8	250-300	0.05-0.08	3.4-4.0	150-200	0.05-0.08	3.5-4.0	100-160	0.05-0.08	3.5-4.0
10	250-300	0.06-0.10	4.5-5.0	150-200	0.06-0.10	4.5-5.0	100-160	0.06-0.10	4.5-5.0
12	250-300	0.07-0.12	5.0-6.0	150-200	0.07-0.12	5.0-6.0	100-160	0.07-0.12	5.0-6.0
16	250-300	0.08-0.12	6.0-8.0	150-200	0.08-0.12	6.0-8.0	100-160	0.08-0.12	6.0-8.0
20	250-300	0.08-0.12	6.0-8.0	150-200	0.08-0.12	6.0-8.0	100-160	0.08-0.12	6.0-8.0

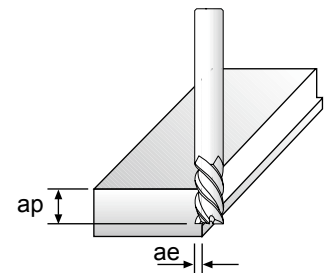
Finishing

CODE: 406 Y406

Material	Free Machining Steel			Tool Steel			Tool Steel & Steel Casting		
Hardness									
Dia.	Vc	Fz	ap	Vc	Fz	ap	Vc	Fz	ap
2	250-350	0.02-0.04	1.0-1.5	220-300	0.02-0.04	1.0-1.5	170-250	0.02-0.04	1.0-1.5
3-4	250-350	0.03-0.06	1.5-2.0	220-300	0.03-0.06	1.5-2.0	170-250	0.03-0.06	1.5-2.0
5-6	250-350	0.05-0.08	2.5-3.0	220-300	0.05-0.08	2.5-3.0	170-250	0.05-0.08	2.5-3.0
8	250-350	0.05-0.08	3.5-4.0	220-300	0.05-0.08	3.5-4.0	170-250	0.05-0.08	3.5-4.0
10	250-350	0.06-0.10	4.5-5.0	220-300	0.06-0.10	4.5-5.0	170-250	0.06-0.10	4.5-5.0
12	250-350	0.07-0.12	5.0-6.0	220-300	0.07-0.12	5.0-6.0	170-250	0.07-0.12	5.0-6.0
16	250-350	0.08-0.12	6.0-8.0	220-300	0.08-0.12	6.0-8.0	170-250	0.08-0.12	6.0-8.0
20	250-350	0.08-0.12	6.0-8.0	220-300	0.08-0.12	6.0-8.0	170-250	0.08-0.12	6.0-8.0

Material	Steel								
Hardness	<50HRC			<60HRC			<70HRC		
Dia.	Vc	Fz	ap	Vc	Fz	ap	Vc	Fz	ap
2	190-250	0.02-0.04	0.04-0.1	120-250	0.02-0.04	0.04-0.1	80-120	0.02-0.04	0.04-0.1
3-4	190-250	0.03-0.06	0.08-0.2	120-250	0.03-0.06	0.08-0.2	80-120	0.03-0.06	0.08-0.2
5-6	190-250	0.05-0.08	0.1-0.3	120-250	0.05-0.08	0.1-0.3	80-120	0.05-0.08	0.1-0.3
8	190-250	0.05-0.08	0.15-0.4	120-250	0.05-0.08	0.15-0.4	80-120	0.05-0.08	0.15-0.35
10	190-250	0.06-0.10	0.2-0.5	120-250	0.06-0.10	0.2-0.5	80-120	0.06-0.10	0.2-0.45
12	190-250	0.07-0.12	0.2-0.6	120-250	0.07-0.12	0.2-0.6	80-120	0.07-0.12	0.2-0.5
16	190-250	0.08-0.12	0.2-0.8	120-250	0.08-0.12	0.2-0.8	80-120	0.08-0.12	0.2-0.6
20	190-250	0.08-0.12	0.2-0.8	120-250	0.08-0.12	0.2-0.8	80-120	0.08-0.12	0.2-0.6

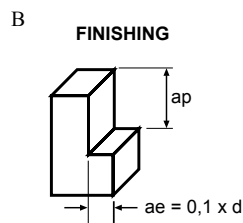
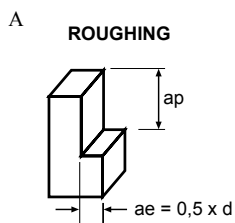
Material	Cast Iron								
Hardness	Grey			Spheroidal			Tempered Casting		
Dia.	Vc	Fz	ap	Vc	Fz	ap	Vc	Fz	ap
2	300-400	0.02-0.04	1.0-1.5	200-250	0.02-0.04	1.0-1.5	160-200	0.02-0.04	1.0-1.5
3-4	300-400	0.03-0.06	1.5-2.0	200-250	0.03-0.06	1.5-2.0	160-200	0.03-0.06	1.5-2.0
5-6	300-400	0.05-0.08	2.5-3.0	200-250	0.05-0.08	2.5-3.0	160-200	0.05-0.08	2.5-3.0
8	300-400	0.05-0.08	3.5-4.0	200-250	0.05-0.08	3.5-4.0	160-200	0.05-0.08	3.5-4.0
10	300-400	0.06-0.10	4.5-5.0	200-250	0.06-0.10	4.5-5.0	160-200	0.06-0.10	4.5-5.0
12	300-400	0.07-0.12	5.0-6.0	200-250	0.07-0.12	5.0-6.0	160-200	0.07-0.12	5.0-6.0
16	300-400	0.08-0.12	6.0-8.0	200-250	0.08-0.12	6.0-8.0	160-200	0.08-0.12	6.0-8.0
20	300-400	0.08-0.12	6.0-8.0	200-250	0.08-0.12	6.0-8.0	160-200	0.08-0.12	6.0-8.0



ap= up to 100%
of Cutting Length

ae= up to 20%
of the diameter
for non-hardened materials

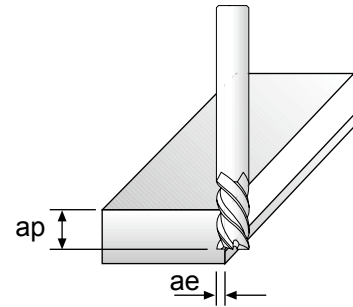
ae= up to 5%
of the diameter
for hardened materials



CODE: 500RV

Material MATERIAL	APPLICATION	Roughing										
		Vc m/min	Fz mm/ Tooth									
			D.3	D.4	D.6	D.8	D.10	D.12	D.14	D.16	D.20	
CODE: 500RV - A	ConstructionSteel 500 N/mm ²	ap=1xd ap=2xd (ae=0.25xd)	170-200 110-130	0.024 0.016	0.028 0.021	0.041 0.027	0.058 0.035	0.073 0.044	0.09 0.052	0.1 0.058	0.11 0.063	0.13 0.08
	ConstructionSteel 510-800 N/mm ²	ap=1xd ap=2xd (ae=0.25xd)	160-188 100-125	0.022 0.015	0.026 0.02	0.036 0.031	0.052 0.042	0.066 0.05	0.085 0.058	0.093 0.05	0.1 0.071	0.12 0.09
	Tool Steel 850-1000 N/mm ²	ap=1xd ap=2xd (ae=0.25xd)	70-90 80-100	0.016 0.01	0.02 0.015	0.029 0.025	0.042 0.032	0.053 0.039	0.063 0.048	0.071 0.053	0.079 0.058	0.097 0.073
	Stainless Steel 850 N/mm ²	ap=1xd	95-115	0.019	0.024	0.039	0.053	0.065	0.079	0.087	0.095	0.11
	Super Alloy 850-1000 N/mm ²	ap=1xd ap=2xd (ae=0.25xd)	150-185 95-120	0.019 0.01	0.024 0.015	0.039 0.027	0.053 0.035	0.065 0.044	0.079 0.052	0.087 0.058	0.095 0.063	0.11 0.08
	Super Alloy 1000-1200 N/mm ²	ap=1xd ap=2xd (ae=0.25xd)	125-150 80-100	0.013 0.01	0.02 0.015	0.033 0.02	0.047 0.032	0.059 0.039	0.072 0.048	0.08 0.053	0.088 0.058	0.1 0.073
	Ni Alloy 1200 N/mm ²	ap=1xd	56-70	0.013	0.02	0.033	0.047	0.059	0.072	0.08	0.088	0.1
	Cast Iron 240HB	ap=1xd ap=2xd (ae=0.25xd)	220-270 140-170	0.022 0.015	0.026 0.02	0.036 0.0311	0.052 0.042	0.066 0.05	0.085 0.058	0.093 0.065	0.1 0.071	0.12 0.09
	Cast Iron <300HB	ap=1xd ap=2xd (ae=0.25xd)	115-140 130-160	0.019 0.01	0.024 0.016	0.039 0.027	0.053 0.064	0.065 0.044	0.079 0.052	0.087 0.058	0.095 0.063	0.11 0.08
	Cast Iron <850 N/mm ²	ap=1xd ap=2xd (ae=0.25xd)	90-110 60-70	0.013 0.01	0.02 0.015	0.033 0.025	0.047 0.032	0.059 0.039	0.072 0.048	0.08 0.053	0.088 0.058	0.1 0.073
Cast Iron 850-1200 N/mm ²	ap=1xd ap=2xd (ae=0.25xd)	75-90 50-60	0.016 0.01	0.021 0.015	0.029 0.024	0.042 0.032	0.053 0.038	0.063 0.046	0.071 0.05	0.079 0.054	0.097 0.066	

Material MATERIAL	APPLICATION	Finishing										
		Vc m/min	Fz mm/ Tooth									
			D.3	D.4	D.6	D.8	D.10	D.12	D.14	D.16	D.20	
CODE: 500RV - B	ConstructionSteel 500 N/mm ²	ap=1xd ap=2xd	210-250 140-170	0.01 0.01	0.015 0.015	0.025 0.025	0.032 0.032	0.039 0.039	0.048 0.048	0.053 0.53	0.058 0.058	0.073 0.073
	ConstructionSteel 510-800 N/mm ²	ap=1xd ap=2xd	190-230 125-155	0.013 0.01	0.039 0.015	0.033 0.024	0.047 0.032	0.059 0.038	0.072 0.046	0.08 0.05	0.088 0.054	0.1 0.066
	Tool Steel 850-1000 N/mm ²	ap=1xd ap=2xd	160-200 100-120	0.015 0.004	0.02 0.007	0.031 0.013	0.042 0.019	0.05 0.025	0.059 0.03	0.065 0.034	0.071 0.038	0.09 0.045
	Stainless Steel 850 N/mm ²	ap=1xd	70-90	0.016	0.021	0.029	0.042	0.053	0.063	0.071	0.079	0.097
	Super Alloy 850-1000 N/mm ²	ap=1xd ap=2xd	180-230 120-140	0.016 0.007	0.021 0.016	0.029 0.017	0.042 0.024	0.053 0.03	0.063 0.036	0.071 0.041	0.079 0.045	0.097 0.057
	Super Alloy 1000-1200 N/mm ²	ap=1xd ap=2xd	155-190 100-125	0.015 0.004	0.02 0.007	0.031 0.013	0.042 0.019	0.05 0.025	0.059 0.03	0.065 0.034	0.071 0.038	0.09 0.045
	Ni Alloy 1200 N/mm ²	ap=1xd	70-90	0.015	0.02	0.031	0.042	0.05	0.059	0.065	0.071	0.09
	Cast Iron 240HB	ap=1xd ap=2xd	255-313 180-220	0.013 0.01	0.02 0.015	0.033 0.024	0.047 0.032	0.059 0.038	0.072 0.046	0.08 0.05	0.088 0.054	0.1 0.065
	Cast Iron <300HB	ap=1xd ap=2xd	250-310 160-200	0.016 0.007	0.021 0.011	0.029 0.017	0.042 0.024	0.053 0.03	0.063 0.036	0.071 0.041	0.079 0.045	0.097 0.057
	Cast Iron <850 N/mm ²	ap=1xd ap=2xd	120-145 80-95	0.015 0.004	0.02 0.007	0.031 0.013	0.042 0.019	0.05 0.025	0.059 0.03	0.065 0.034	0.071 0.038	0.09 0.045
	Cast Iron 850-1200 N/mm ²	ap=1xd ap=2xd	100-120 60-75	0.01 0.003	0.015 0.006	0.027 0.011	0.035 0.016	0.044 0.021	0.052 0.026	0.058 0.029	0.063 0.032	0.08 0.038



Roughing - High speed cutting

CODE: Y508

Material	Steel							
Hardness	< HRC 48-60				< HRC 72			
Dia.	Vc	Fz	ae	ap	Vc	Fz	ae	ap
6.0	275	0.042	0.033 x d	0.820 x d	125	0.030	0.028x d	0.750x d
8.0	275	0.085	0.033 x d	0.820 x d	125	0.065	0.028x d	0.750x d
10.0	275	0.085	0.033 x d	0.820 x d	125	0.065	0.028x d	0.750x d
12.0	275	0.128	0.033 x d	0.820 x d	125	0.100	0.028x d	0.750x d
16.0	275	0.128	0.033 x d	0.820 x d	125	0.100	0.028x d	0.750x d
20.0	275	0.170	0.033 x d	0.820 x d	125	0.144	0.028x d	0.750x d

Finishing - High speed cutting

CODE: Y508

Material	Steel							
Hardness	< HRC 48-60				< HRC 72			
Dia.	Vc	Fz	ae	ap	Vc	Fz	ae	ap
6.0	340	0.045	0.020 x d	0.650 x d	140	0.030	0.010x d	0.450x d
8.0	340	0.090	0.020 x d	0.650 x d	140	0.075	0.010x d	0.450x d
10.0	340	0.090	0.020 x d	0.650 x d	140	0.075	0.010x d	0.450x d
12.0	340	0.135	0.020 x d	0.650 x d	140	0.115	0.010x d	0.450x d
16.0	340	0.135	0.020 x d	0.650 x d	140	0.115	0.010x d	0.450x d
20.0	340	0.180	0.020 x d	0.650 x d	140	0.165	0.010x d	0.450x d

CODE: T2204

Material	Hardness	Applications			Vc	Fz(mm/Tooth)						
		Side Milling	Slot Milling	Slot Milling								
	HRC	ap	ae	ap	m/min	Φ6	Φ8	Φ10	Φ12	Φ16	Φ20	Φ25
Steels	35-45	1.5 X d	0.40 X d	0.5 X d	150	0.020	0.025	0.030	0.040	0.050	0.065	0.070
	45-55	1.5 X d	0.33 X d	0.5 X d	110	0.015	0.020	0.025	0.030	0.040	0.050	0.055
	55-60	1.5 X d	0.25 X d	0.3 X d	90	0.010	0.015	0.020	0.025	0.030	0.040	0.045
Titanium	<40	1.5 X d	0.33 X d	0.5 X d	70	0.030	0.035	0.040	0.050	0.070	0.080	0.085
	>40	1.5 X d	0.25 X d	0.30 X d	60	0.025	0.030	0.035	0.045	0.060	0.075	0.080
Cast Iron	-	1.5 X d	0.20 X d	0.25 X d	30	0.015	0.020	0.025	0.030	0.040	0.050	0.055



Via Torino, 502 10032 BRANDIZO (TO) ITALY
Tel: +39 011 917 95 14/917 95 15
Telefax: +39 011 917 95 55/917 95 02
www.nuovacumet.it
E-mail: info@nuovacumet.it