



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																