

## Laser Cutting Data Sheet of 1500W

Material	Thickness (mm)	Speed (m/min)	Gas	Power (%)	Focus Length (mm)	Pressure (bar)	Nozzle
Carbon Steel	1		O <sub>2</sub>	100			1.5 double
	2	4-6			2	4	1.5 double
	3	3.2-4			3	3	1.5 double
	4	2.3-2.6			3	0.6-0.9	2.0 double
	5	2-2.3			3	0.6-0.9	2.0 double
	6	1.5-1.8			3	0.6-0.9	2.0 double
	8	1-1.3			3	0.6-0.9	2.0 double
	10	1-1.1			3	0.6-0.9	2.0 double
	12	0.8-0.95			3	0.6-0.9	2.5 double
	14	0.6-0.7			3	0.6-0.9	3.0 double
	16	0.5-0.65	3	0.6-0.9	3.5 double		
Stainless Steel	1		N <sub>2</sub>	100			
	2	10-13			-2	20	2.0 Single
	3	4-5.5			-3	20	2.0 Single
	4	2.5-3			-3	20	2.5 Single
	5	1.6-1.8			-3	20	2.5 Single
	6	1-1.4			-4	20	2.5 Single
Aluminum	1	20-25	N <sub>2</sub>	100	-1	20	2.0 Single
	2	8-10			-1.5	20	2.0 Single
	3	3.5-4.1			-2	20	2.5 Single
	4	1.8-2.4			-2	20	2.5 Single
	5	1-1.6			-2	20	2.5 Single
Brass	1	20-23	N <sub>2</sub>	100	-1	20	2.0 Single
	2	7-8			-1	20	2.0 Single
	3	2.8-3.3			-2	20	2.0 Single
	4	1.6-2.1			-2	20	2.0 Single
	5	0.6-1			-2	20	3.0 Single
Copper	1	12	O <sub>2</sub>	100	1	20	2.0 Single
	2	4-5			-1	20	2.0 Single
	3	1.8-2			-1.5	20	2.0 Single
	4	0.5-0.8			-2.5	20	2.0 Single

### Note:

- 1) The above data is tested by the laser with 50um central wavelength.
- 2) Regarding to the laser cutting head to be tested, the rate between collimating and focus optical is 100:125.
- 3) The data is just for reference and will be a little difference depends on laser cutting head of brands.