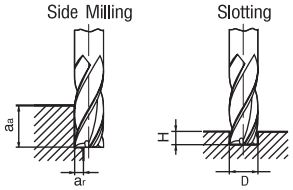
Cutting Conditions

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Conventional Milling for GS Mill (Cont.)

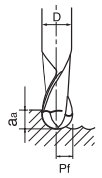
• GS - mill Four Flute L9384

Work Material / Milling Condition / Dia. of Mill mm		Carbon Steels, Cast Irons SS, SC, FC (150~225HB)		Alloy Steels, Pre-Hardended Steels (25~35HRC)		Hardended Steels (35~45HRC)		Hardended Steels (45~55HRC)		Stainless Steels SUS304, 316		Nickel Alloys, Titanium Alloys	
		Rotation min^{-1}	Feed mm/min	Rotation min^{-1}	Feed mm/min	Rotation min^{-1}	Feed mm/min	Rotation min^{-1}	Feed mm/min	Rotation min^{-1}	Feed mm/min	Rotation min^{-1}	Feed mm/min
2		12800	570	12000	380	8300	230	6000	150	6000	130	3700	70
4		6800	730	6400	490	4400	300	3200	200	3200	170	2000	90
6		4600	770	4300	520	3000	320	2200	210	2200	180	1400	100
8		3400	770	3200	520	2200	320	1600	210	1600	180	1000	100
10		2800	780	2600	520	1800	320	1300	210	1300	180	800	100
12		2300	780	2200	530	1500	320	1100	210	1100	180	700	100
Depth of cut	aa	1.5D						1D		1.5D		1D	
	ar	0.1D				0.05D		0.02D		0.1D		0.05D	
	H	0.5D				0.2D		0.05D		0.3D		0.1D	



• GS - mill Ball L9386, L9186

Work Material / Milling Condition / Dia. of Mill mm		Carbon Steels, Cast Irons SS, SC, FC (150~225HB)		Alloy Steels, Pre-Hardended Steels (25~35HRC)		Hardended Steels (35~45HRC)		Hardended Steels (45~55HRC)		Stainless Steels SUS304, 316		Nickel Alloys, Titanium Alloys	
		Rotation min^{-1}	Feed mm/min	Rotation min^{-1}	Feed mm/min	Rotation min^{-1}	Feed mm/min	Rotation min^{-1}	Feed mm/min	Rotation min^{-1}	Feed mm/min	Rotation min^{-1}	Feed mm/min
R1		19100	770	12800	370	10200	270	8900	190	8900	210	6400	120
R2		10800	1100	7200	550	5700	400	5000	280	5000	310	3600	180
R3		7700	1300	5200	660	4100	480	3600	330	3600	380	2600	210
R4		6000	1400	4000	700	3200	510	2800	360	2800	400	2000	230
R5		4800	1400	3200	700	2600	520	2300	370	2300	410	1600	230
R6		4000	1400	2700	710	2200	530	1900	370	1900	410	1400	240
Depth of cut	aa	0.1D				0.05D				0.1D		0.05D	
	Pf	0.2D				0.1D				0.2D		0.1D	



L9386

• GS - mill Hard L9398

Work Material / Milling Condition / Dia. of Mill mm		Carbon Steels, Alloy Steels (~35HRC)		Pre-Hardended Steels Mold Steels (35~45HRC)		Hardended Steels SKD61 (45~55HRC)		Hardended Steels SKD11 (55~60HRC)		SKH51 Hardened Steels (60~65HRC)		SKH55, PM Hardened Steels (65~70HRC)	
		Rotation min^{-1}	Feed mm/min	Rotation min^{-1}	Feed mm/min	Rotation min^{-1}	Feed mm/min	Rotation min^{-1}	Feed mm/min	Rotation min^{-1}	Feed mm/min	Rotation min^{-1}	Feed mm/min
1		20000	540	20000	390	15600	260	12300	160	11100	140	7800	95
2		19000	1100	17200	770	13400	530	10500	320	9500	270	6700	190
3		15000	2150	13400	1540	10400	1050	8200	650	7400	540	5200	380
4		11200	2400	10000	1740	7800	1180	6100	730	5600	600	3900	420
5		9000	2700	8000	1930	6200	1300	4900	810	4400	670	3100	470
6		7500	2700	6700	1930	5200	1300	4100	810	3700	670	2600	470
8		5600	2700	5000	1930	3900	1300	3050	810	2800	670	1950	470
10		4500	2700	4000	1930	3100	1300	2450	810	2200	670	1550	470
12		3750	2700	3350	1930	2600	1300	2050	810	1850	670	1300	470
16		2800	2500	2500	1800	1950	1220	1530	760	1400	630	980	440
20		2250	2100	2000	1540	1550	1050	1230	650	1100	540	780	380
Depth of cut	aa	1~1.5D											
	ar	0.1D				0.05D				0.02D			
	H	0.1D				0.05D				~0.05D max 0.5mm			

Adjust milling condition when unusual vibration, different sound occur by cutting.

D : Dia. of Mill

