

Fiber laser cutting machine's Cutting Thickness and corresponding cutting Speed

(Laser power from 500W to 3000W)

Material Type	Thickness (mm)	Power 500W		Power 750W		Power 1000W		Power 1500W		Power 2000W		Power 3000W	
		Max Cutting Speed(m/min)	Best Cutting Speed(m/min)	Max Cutting Speed(m/min)	Best Cutting Speed(m/min)	Max Cutting Speed(m/min)	Best Cutting Speed(m/min)	Max Cutting Speed(m/min)	Best Cutting Speed(m/min)	Max Cutting Speed(m/min)	Best Cutting Speed(m/min)	Max Cutting Speed(m/min)	Best Cutting Speed(m/min)
Carbon steel(O2 gas auxiliary)	0.6	> 20	–	> 23	–	> 25	–	> 27	–	> 30	–	> 36	–
	1	15	10	21	14	24	16	24	20	36	30	–	36
	2	8	6	11	8	13	10	17	14	21	18	–	24
	3	4	3	6	3.5	8	5	8.5	7	9.6	8	–	12
	4	2	1.5	3	2	4	2.5	6	5	7.2	6.5	–	10
	5	1	0.8	2	1	3	2	4.5	4	5.6	5.2	–	9
	6	0.8	0.6	1.5	1	2	1.5	3.5	3	4.5	4.2	–	7.5
	8	–	–	0.8	0.5	1.2	1	2.5	2.1	3.5	3.2	–	6
	10	–	–	–	–	1	0.8	1.8	2	2.7	2.4	–	4.5
	12	–	–	–	–	0.8	0.5	1	0.6	1.8	1.2	–	3.5
	14	–	–	–	–	–	–	0.8	0.6	1.5	1	2.7	2.2
	20	–	–	–	–	–	–	–	–	0.8	0.5	–	1.8
	25	–	–	–	–	–	–	–	–	–	–	–	0.4-0.5
Stainless steel (Air gas auxiliary)	1	15	10	20	13	24	16	30	24	36	30	–	36
	2	6	4	8	5	10	6	15	11	18	16	–	24
	3	1.5	1	2.3	2	3	2	8	6	12	9	–	15
	4	–	–	1.5	1	2	1.5	4.5	4	6	5.4	–	9
	5	–	–	–	–	1.8	1.5	3.5	3	4.8	4.2	–	6
	6	–	–	–	–	–	–	1.5	1.4	3	2.7	–	4.2
	8	–	–	–	–	–	–	1.1	1	2.1	1.8	–	3
	10	–	–	–	–	–	–	–	–	1.2	0.9	–	1.5
	12	–	–	–	–	–	–	–	–	–	–	–	–
Aluminium (N2 gas auxiliary)	1	2.4	2	3.5	3	18	15	25	21.5	32	30	–	36
	2	1.5	1	2.5	2	4.8	3.6	7.5	6	12	9	–	14
	3	0.8	0.6	1	0.8	1.8	1.2	6	5	8	6	–	10
	4	–	–	–	–	0.9	0.6	3	2.4	5	4.2	–	7
	5	–	–	–	–	–	–	1.5	1.3	3	2.7	–	4.2
	6	–	–	–	–	–	–	0.9	0.7	1.8	1.5	–	2.4
	8	–	–	–	–	–	–	–	–	0.9	0.6	–	1.2
Copper (N2 gas auxiliary)	1	1.5	1	1.7	1.3	2	1.5	16	15.5	33	30	–	36
	2	0.8	0.6	1.2	0.8	1.5	1	4.8	4	8	7.2	–	12
	3	–	–	–	–	0.7	0.5	1.6	1.4	2.7	2.4	–	3.6
	4	–	–	–	–	–	–	0.6	0.5	1.2	0.9	–	1.5
	5	–	–	–	–	–	–	–	–	–	–	–	–
	6	–	–	–	–	–	–	–	–	–	–	–	–

Remark: the above cutting data only for reference, the exact cutting data depend on the actual metal material exact type;