

TIG Inverter Selection Guide

Material Type	Diameter	Weld Type	Polarity	Filler	Amps Range	Inverter Model														
						180	180DV	180SE	200	200P PFC	400P	200P AC/DC	200P AC/DCA	200P AC/DCD	315P AC/DC	500P				
Steel / Stainless Steel	1/16" (1.6mm)	Butt	DC	1.6mm	50A - 80A															
		Corner			50A - 80A															
		Fillet			60A - 90A															
		Lap			60A - 90A															
	3/32" (2.4mm)	Butt	DC	1.6mm / 2.4mm	80A - 110A															
		Corner			80A - 110A															
		Fillet			90A - 120A															
		Lap			90A - 120A															
	1/8" (3.2mm)	Butt	DC	2.4mm	85A - 120A															
		Corner			85A - 120A															
		Fillet			100A - 140A															
		Lap			100A - 140A															
	3/16" (4.8mm)	Butt	DC	3.2mm	125A - 200A															
		Corner			150A - 200A															
		Fillet			175A - 225A															
		Lap			150A - 200A															
	1/4" (6.4mm)	Butt	DC	4.8mm	225A - 300A															
		Corner			225A - 300A															
		Fillet			250A - 325A															
		Lap			250A - 325A															
1/2" (12.7mm)	Butt	DC	6.4mm	300A - 400A																
	Corner			325A - 425A																
	Fillet			325A - 425A																
	Lap			325A - 425A																
Aluminium	1/16" (1.6mm)	Butt	AC	1.6mm	65A - 75A															
		Corner			55A - 65A															
		Fillet			55A - 75A															
		Lap			60A - 70A															
	1/8" (3.2mm)	Butt	AC	2.4mm / 3.2mm	115A - 135A															
		Corner			90A - 120A															
		Fillet			100A - 140A															
		Lap			105A - 130A															
	3/16" (4.8mm)	Butt	AC	2.4mm	125A - 150A															
		Corner			130A - 160A															
		Fillet			150A - 180A															
		Lap			130A - 170A															
	1/4" (6.4mm)	Butt	AC	2.4mm	190A - 220A															
		Corner			140A - 170A															
		Fillet			160A - 190A															
		Lap			160A - 180A															
	1/2" (12.7mm)	Butt	AC	3.2mm	120A - 290A															
		Corner			145A - 300A															
		Fillet			320A - 350A															
		Lap			280A - 320A															