WIRE WELDING							
Material	Thickness (mm)	Feeding speed (mm/s)	Wobble Width (mm)	Laser power (W)	Weld wire diameter (mm)	Welding penetration	Protective gas
Stainless steel	1	80	2.5	350	ER308 1.0	90%	Nitrogen/ Argon
	2	80	3.0	500	ER308 1.2	100%	
	3	70	3.0	700	ER308 1.2	100%	
	4	65	3.5	1000	ER308 1.2	100%	
	5	60	3.5	1500	ER308 1.6	100%	
	6	60	4	1600	ER308 1.6	80%	
	7	60	3.5	2000	ER308 1.6	100%	
	8	50	3.5	2800	ER308 1.6	100%	
Carbon steel	0.5	45	2.5	250	ER 0.8	80%	Nitrogen
	1	80	2.5	380	ER 1.0	90%	
	2	70	3.0	700	ER 1.2	100%	
	3	65	3.0	1200	ER 1.2	100%	
	4	60	3.5	1500	ER 1.2	100%	
	5	60	3.5	1700	ER 1.6	100%	
	6	60	4	2000	ER 1.6	80%	
	7	50	3.5	2600	ER 1.6	100%	
	8	45	3.5	3000	ER 1.6	100%	
Aluminum	1	80	2.5	450	AL 1.0	90%	Argon
	2	70	3.0	900	AL 1.2	100%	
	3	65	3.0	1500	AL 1.2	100%	
	4	60	3.5	1800	AL 1.2	100%	
	5	60	3.5	2200	AL 1.6	100%	
	6	55	3.5	2800	AL 1.6	80%	

Default: Scanning speed=Scan width*100, Duty cycle: 100%, Frequency:1000Hz

The protective gas pressure is set to 0.2MPa by adjusting the pressure regulator.

FUSION WELDING						
Material	Thickness (mm)	Feeding speed (mm/s)	Wobble Width (mm)	Laser power (W)	Welding penetration	Protective gas
Stainless steel	1	80	2.5	300	90%	Nitrogen/ Argon
	2	80	3.0	400	100%	
	3	70	3.0	600	100%	
	4	65	3.5	850	100%	
	5	60	3.5	1300	100%	
	6	60	4	1400	80%	
	7	60	3.5	1800	100%	
	8	50	3.5	2600	100%	
Carbon steel	0.5	45	2.5	200	80%	Nitrogen
	1	80	2.5	280	90%	
	2	70	3.0	550	100%	
	3	65	3.0	1100	100%	
	4	60	3.5	1400	100%	
	5	60	3.5	1500	100%	
	6	60	4	1800	80%	
	7	50	3.5	2400	100%	
	8	45	3.5	2800	100%	
Aluminum	1	80	2.5	350	90%	Argon
	2	70	3.0	800	100%	
	3	65	3.0	1300	100%	
	4	60	3.5	1600	100%	
	5	60	3.5	2000	100%	
	6	55	3.5	2600	80%	

Default: Scanning speed=Scan width*100, Duty cycle: 100%, Frequency:1000Hz

The protective gas pressure is set to 0.2MPa by adjusting the pressure regulator.