

TABLE OF PARAME TRS	3KW		Parametrs (GAS) (MPA)	Wire feeding speed mm/S	Single wire or double wire	Laser Power	Remark
	Material thickness mm	wire diam					
STAINLESS STEEL 316 Lsi	1	0.8/1.0mm	Nitrogen/Argon (can choose base on local gas costs) 0.3MPA	60-70	single wire feeding	550-650W	If customer doesn't care much about the deformation of the sheet metal, he can choose 1.0mm welding wire, because 1.0mm welding wire is easier to break when the wire breaks. If customer requests minimal deformation of the sheet metal, then choose 0.8mm welding .
	2	1.0/1.2mm		60-70	single wire feeding	650W-800W	If the weld seam is required to be full, then choose 1.2mm welding wire
	3	1.2/1.6mm		60-70	single /double wire	800W-1200W	Choosing single or double welding wire according to customer requirements
	4	1.2/1.6mm		60-70	single /double wire	1200W-1500W	
	5	1.6mm/2.0mm		55-60	double wire feeding	1500W-1800W	It is recommended to use thicker welding wire for thicker plates, as this will result in a fuller welding effect
	6	1.6mm/2.0mm		50-55		1800W-2200W	
	7	1.6mm/2.0mm		50-55		2200W-2600W	
	8	1.6mm/2.0mm		40-45		2600W-3000W	
MILD STELL	1	0.8/1.0mm	Nitrogen/Argon (can choose base on local gas costs) 0.3MPA	60-70	single wire feeding	550-650W	The parameters and wire diameter of stainless steel & carbon steel are basically the same. It should be noted that carbon steel contains more impurities, so it will be more prone for the slag to crack at higher power, so it is necessary to regularly check the protective lenses during use. It is recommended to do so once a day.
	2	1.0/1.2mm		60-70	single wire feeding	650W-800W	
	3	1.2/1.6mm		60-70	single /double wire	800W-1200W	
	4	1.2/1.6mm		60-70	single /double wire	1200W-1500W	
	5	1.6mm/2.0mm		55-60	double wire feeding	1500W-1800W	
	6	1.6mm/2.0mm		50-55		1800W-2200W	
	7	1.6mm/2.0mm		50-55		2200W-2600W	
	8	1.6mm/2.0mm		40-45		2600W-3000W	
GAVANIZED CuSi3	1	0.8/1.0mm	Nitrogen/Argon (can choose base on local gas costs) 0.3MPA	60-65	single wire feeding	450W-550W	The slag crack will occur when the thickness reaches 3-4mm
	2	1.0/1.2mm		60-65		500W-800W	
	3	1.2/1.6mm		60-65		800W-1200W	
	4	1.2/1.6mm		60-65		1200W-1500W	
	5						The slag of galvanized sheet is the most severely cracked/exploded among these materials, so it is not recommended to weld thicker sheets.
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ALUMINIUM						
	1				650W-750W	1mm aluminum plate can be melt the base material directly without welding wire
	2	1.2mm	80-90	single wire feeding	800W-900W	The minimum size of aluminum wire should be 1.2mm. If the wire is less than 1.2mm, the feeding may not be smooth and the wire may get stuck, because the aluminum wire is relatively soft and It is difficult to send out the wire through the wire feeding liner. It is generally recommended to use welding wire with a diameter of 1.2/1.6mm, model (ER5356).
	3	1.2/1.6mm	80-90		900W-1200W	
	4	1.2/1.6mm	80-90		1200W-1500W	
	5	1.2/1.6mm	80-90		1500W-1800W	
	6					It is not recommended to weld more thicker aluminum plates, because higher power may burnthrough the seam when stop the wire feeding finally, so not able to get normal welding performance. On the other hand, prolonged welding with higher power can cause the welding nozzle and graduated tube hot severely (as aluminum is high-reflection material, the higher power, the more heat reflected).
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