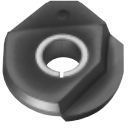


● Applicable Inserts

Shape	Description
	RDFG 08FR 10FR 12FR 16FR 20FR 25FR

• Check the Top Face Mark of both insert and toolholder.

● Recommended ap

Description	ap	Pf	Application
Standard Neck	MRF08-S12	0.2 (Max0.3)	0.8
	MRF10-S12	0.2	1
	MRF12-S12	0.5	1.2
	MRF16-S20	0.5	1.6
	MRF20-S25	1	2
	MRF25-S32	1	2.5
Long Neck	MRF08-S12-130	0.2 (Max0.3)	0.8
	MRF10-S12-150	0.2	1
	MRF12-S12-160	0.5	1.2
	MRF16-S20-160	0.5	1.6
	MRF20-S25-180	1	2
	MRF25-S32-200	1	2.5
Carbide Standard Neck	MRFW08-S08	0.2 (Max0.3)	0.8
	MRFW10-S10	0.2	1
	MRFW12-S12	0.5	1.2
Carbide Long Neck	MRFW08-S08-130	0.2 (Max0.3)	0.8
	MRFW10-S10-140	0.2	1
	MRFW12-S12-150	0.5	1.2

For ø8, Holder may be broken because of over load if ap exceeds 0.3mm.

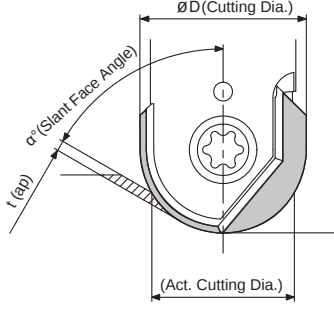
◆ Recommended Cutting Conditions (At Cutting Dia. øD)

Workpiece Material	Insert Grade	Vc (m/min)	fz (mm/t)	ø8		ø10		ø12	
				Vc (m/min) (n: min ⁻¹)	fz (mm/t) (Vf: mm/min)	Vc (m/min) (n: min ⁻¹)	fz (mm/t) (Vf: mm/min)	Vc (m/min) (n: min ⁻¹)	fz (mm/t) (Vf: mm/min)
Stainless Steel	PR915	50~150	0.1~0.2	100 (3980)	0.15 (1190)	100 (3180)	0.15 (950)	100 (2650)	0.15 (800)
Carbon Steel	PR915	100~200	0.1~0.3	150 (5970)	0.2 (2930)	150 (4770)	0.2 (1190)	150 (3980)	0.2 (1590)
Alloy Steel	PR915	80~180	0.1~0.3	130 (5170)	0.2 (2070)	130 (4140)	0.2 (1660)	130 (3450)	0.2 (1380)
Mold Steel	PR915	50~150	0.1~0.2	100 (3980)	0.15 (1190)	100 (3180)	0.15 (950)	100 (2650)	0.15 (800)
Cast Iron	PR915	100~200	0.2~0.4	150 (5970)	0.3 (3580)	150 (4770)	0.3 (2860)	150 (3980)	0.3 (2390)
Workpiece Material	Insert Grade	Vc (m/min)	fz (mm/t)	ø16		ø20		ø25	
				Vc (m/min) (n: min ⁻¹)	fz (mm/t) (Vf: mm/min)	Vc (m/min) (n: min ⁻¹)	fz (mm/t) (Vf: mm/min)	Vc (m/min) (n: min ⁻¹)	fz (mm/t) (Vf: mm/min)
Stainless Steel	PR915	50~150	0.1~0.2	100 (1990)	0.15 (600)	100 (1590)	0.15 (480)	100 (1270)	0.15 (380)
Carbon Steel	PR915	100~200	0.1~0.3	150 (2980)	0.2 (1190)	150 (2390)	0.2 (950)	150 (1910)	0.2 (760)
Alloy Steel	PR915	80~180	0.1~0.3	130 (2950)	0.2 (1030)	130 (2070)	0.2 (830)	130 (1660)	0.2 (660)
Mold Steel	PR915	50~150	0.1~0.2	100 (1990)	0.15 (600)	100 (1590)	0.15 (480)	100 (1270)	0.15 (380)
Cast Iron	PR915	100~200	0.2~0.4	150 (2980)	0.3 (1790)	150 (2390)	0.3 (1430)	150 (1910)	0.3 (1150)

◆ Actual Cutting Speed (Vd) Conversion Coefficient Table

The actual Vc varies depending on ap and slant face angle.

Vd can be obtained by dividing the conversion coefficient into the recommended cutting speed.

Model	Tool Dia.(øD)	ø8		ø10		ø12	
	ap(t:mm)	0.1	0.2	0.1	0.2	0.2	0.5
	15°	1.00	1.00	1.00	1.00	1.00	1.00
	30°	1.05	1.02	1.05	1.03	1.04	1.01
	45°	1.18	1.12	1.20	1.14	1.16	1.07
	60°	1.47	1.34	1.51	1.38	1.42	1.24
	75°	2.15	1.82	2.24	1.92	2.02	1.60
	90°(Horizontal Plane)	4.48	3.22	5.06	3.57	3.92	2.50
	Tool Dia.(øD)	ø16		ø20		ø25	
	ap(t:mm)	0.2	0.5	0.5	1	0.5	1
	15°	1.00	1.00	1.00	1.02	1.00	1.01
	30°	1.05	1.01	1.02	1.00	1.03	1.00
	45°	1.18	1.10	1.12	1.06	1.14	1.08
	60°	1.47	1.30	1.34	1.21	1.38	1.25
	75°	2.14	1.73	1.83	1.53	1.93	1.62
	90°(Horizontal Plane)	4.48	2.87	3.20	2.29	3.57	2.55

E.g.: Suppose tool dia. 8mm, ap=0.1mm, slant face angle 90°.The actual cutting speed Vd for carbon steel machining, when Vc is 150m/min at the biggest diameter, Vd can be obtained as Vd=150÷4.48=33.5m/min

M



Milling