

## Comparasion of Cutting Capacities

Material	Gas	Thickness (mm)	1500S (50μm)	2000S (50μm)	3000S (50μm)	6000s (75μm)
			Cutting Speed (m/min)			
Carbon Steel	N2/ Air	1	20	25	28-35	45-60
		2	/	9	16-20	35-40
		3	/	/	/	22-27
		4	/	/	/	15-20
		5	/	/	/	9-12
		6	/	/	/	8-10
Carbon steel	O2	2	5	5.2	5.4-6	6-6.5
		3	3.6	4.2	4.3-4.6	4.6-5
		4	2.5	3	3-3.2	3.2-3.4
		5	1.8	2.2	2.7-3	3-3.2
		6	1.4	1.8	2.2-2.5	2.7-2.9
		8	1.2	1.3	1.8-2.2	2.2-2.4
		10	1	1.1	1-1.3	2.0-2.2
		12	0.8	0.9	0.9-1	1.9-2.1
		14	<b>0.65</b>	0.8	0.8-0.9	1.4-1.6
		16	<b>0.5</b>	0.7	0.6-0.7	1.2-1.4
		18	/	<b>0.5</b>	0.5-0.6	0.8
		20	/	<b>0.4</b>	<b>0.5-0.55</b>	0.6-0.8
		22	/	/	<b>0.5</b>	0.5-0.6
		25	/	/	/	<b>0.4-0.5</b>
30	/	/	/	<b>0.3</b>		
Stainless Steel	N2	1	20	28	28-35	45-60
		2	7	10	18-24	35-45
		3	4.5	5	7-10	22-27
		4	1.5	3	5-6.5	15-20
		5	<b>0.8</b>	2	3-3.6	9-12
		6	/	1.5	2-2.7	8-11
		8	/	<b>0.6</b>	1-1.2	3.5-4.5
		10	/	/	<b>0.5-0.6</b>	2-2.5
		12	/	/	/	1.5-1.8
		14	/	/	/	1-1.5
		16	/	/	/	0.5-0.6
		18	/	/	/	0.3-0.5
Aluminum	N2	1	18	20	25-30	45-60
		2	2.5	10	15-18	35-40
		3	1.5	4	7-8	22-27
		4	<b>0.8</b>	1.5	5-6	14-17
		5	/	0.9	2.5-3	9-11
		6	/	<b>0.6</b>	1.5-2	4-6
		8	/	/	<b>0.6-0.7</b>	2.5-3
		10	/	/	/	1.5-1.8
		12	/	/	/	0.8-1
		14	/	/	/	0.6-0.7
		16	/	/	/	<b>0.35-0.45</b>
		18	/	/	/	<b>0.2-0.3</b>

Note: The parameters marked in red in the table are prototype parameters. They are greatly affected by various factors in actual processing and are only suitable for small-scale production. Mass production processing is not recommended. It is advised to use a higher-power laser.