

Tungsten Electrode Types

Electrode Type (Ground Finish)	Welding Application	Features	Color Code
Thoriated 2%	DC welding of mild steel, stainless steel and copper	Excellent arc starting, Long life, High current carrying capacity	Red
Zirconated 1%	High quality AC welding of aluminium, magnesium and their alloys.	Self cleaning, Long life, Maintains balled end, High current carrying capacity.	White
Ceriated 2%	AC & DC welding of mild steel, stainless steel, copper, aluminium, magnesium and their alloys	Longer life, More stable arc, Easier starting, Wider current range, Narrower more concentrated arc.	Grey

Base Metal Thickness	AC Current for Aluminium	Tungsten Electrode Diameter	Filler Rod Diameter (if required)	Argon Gas Flow Rate	JOINT TYPE
1/16" 1.6mm	60-80 70-90	1/16" 1.6mm	1/16" 1.6mm	15 CFM 7 LPM	Butt/Corner Lap/Fillet
1/8" 3.2mm	125-145 140-160	3/32" 2.4mm	1/16"-3/32" 1.6mm - 2.4mm	17 CFM 8 LPM	Butt/Corner Lap/Fillet

Base Metal Thickness	DC Current for Mild Steel	DC Current for Stainless Steel	Tungsten Electrode Diameter	Filler Rod Diameter (if required)	Argon Gas Flow Rate	Joint Type
0.040" 1.0mm	35-45 40-50	20-30 25-35	0.040" 1.0mm	1/16" 1.6mm	10 CFH(5 LPM)	Butt/Corner Lap/Fillet
0.045" 1.2mm	45-55 50-60	30-45 35-50	0.040" 1.0mm	1/16" 1.6mm	13 CFH(6 LPM)	Butt/Corner Lap/Fillet
1/16" 1.6mm	60-70 70-90	40-60 50-70	1/16" 1.6mm	1/16" 1.6mm	15 CFH(7 LPM)	Butt/Corner Lap/Fillet
1/8" 3.2mm	80-100 90-115	65-85 90-110	1/16" 1.6mm	3/32" 2.4mm	15 CFH(7 LPM)	Butt/Corner Lap/Fillet
3/16" 4.8mm	115-135 140-165	100-125 125-150	3/32" 2.4mm	1/8" 3.2mm	21 CFH(10 LPM)	Butt/Corner Lap/Fillet
1/4" 6.4mm	160-175 170-200	135-160 160-180	1/8" 3.2mm	5/32" 4.0mm	21 CFH(10 LPM)	Butt/Corner Lap/Fillet