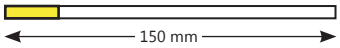
TIG Tungsten Electrodes

Tungsten electrodes are used for TIG welding. The melting temperature of tungsten is very high (around 3400°C) to maintain the arc between the workpiece and the electrode without consuming it too quickly. Several types of electrodes can be chosen depending on the process used. EN26848 and ISO 6848 provide information on these electrodes.

Lanthanum Tungsten
Steel/Stainless/Aluminium

AC +++ DC +++

The Lanthanum Tungsten electrodes (gold) are versatile TIG electrodes for welding steel and stainless steel in DC as well as aluminium in AC. The presence of Lanthanum in the composition gives them a slower wear and consumes less power while initiating than WR2 electrodes.

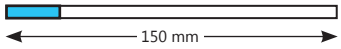


Ref.	ø	Quantity	Imax(A) AC	Imax(A) DC
045330	1.6	x10	150	160
045347	2.0	x10	200	220
045354	2.4	x10	250	270
045361	3.2	x10	300	350

WR2 Tungsten
Steel/Stainless/Aluminium

AC ++ DC +++

The WR2 Tungsten electrodes (turquoise) are versatile TIG electrodes for welding steel and stainless steel in DC as well as aluminium in AC.

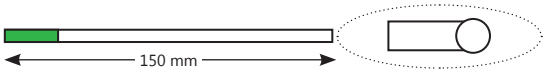


Ref.	ø	Quantity	Imax(A) AC	Imax(A) DC
044586	1.6	x10	100	110
044593	2.0	x10	160	170
044609	2.4	x10	210	220
044616	3.2	x10	220	300

Pure Tungsten
Aluminium

AC +++

The Pure Tungsten electrodes (green) are designed for welding aluminium in AC. A well formed ball is created at the end of the electrode, this ball is formed within seconds. Thus, the Tungsten electrode for this type of welding is not sharpened.



Ref.	ø	Quantity	Imax(A) AC
044555	1.6	x10	80
044579	2.4	x10	130

Summary

	Steel / Stainless steel	Alu	DC	AC	Arc stability	Striking arc	Life of electrode
	-	+++	-	+++	++	+++	+++
	+++	+++	+++	+++	++	+++	+++
	+++	++	+++	++	++	+++	+++

More information

Sharpening the electrode : The sharpening angle has a huge impact on the welding performance. A large angle produces a narrow welding and high penetration while a small angle produces a wide weld with less penetration.

Electrode sharpener (ref. 045415)
Electrode from ø 1 to 4mm
Particle filter
15 to 180° Angle