

Heavy Milling Cutter MSR

Cutting Conditions

1) Shouldering

● In case of MSR100R-1

Workpiece Material	Overhang Length A (mm)	Cutting Conditions		ap×ae (mm)	Chip Removal Rate (cc/min)
		Cutting speed	Feed rate		
Cast Iron	Less than 100mm	Vc=180m/min	fz=0.2mm/t	20×80	1100
	100~200mm	Vc=180m/min	fz=0.2mm/t	20×40	550
	201mm and over	Vc=120m/min	fz=0.2mm/t	20×30	276
Carbon Steel	Less than 100mm	Vc=150m/min	fz=0.2mm/t	20×80	920
	100~200mm	Vc=150m/min	fz=0.2mm/t	20×40	460
	201mm and over	Vc=100m/min	fz=0.2mm/t	20×30	228
Stainless Steel	-	Not recommended			
Non-ferrous Metals	-	Not recommended			

● In case of MSR100R-2

Workpiece Material	Overhang Length A (mm)	Cutting Conditions		ap×ae (mm)	Chip Removal Rate (cc/min)
		Cutting speed	Feed rate		
Cast Iron	Less than 130mm	Vc=180m/min	fz=0.2mm/t	40×40	1100
	130~230mm	Vc=180m/min	fz=0.2mm/t	40×20	550
	231mm and over	Vc=120m/min	fz=0.2mm/t	40×20	368
Carbon Steel	Less than 130mm	Vc=150m/min	fz=0.2mm/t	40×40	920
	130~230mm	Vc=150m/min	fz=0.2mm/t	40×20	460
	231mm and over	Vc=100m/min	fz=0.2mm/t	40×20	304
Stainless Steel	-	Not recommended			
Non-ferrous Metals	-	Not recommended			

● In case of MSR100R-4

Workpiece Material	Overhang Length A (mm)	Cutting Conditions		ap×ae (mm)	Chip Removal Rate (cc/min)
		Cutting speed	Feed rate		
Cast Iron	Less than 180mm	Vc=180m/min	fz=0.2mm/t	75×20	1035
	180~280mm	Vc=180m/min	fz=0.2mm/t	75×10	518
	281mm and over	Vc=120m/min	fz=0.2mm/t	75×10	345
Carbon Steel	Less than 180mm	Vc=150m/min	fz=0.2mm/t	75×20	863
	180~280mm	Vc=150m/min	fz=0.2mm/t	75×10	431
	281mm and over	Vc=100m/min	fz=0.2mm/t	75×10	285
Stainless Steel	-	Not recommended			
Non-ferrous Metals	-	Not recommended			

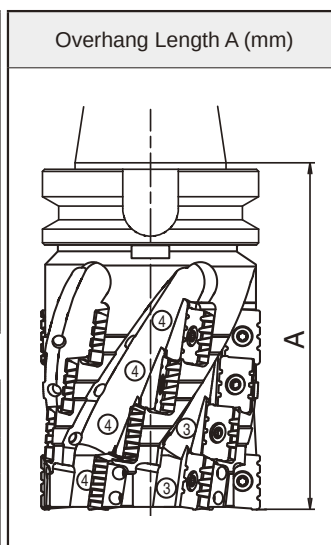
2) Slotting

● In case of MSR100R-1

Workpiece Material	Overhang Length A (mm)	Cutting Conditions		ap×ae (mm)	Chip Removal Rate (cc/min)
		Cutting speed	Feed rate		
Cast Iron	Less than 100mm	Vc=180m/min	fz=0.2mm/t	14×100	966
	100~200mm	Vc=150m/min	fz=0.2mm/t	7×100	403
	201mm and over	Vc=120m/min	fz=0.2mm/t	4×100	184
Carbon Steel	Less than 100mm	Vc=150m/min	fz=0.2mm/t	7×100	403
	100~200mm	Vc=120m/min	fz=0.2mm/t	4×100	184
	201mm and over	Vc=100m/min	fz=0.2mm/t	3×100	114
Stainless Steel	-	Not recommended			
Non-ferrous Metals	-	Not recommended			

● In case of MSR100R-2

Workpiece Material	Overhang Length A (mm)	Cutting Conditions		ap×ae (mm)	Chip Removal Rate (cc/min)
		Cutting speed	Feed rate		
Cast Iron	Less than 130mm	Vc=180m/min	fz=0.2mm/t	14×100	966
	130~230mm	Vc=150m/min	fz=0.2mm/t	7×100	403
	231mm and over	Vc=120m/min	fz=0.2mm/t	4×100	184
Carbon Steel	Less than 130mm	Vc=150m/min	fz=0.2mm/t	7×100	403
	130~230mm	Vc=120m/min	fz=0.2mm/t	4×100	184
	231mm and over	Vc=100m/min	fz=0.2mm/t	3×100	114
Stainless Steel	-	Not recommended			
Non-ferrous Metals	-	Not recommended			



Note) MSR...-4 (No. of stage)
Slotting is not recommended.

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Milling