CIGWELD

AN ESAB BRAND

TIG WELDING

TUNGSTEN ELECTRODES

Conform to AWS A5.12 | ISO 6848



TUNGSTENS FOR ANY TIG WELDING APPLICATION !

CIGWELD's Tungsten Electrodes are essential for TIG welding, offering exceptional durability due to the tungsten's extremely high melting point of approximately 3400°C. This allows the electrode to sustain a stable electric arc between the workpiece and the electrode without rapid wear. Various types of tungsten electrodes are available, each tailored to specific welding applications. For guidance on selecting the right electrode, refer to the AWS A5.12 and ISO 6848 standards, which provide detailed information on CIGWELD's tungsten electrode offerings.

TUNGSTEN ELECTRODE SELECTION GUIDE

CLASSIFICATION	SIZE	CURRENT SUITABILITY	COMPOSITIONS	WELDABLE MATERIALS
2% THORIATED				
WT20 | EWTh-2 Provides excellent arc starting, stability, and current capacity.	1.6mm X 175mm 2.4mm X 175mm 3.2mm X 175mm	DC	97.7%~ 98.2% W 1.7%~2.2% ThO_2 ≤ 0.1% Others	Mild & Carbon Steel, Stainless Steel, Nickel, Titanium and Copper Alloys.
1.5% LANTHANATED				
WL15 | EWLa-1.5 Provides excellent arc starting and stability, similar to Thoriated electrodes.	1.6mm X 175mm 2.4mm X 175mm 3.2mm X 175mm	AC/DC	98.1%~98.5% W 1.3%~1.7% La_2O_3 ≤ 0.2% Others	Aluminum, Copper Alloys, Nickel, Stainless Steel, Mild & Carbon Steel and Titanium
3% RARE EARTH				
WG | EWG Excellent arc stability, low wear rate, and superior arc starting, even at lower amperages.	1.6mm X 175mm/150mm 2.4mm X 175mm/150mm 3.2mm X 175mm	AC/DC	97.7%~98.1 W 1.8~2.2% La_2O_3+ YO_2+$WZrO_2$ ≤ 0.1% Others	Aluminum, Copper Alloys, Nickel, Stainless Steel, Mild & Carbon Steel and Titanium
0.8% ZIRCONIATED				
(WZ | EWZr-0.8) Excellent arc stability and resistance to contamination.	1.6mm X 175mm/150mm 2.4mm X 175mm/150mm 3.2mm X 175mm	AC	98.9%~99.1% W 0.7~0.9% ZrO_2 ≤ 0.2% Others	Aluminium and Magnesium Alloys

2% THORIATED TUNGSTEN ELECTRODES

DC

FEATURES:

- Suitable for DC TIG welding.
- Commonly used with materials like Carbon Steel, Stainless Steel, Titanium, Nickel and Copper Alloys.
- Superior DC arc starts and stability, balanced erosion rate.
- Excellent low amperage stability for care on thin materials.
- Clean snap for a safe split.





9 310574 083462

THORIATED: 10 Pack
1.6mm x 175mm
P/N: TUN16THR

9 310574 083479

THORIATED: 10 Pack
2.4mm x 175mm
P/N: TUN24THR

9 310574 083486

THORIATED: 10 Pack
3.2mm x175mm
P/N: TUN32THR

1.5% LANTHANATED TUNGSTEN ELECTRODES

AC DC

FEATURES:

- Suitable for AC and DC TIG welding.
- Work exceptionally well with Carbon Steel, Stainless Steel, Titanium, Nickel, Aluminium and Copper Alloys, providing smooth arc starts and excellent arc stability.
- Good ball forming when used for AC-TIG welding on Aluminium and Aluminium Alloys.





9 310574 083493

LANTHANATED: 10 Pack
1.6mm x 175mm
P/N: TUN16LAN

9 310574 083509

LANTHANATED: 10 Pack
2.4mm x 175mm
P/N: TUN24LAN

9 310574 083516

LANTHANATED: 10 Pack
3.2mm x 175mm
P/N: TUN32LAN

3% RARE EARTH TUNGSTEN ELECTRODES

FEATURES:

- Suitable for AC and DC TIG welding.
- Excellent ignition characteristics and consistent welding properties.
- Holds sharp needle points longer between re-sharpening, compared to Thoriated Tungstens.
- Due to their great ignition characteristics and consistent welding properties, they are well suited for Automated welding applications.
- Made from Lanthanum, Zirconium and Yttrium in a specific chemical analysis to provide cooler welding temperatures at the tungsten tip.
- Non-Radioactive to improve health and safety for operator and environment.









9 310574 083400

RARE EARTH: 10 Pack
1.6mm x 175mm
P/N: TUN16RE3

9 310574 083417

RARE EARTH: 10 Pack
2.4mm x 175mm
P/N: TUN24RE3

9 310574 083424

RARE EARTH: 10 Pack
3.2mm x 175mm
P/N: TUN32RE3

9 310574 068513

RARE EARTH: 2 Pack
1.6mm x 150mm
P/N: 699859

9 310574 068520

RARE EARTH 2 Pack
2.4mm x 150mm
P/N: 699860

0.8% ZIRCONIATED TUNGSTEN ELECTRODES

FEATURES:

- Suitable for AC TIG welding applications.
- Suitable for Aluminium and Magnesium Alloys.
- Retains a balled tip with high resistance to contamination.
- White tipped Zirconiated Tungsten's have the best ball forming characteristics of all welding tungsten's, so they're especially suited to holding a steady arc when welding with AC-Current High Frequency which facilitates the break-up of the Aluminium Oxide layer, which is a critical factor for AC-TIG welding.
- NOT FOR USE ON DC CURRENT



9 310574 083431

ZIRCONIATED: 10 Pack
1.6mm x 175mm
P/N: TUN16ZIR

9 310574 083448

ZIRCONIATED: 10 Pack
2.4mm x 175mm
P/N: TUN24ZIR

9 310574 083455

ZIRCONIATED: 10 Pack
3.2mm x 175mm
P/N: TUN32ZIR





9 310574 068568

ZIRCONIATED: 2 Pack
1.6mm x 150mm
P/N: 699864

9 310574 068575

ZIRCONIATED: 2 Pack
2.4mm x 150mm
P/N: 699865

