

1000W cutting parameter

Material	THICKNESS (mm)	SPEED(m/min)	perforation TIME (S)	Oxygen pressure(BAR)	Power (W)	NOZZLE (mm)
MS (O2)	1	9	0.5	3	1000	1
	2	4.7	1	1.5	1000	1
	3	3.2	1.5	0.5	1000	1
	4	2.7	2.5	0.5	1000	1
	5	2.1	4	0.5	1000	1
	6	1.3	5	0.5	1000	1
	8	1.1	9	0.5	1000	1.5
	10	0.85	12	0.5	1000	2
SS (N2)	1	18	0.05	10	1000	1.5
	2	4.5	0.2	12	1000	2
	3	2	0.5	14	1000	2
	4	1.3	1	15	1000	2.5
	5	0.7	1.5	15	1000	2.5
SS (AIR)	1	20	0.05	10	1000	1.5
	2	6	0.2	10	1000	2
	3	2.5	0.5	10	1000	2
	4	1.7	1	10	1000	2.5
	5	1	1.5	10	1000	2.5
AL (N2)	1	10	0.05	10	1000	1.5
	2	3.5	0.2	14	1000	2
	3	1	0.5	14	1000	2
AL (AIR)	1	15	0.05	10	1000	1.5
	2	4	0.2	10	1000	2
	3	1.5	0.5	10	1000	2

IPG2000W

Material	THICKNESS (mm)	SPEED (m/min)
MS (O2)	1 (FAST)	11
	1	10
	2 (FAST)	7
	2	6
	3 (FAST)	4
	3	3.2
	4 (FAST)	3.5
	4	2.8
	5 (FAST)	3
	5	2.6
	6 (FAST)	2.2
	6	2
	8	1.2
	10	1.1
	12	1
	14	0.85
16	0.8	
SS (N2)	1	30
	2	10
	3	7
	4	2.4
	5	2
	6	1.5
	8	0.7
	SS (AIR)	1
2		10
3		7.5
4		3.2
5		2.4
6		1.6
8		1
AL (N2)		1
	2	10
	3	4
	4	2.8
	5	2
	6	1
AL (AIR)	1	30
	2	11
	3	4.5
	4	3
	5	2.2

cutting ability

perforation TIME (S)	Oxygen pressure(BAR)	Power (W)	NOZZLE (mm)
0.1	5	1200	1
0.1	2.5	1200	1
0.2	5	1200	1
0.2	2	1200	1
0.3	0.7	2000	1
0.3	0.5	1500	1
0.4	0.7	2000	1
0.4	0.5	1500	1
0.5	0.6	2000	1
0.5	0.5	1500	1
0.6	0.6	2000	1
0.6	0.5	1500	1
0.8	0.5	1500	2.5
1.2	0.5	1800	3
1.5	0.5	1800	3
3.5	0.5	1800	3.5
6	0.5	2000	4
0.05	10	2000	1.5
0.2	12	2000	2
0.3	12	2000	2
0.5	15	2000	2.5
0.5	15	2000	3
0.8	16	2000	3
1	18	2000	3
0.05	10	2000	1.5
0.2	10	2000	2
0.3	10	2000	2
0.5	10	2000	2.5
0.5	10	2000	3
0.8	10	2000	3
1	10	2000	3
0.05	10	2000	1.5
0.2	14	2000	2
0.3	14	2000	2
0.5	15	2000	2
0.5	15	2000	2.5
0.8	16	2000	2.5
0.05	10	2000	1.5
0.2	10	2000	2
0.3	10	2000	2
0.5	10	2000	2
0.5	10	2000	2.5

0.8

10

2000

2.5

3000W cutting abilit

Material	THICKNESS (mm)	SPEED(m/min)	perforation TIME (S)	
MS (O2)	1 (FAST)	11	0.1	
	1	10	0.1	
	2 (FAST)	7	0.2	
	2	6	0.2	
	3 (FAST)	4	0.3	
	3	3.2	0.3	
	4 (FAST)	3.8	0.4	
	4	2.8	0.4	
	5 (FAST)	3.5	0.5	
	5	2.6	0.5	
	6 (FAST)	3	0.5	
	6	2.2	0.5	
	8 (FAST)	2.5	0.5	
	8	1.2	0.5	
	10	1.1	0.8	
	12	1	1.2	
	14	0.85	2	
	16	0.8	3	
	18	0.75	8	
	20	0.65	12	
Material	THICKNESS (mm)	SPEED(m/min)	perforation TIME (S)	
SS (N2)	1	45	0.05	
	2	22	0.2	
	3	8.7	0.3	
	4	6.2	0.4	
	5	4	0.5	
	6	2.4	0.8	
	8	1.1	1	
	10	0.8	1	
	SS(AIR)	1	50	0.05
		2	22	0.2
3		9	0.3	
4		6.5	0.4	
5		4.5	0.5	
6		3	0.8	
8		1.8	1	
10		1.1	1	
AL(N2)		1	35	0.05
		2	15	0.2
	3	8	0.3	
	4	5	0.4	
	5	3.4	0.5	
	6	2.5	0.8	
	10	0.7	1	

	1	45	0.05
	2	20	0.2
	3	9	0.3
AL(AIR)	4	5.5	0.4
	5	3	0.5
	6	2.1	0.8
	8	1	1
	10	0.5	1

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Oxygen pressure (B	Power (W)	NOZZLE (mm)
5	1200	1
2.5	1200	1
5	1200	1
2	1200	1
0.7	3000	1
0.5	1500	1
0.7	3000	1
0.5	1500	1
0.7	3000	1
0.5	1500	1
0.7	3000	1
0.5	1500	1
0.7	3000	1
0.5	1500	2.5
0.5	1800	3
0.5	1800	3
0.5	1800	3.5
0.5	1800	4
0.5	2000	4
0.5	2000	4

Nitrogen pressure	Power (W)	NOZZLE (mm)
10	3000	1.5
10	3000	2
12	3000	2
14	3000	2.5
14	3000	2.5
15	3000	3
16	3000	3
18	3000	3
8	3000	1.5
10	3000	2
10	3000	2
10	3000	2.5
10	3000	2.5
10	3000	3
10	3000	3
12	3000	3
8	3000	1.5
10	3000	2
12	3000	2
15	3000	2.5
16	3000	2.5
16	3000	3
17	3000	3
18	3000	3

8	3000	1.5
8	3000	2
10	3000	2
10	3000	2.5
12	3000	2.5
12	3000	3
12	3000	3
12	3000	3

IPG4000W cutting abil

Material	THICKNESS (mm)	SPEED(m/min)	perforation TIME (S)	
MS (O2)	1	10	0.1	
	2	6	0.1	
	3 (FAST)	4	0.1	
	3	3	0.1	
	4 (FAST)	3.5	0.1	
	4	2.8	0.1	
	5 (FAST)	3.3	0.1	
	5	2.5	0.1	
	6 (FAST)	3	0.1	
	6	2	0.1	
	8 (FAST)	2.5	0.2	
	8	1.3	0.2	
	10 (FAST)	2.1	0.5	
	10	1.2	0.5	
	12	1.1	1	
	14	0.9	1.5	
	16	0.8	2.5	
	18	0.7	5	
	20	0.6	8	
	SS (N2)	1	55	0.05
2		23	0.1	
3		10	0.2	
4		7	0.5	
5		5	0.6	
6		3	0.8	
8		1.5	1	
10		1.1	1.5	
12		0.75	2	
SS (AIR)		1	60	0.05
		2	25	0.1
		3	11	0.2
	4	7.5	0.5	
	5	5.5	0.6	
	6	3.5	0.8	
	8	2.3	1	
	10	1.8	1.5	
	12	0.75	2	
	AL(N2)	1	50	0.05
		2	20	0.2
		3	12	0.3
4		5	0.4	
5		3	0.5	
6		1.8	0.8	
8		1.4	1	

	10	0.5	1
	1	50	0.05
	2	20	0.2
	3	8	0.3
	4	5	0.4
AL(AIR)	5	3	0.5
	6	1.8	0.8
	8	1	1
	10	0.5	1

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Oxygen pressure (B	Power (W)	NOZZLE (mm)
3	1200	1
2.5	1200	1
0.7	3000	1
0.5	1200	1
0.7	3500	1
0.5	1500	1
0.7	4000	1
0.5	1500	1
0.7	4000	1
0.5	1500	1
0.7	4000	1
0.5	1500	1
0.7	4000	1
0.5	1800	2.5
0.5	1800	3
0.5	1800	3.5
0.5	1800	4
0.5	2000	4
0.5	2000	4

Nitrogen pressure	Power (W)	NOZZLE (mm)
8	4000	1.5
12	4000	2
12	4000	2
14	4000	2.5
14	4000	2.5
14	4000	3
16	4000	3
17	4000	3
18	4000	3.5
8	4000	1.5
10	4000	2
10	4000	2
10	4000	2.5
10	4000	2.5
10	4000	2.5
10	4000	3
10	4000	3
12	4000	3.5
8	4000	1.5
10	4000	2
12	4000	2
15	4000	2.5
16	4000	2.5
16	4000	3
17	4000	3

18	4000	3
8	4000	1.5
8	4000	2
10	4000	2
10	4000	2.5
10	4000	2.5
10	4000	3
10	4000	3
10	4000	3

IPG6000W cutting abili

Material	THICKNESS (mm)	SPEED(m/min)	perforation TIME (S)
MS (O2)	1	11	0.1
	2	6.5	0.1
	3 (FAST)	4.2	0.1
	3	3.2	0.1
	4 (FAST)	3.8	0.1
	4	3	0.1
	5 (FAST)	3.7	0.1
	5	2.7	0.1
	6 (FAST)	3.3	0.1
	6	2.2	0.1
	8 (FAST)	2.7	0.2
	8	1.3	0.2
	10 (FAST)	2.1	0.3
	10	1.2	0.3
	12 (FAST)	1.6	0.5
	12	1.1	0.5
	14	0.95	1
16	0.85	1.5	
18	0.75	2.5	
20	0.65	4	

Material	THICKNESS (mm)	SPEED(m/min)	perforation TIME (S)
SS (N2)	1	75	0.05
	2	30	0.2
	3	15	0.3
	4	8	0.4
	5	7.5	0.5
	6	6	0.5
	8	4	0.8
	10	2.1	1
12	1.1	1.2	
14	0.9	1.5	

SS(AIR)	1	75	0.05
	2	40	0.2
	3	18	0.3
	4	10	0.4
	5	8	0.5
	6	7	0.5
	8	4	0.8
	10	2.5	1
12	0.8	1.2	
14	0.6	1.5	

	1	75	0.05
	2	35	0.1
	3	15	0.2
	4	10	0.5

AL(N2)	5	8	0.6
	6	5.5	0.8
	8	2.5	1
	10	1.3	1.5
	12	0.9	2
AL (AIR)	1	80	0.05
	2	35	0.1
	3	15	0.2
	4	10	0.5
	5	5.5	0.6
	6	3.5	0.8
	8	2.5	1
	10	1.5	1.5
	12	0.9	2

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Oxygen pressure (B	Power (W)	NOZZLE (mm)
2.5	1200	1
2.5	1200	1
0.6	3000	1
0.5	1800	1
0.6	4000	1
0.5	1800	1
0.6	4000	1
0.5	1800	1
0.6	4000	1
0.5	1800	1
0.7	4000	1
0.5	1800	2.5
0.7	4000	1
0.5	1800	3
0.7	4000	1.25
0.5	2000	3
0.5	2000	3.5
0.5	2000	4
0.5	2000	4
0.5	2000	4
Oxygen pressure (B	Power (W)	NOZZLE (mm)
10	6000	1.5
12	6000	2
14	6000	2.5
14	6000	2.5
14	6000	3
15	6000	3
15	6000	3
15	6000	3.5
16	6000	3.5
17	6000	3.5
10	6000	1.5
10	6000	2
10	6000	2.5
10	6000	2.5
10	6000	3
10	6000	3
10	6000	3
10	6000	3
10	6000	3
12	6000	3.5
12	6000	3.5
10	6000	1.5
12	6000	2
14	6000	2
14	6000	2.5

14	6000	2.5
15	6000	3
17	6000	3
18	6000	3
18	6000	3.5
10	6000	1.5
10	6000	2
10	6000	2
10	6000	2.5
10	6000	2.5
10	6000	2.5
10	6000	3
10	6000	3
12	6000	3.5

IPG8000W cutting abil

Material	THICKNESS (mm)	SPEED(m/min)	perforation TIME (S)	
碳钢/MS (O2)	1	11	0.1	
	2	6.5	0.1	
	3 (FAST)	4.2	0.1	
	3	3.2	0.1	
	4 (FAST)	3.8	0.1	
	4	3	0.1	
	5 (FAST)	3.7	0.1	
	5	2.7	0.1	
	6 (FAST)	3.3	0.1	
	6	2.2	0.1	
	8 (FAST)	2.7	0.2	
	8	1.3	0.2	
	10 (FAST)	2.1	0.3	
	10	1.2	0.3	
	12 (FAST)	1.6	0.5	
	12	1.1	0.5	
	14	0.95	0.7	
	16	0.85	1	
	18	0.75	1.5	
	20	0.65	2	
	22	0.6	3	
	Material	THICKNESS (mm)	SPEED(m/min)	perforation TIME (S)
不锈钢/ SS (N2)	1	75	0.05	
	2	40	0.05	
	3	27	0.1	
	4	20	0.2	
	5	10	0.3	
	6	7.5	0.4	
	8	5	0.5	
	10	3.5	0.6	
	12	2.5	0.8	
	14	1.9	1	
	16	1.4	1.5	
	18	1.1	2	
	20	0.85	3	
	25	0.45	4	
	不锈钢/SS(AIR)	1	80	0.05
		2	45	0.05
3		28	0.1	
4		22	0.2	
5		14	0.3	
6		11	0.4	
8		7	0.5	
10		4.5	0.6	
12		3.5	0.8	
14		2.2	1	
16	1.8	1.5		

	18	1.4	2
	20	1.1	3
	1	65	0.05
	2	40	0.05
	3	30	0.1
	4	20	0.2
	5	15	0.3
	6	9	0.4
	8	4	0.5
铝合金/AL(N2)	10	3	0.6
	12	2	0.8
	14	1.3	1
	16	1.2	1.5
	18	1.1	2
	20	0.9	3
	22	0.7	4
	25	0.5	5
	30	0.3	5
	1	70	0.05
	2	50	0.05
	3	40	0.1
铝合金/ AL (AIR)	4	25	0.2
	5	15	0.3
	6	10	0.4
	8	2.5	0.5
	10	1	0.6
	1	65	0.1
	2	35	0.1
	3	20	0.2
黄铜/ BRASS (N2)	4	15	0.2
	5	10000	0.3
	6	8000	0.3
	8	4.5	0.4
	10	3	0.4
	12	2	0.5

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Oxygen pressure (I	Power (W)	NOZZLE (mm)
2.5	1200	1
2.5	1200	1
0.6	3000	1
0.5	1800	1
0.6	4000	1
0.5	1800	1
0.6	4000	1
0.5	1800	1
0.6	4000	1
0.5	1800	1
0.7	4000	1
0.5	1800	2.5
0.7	4000	1
0.5	1800	3
0.7	4000	1.25
0.5	2000	3
0.5	2000	3.5
0.5	2000	4
0.5	2000	4
0.5	2000	4
0.5	2000	4

Oxygen pressure (I	Power (W)	NOZZLE (mm)
10	8000	1.5
12	8000	2
14	8000	3
14	8000	3
14	8000	3
14	8000	4
14	8000	4
14	8000	4
14	8000	4
14	8000	4
14	8000	4
15	8000	4
16	8000	4.5
16	8000	4.5
16	8000	4.5
10	8000	1.5
10	8000	2
10	8000	2
10	8000	3
10	8000	3
10	8000	3
10	8000	3
10	8000	3
10	8000	3
10	8000	3
12	8000	3
12	8000	3

12	8000	3
12	8000	3
10	8000	1.5
14	8000	3
14	8000	3
14	8000	3
14	8000	3
14	8000	3
14	8000	4
14	8000	4
16	8000	4
18	8000	4
18	8000	4
18	8000	4
18	8000	4
18	8000	4
18	8000	4
18	8000	4.5
10	8000	1.5
10	8000	2
10	8000	3
10	8000	3
10	8000	3
12	8000	3
12	8000	4
12	8000	4
12	8000	2
12	8000	2
14	8000	2.5
12	8000	2.5
14	8000	2.5
14	8000	2.5
14	8000	2.5
14	8000	3
14	8000	4