

Material	Structural steel / Carbon Steels / Gray cast iron SS/SC/FC				Tool steels / Mold steels SCM/HPM				Titanium alloy steels Ti6A				Heat Resistance Alloy				Stainless Steels SUS304 / SUS316			
	~30HRc				30 ~ 40HRc				-				-							
(Radius)	RPM	FEED	Ap Axial	Ae Radial	RPM	FEED	Ap Axial	Ae Radial	RPM	FEED	Ap Axial	Ae Radial	RPM	FEED	Ap Axial	Ae Radial	RPM	FEED	Ap Axial	Ae Radial
0.5R	44,500	1,000	1.00	0.50	37,825	750	1.00	0.50	16,000	600	0.30	0.50	9,550	110	0.30	0.20	25,500	1,000	1.00	0.50
0.6R	37,150	1,250	1.20	0.60	31,578	938	1.20	0.60	13,200	600	0.36	0.60	8,000	100	0.36	0.24	21,000	850	1.20	0.60
0.75R	29,720	1,300	1.50	0.75	25,262	975	1.50	0.75	10,600	600	0.45	0.75	6,300	80	0.45	0.30	17,000	700	1.50	0.75
1R	22,300	1,540	2.00	1.00	18,955	1,155	2.00	1.00	8,000	480	0.60	1.00	3,180	120	0.60	0.40	12,800	760	2.00	1.00
1.25R	17,800	1,650	2.50	1.25	15,130	1,238	2.50	1.25	6,400	380	0.75	1.25	2,500	100	0.75	0.50	10,000	600	2.50	1.25
1.5R	14,860	1,740	3.00	1.00	12,631	1,305	3.00	1.50	5,300	420	0.90	1.50	2,120	90	0.90	0.60	8,500	780	3.00	1.50
2R	11,150	1,624	4.00	2.00	9,478	1,218	4.00	2.00	4,000	300	1.20	2.00	1,590	100	1.20	0.80	6,370	640	4.00	2.00
2.5R	8,910	1,552	5.00	2.50	7,574	1,164	5.00	2.50	3,200	300	1.50	2.50	1,270	90	1.50	1.00	5,100	710	5.00	2.50
3R	7,430	1,450	6.00	3.00	6,316	1,088	6.00	3.00	2,650	300	1.80	3.00	1,000	85	1.80	1.20	4,250	680	6.00	3.00
4R	5,500	1,305	8.00	4.00	4,675	979	8.00	4.00	2,000	240	2.40	4.00	800	70	2.40	1.60	3,190	580	8.00	4.00
5R	4,460	1,160	10.00	5.00	3,791	870	10.00	5.00	1,600	230	3.00	5.00	630	60	3.00	2.00	2,550	500	10.00	5.00
6R	3,710	1,088	12.00	6.00	3,154	816	12.00	6.00	1,320	240	3.60	6.00	530	55	3.60	2.40	2,120	470	12.00	6.00
8R	2,790	885	16.00	8.00	2,372	663	16.00	8.00	1,000	200	4.80	8.00	400	45	4.80	3.20	1,600	390	16.00	8.00
10R	2,230	725	20.00	10.00	1,896	544	20.00	10.00	800	170	6.00	10.00	300	40	6.00	4.00	1,280	320	20.00	10.00
12.5R	1,780	624	25.00	12.50	1,513	468	25.00	12.50	630	150	7.50	12.50	255	35	7.50	5.00	1,000	260	25.00	12.50

Depth of Cut		<p>Ap : Axial Depth (mm) Ae : Radial Depth (mm) D : Outside Diameter (mm) n : Speed (min⁻¹) Vf : Feed (mm/min)</p>
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- When entering the tool to the workpiece, enter the tool from outside to the workpiece.
- If the diameter or effective length of your tool are not on the table, adjust it compared similarity value on the table.
- Use this table for your reference. Adjust the parameters depending on your machining geometry, machining purpose and CNC.
- If the table over the maximum RPM and feed of your machine, or found red heat on the material, adjust RPM and feed in the same proportion.
- Use a machine with low vibration and good rigidity (1 or less, the vibration tolerance management should be within 5μm)
- Air blow or mist coolants are recommended and note for chip emission, heat, or ignition.