

Recommended cutting data

HN55S4

Workpiece material	Carbon steel, alloy steel-750N/Mm ²		Carbon steel, alloy steel - 30HRC		Pre hardened steel, quenched and tempered steel-40HRC		Cast iron		Stainless steel		Pre hardened steel, quenched and tempered steel-50HRC	
	Diameter mm	Rotating RPM	Feed mm/min	Rotating RPM	Feed mm/min	Rotating RPM	Feed mm/min	Rotating RPM	Feed mm/min	Rotating RPM	Feed mm/min	Rotating RPM
1	20000	300	18000	520	14000	420	20000	300	8600	100	9500	360
2	16000	400	15000	630	12000	515	16000	400	8200	120	9000	420
3	14000	820	13000	755	10600	630	14000	820	7500	145	8500	490
4	10800	840	10000	770	8000	640	10800	840	5500	145	6500	500
5	8200	880	7600	810	6400	670	8200	880	4500	145	5000	530
6	7000	900	6400	830	5300	690	7000	900	3700	160	4200	540
8	5200	890	4800	815	4000	680	5200	890	2800	160	3200	550
10	4200	880	3800	810	3200	670	4200	880	2200	160	2500	520
12	3500	880	3200	810	2650	670	3500	880	1850	160	2100	520
16	2600	900	2400	820	2000	670	2600	880	1400	120	1600	490
18	2300	900	2200	830	1800	670	2400	880	1200	120	1300	470
20	2050	900	2000	850	1700	670	2200	880	1000	120	1100	450

1. The above table shows the standard value of side milling. When slot milling, of rotating speed 50%-70% and feed rate, like mentioned above 40%-60%.
2. Please select high piecise machine and tool holder.
3. Please use air blow or cutting liquid with high mist retardant property.
4. Down milling is recommended in side milling.
5. Vibration and unusual noise may be generated if the machine rigidity and workpiece fixture stability is low,, Please reduce the rotating speed and feed rate like mentioned above
6. Make overhang as short as possible if no interference.

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Workpiece material	Carbon steel, alloy steel-750N/Mm ²		Carbon steel, alloy steel -30HRC		Stainless steel	
	Diameter(mm)	Rotating RPM	Feed mm/min	Rotating RPM	Feed mm/min	Rotating RPM
1	20000	300	18000	520	8600	100
2	16000	400	15000	630	8200	120
3	14000	820	13000	755	7500	145
4	10800	840	10000	770	5500	145
5	8200	880	7600	810	4500	145
6	7000	900	6400	830	3700	160
8	5200	890	4800	815	2800	160
10	4200	880	3800	810	2200	160
12	3500	880	3200	810	1850	160
16	2600	900	2400	820	1400	120
18	2300	900	2200	830	1200	120
20	2050	900	2000	850	1000	120

Workpiece material	Aluminium			Plastic		Carbon steel, alloy steel- 750N/Mm ²	
	Diameter mm	Rotating RPM	Fz	Feed mm/min	Rotating RPM	Feed mm/min	Rotating RPM
1	100000	0.005	1000			20000	300
2	70000	0.007	980			16000	400
3	47000	0.008	752			14000	820
4	35000	0.01	700			10800	840
5	28000	0.015	840			8200	880
6	23000	0.025	1150			7000	900
8	18000	0.03	1080			5200	890
10	14000	0.04	1120			4200	880
12	12000	0.05	1800			3500	880
16	8950	0.06	1611			2600	900
20	7200	0.07	1512			2050	900

450 1000 450000
20 3.14 62.8
7165.6051

	Carbon steel, alloy steel - 30HRC			Pre hardened steel, quenched and tempered steel-40HRC		Cast
	Rotating RPM	Feed mm/min		Rotating RPM	Feed mm/min	Rotating RPM
0.004	18000	520	0.007	14000	420	20000
0.006	15000	630	0.011	12000	515	16000
0.015	13000	755	0.015	10600	630	14000
0.019	10000	770	0.019	8000	640	10800
0.027	7600	810	0.027	6400	670	8200
0.032	6400	830	0.032	5300	690	7000
0.043	4800	815	0.042	4000	680	5200
0.052	3800	810	0.053	3200	670	4200
0.063	3200	810	0.063	2650	670	3500
0.087	2400	820	0.085	2000	670	2600
0.110	2000	850	0.106	1700	670	2200

iron	Stainless steel		Pre hardened steel, quenched and tempered steel-50HRC	
Feed mm/min	Rotating RPM	Feed mm/min	Rotating RPM	Feed mm/min
300	8600	100	9500	360
400	8200	120	9000	420
820	7500	145	8500	490
840	5500	145	6500	500
880	4500	145	5000	530
900	3700	160	4200	540
890	2800	160	3200	550
880	2200	160	2500	520
880	1850	160	2100	520
880	1400	120	1600	490
880	1000	120	1100	450