

MSRS Face Mill



Facing

Spare Parts

Description		Spare Parts					
		Clamp Screw	Wrench	Cartridge	Clamp Screw	Wrench	Anti-seize Compound
Coarse pitch type	MSRS 15080R-○○(M)	SB-60120TR	TT-25L	MAP-1806	SB-40140TR	DT-15	MP-1
	MSRS 15100R-○○(M)						
	15315R-○○(M)						
Close pitch type	MSRS 15080R-○○(M)	SB-60120TR	TT-25L	-	-	-	MP-1
	MSRS 15100R-○○(M)						
	15315R-○○(M)						



Coat Anti-seize Compound (MP-1) thinly on clamp screw when insert is fixed.

Recommended Cutting Conditions

Workpiece Material	fz (mm/t)			Recommended Insert Grade (Cutting Speed Vc : m/min)		
				PVD Coated Carbide		
	NB2P+NB3P	NB2+NB3	NB2T+NB3T	PR660	PR830	PR905
Carbon Steel	0.15	0.2	0.3	☆ 150~200	★ 180~220	-
Alloy Steel	0.15	0.2	0.3	☆ 150~200	★ 180~220	-
Mold Steel	0.1	0.15	0.2	☆ 120~180	★ 150~200	-
Gray Cast Iron	0.2	0.25	0.35	-	☆ 180~220	★ 150~250
Nodular Cast Iron	0.15	0.2	0.3	-	☆ 180~220	★ 180~220

★: 1st Recommendation

☆: 2nd Recommendation

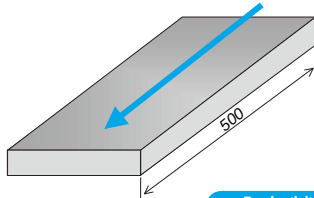
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Case Studies—Improved productivity / Shortened Machining Time—

St42-2 (SS400)

Plate

- Vc=150m/min (n=382min⁻¹)
- ap×ae=10×125mm
- fz=0.2mm/t (Vf=458mm/min)
- Dry · 6 flutes
- MSRS15125R-6T
- SPMT1806EDER-NB2
- SPMT1806EDER-NB3 (PR830)



Productivity improved by 4.4 times!

MSRS

Chip Evacuation Rate 572cc/min.

Competitor's Cutter A

129cc/min.

[Competitor's Cutter A]
 ø125, 6 flutes
 Vc=150m/min (n=382min⁻¹)
 ap×ae=3×125mm
 fz=0.15mm/t (Vf=344mm/min)

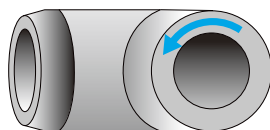
[User's Comments]
 Because conditions can be raised drastically, very effective for time crunch.
 Productivity improved by 4.4 times.

(Evaluation by the user)

C12A (Cast Iron)

Industrial Machine Components

- Vc=100m/min (n=200min⁻¹)
- ap×ae=10×114mm
- fz=0.4mm/t (Vf=635mm/min)
- Dry · 8 flutes
- MSRS15160R-8T
- SPMT1806EDER-NB2
- SPMT1806EDER-NB3 (PR830)



Productivity improved by 2.5 times!

MSRS

Chip Evacuation Rate 724cc/min.

Competitor's Cutter C

290cc/min.

[Competitor's Cutter C]
 6 inches, 8 flutes
 Vc=250m/min (n=522min⁻¹)
 ap×ae=2.5×114mm
 fz=0.25mm/t (Vf=1016mm/min)

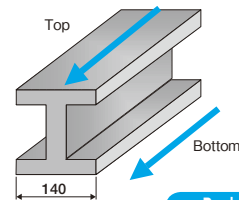
[User's Comments]
 Before ap could not be increased due to high resistance, but MSRS can increase ap without increasing load on the main spindle. Productivity improved by 2.5 times.

(Evaluation by the user)

C50 (S50C)

Rail

- Vc=150m/min (n=300min⁻¹)
- ap×ae=6×140mm
- fz=0.2mm/t (Vf=480mm/min)
- Dry · 8 flutes
- MSRS15160R-8T
- SPMT1806EDER-NB2
- SPMT1806EDER-NB3 (PR830)



Productivity improved by 4.7 times!

MSRS

Chip Evacuation Rate 403cc/min.

Competitor's Cutter B

84cc/min.

[Competitor's Cutter B]
 Machining with 2mm×3 passes
 Vc=150m/min (n=300min⁻¹)
 ap×ae=2×140mm
 fz=0.125mm/t (Vf=300mm/min)

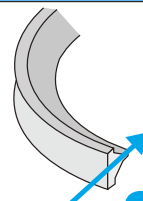
[User's Comments]
 MSRS can complete machining with 1 pass for what needed to be machined with 3 passes usually. Still machining sound of MSRS was quiet. Productivity improved by 4.7 times.

(Evaluation by the user)

C45 (S45C)

Gear

- Vc=200m/min (n=255min⁻¹)
- ap×ae=10×200mm
- fz=0.17mm/t (Vf=600mm/min)
- Dry · 14 flutes
- MSRS15250R-14T
- SPMT1806EDER-NB2
- SPMT1806EDER-NB3 (PR830)



Productivity improved by 2.6 times!

MSRS

Chip Evacuation Rate 1200cc/min.

Competitor's Cutter D

459cc/min.

[Competitor's Cutter D]
 ø250, 12 flutes
 Vc=120m/min (n=153min⁻¹)
 ap×ae=5×200mm
 fz=0.25mm/t (Vf=459mm/min)

[User's Comments]
 Cutting sound is quiet even when cutting width is less than 80 % of cutter dia.
 Productivity improved by 2.6 times.

(Evaluation by the user)