

# TUNGSTEN ELECTRODE

## Pure (Green) | EWP/WP

**Principal Oxide: None**

Non-Radioactive. Good for use in Alternating Current (A/C) for aluminum alloys and magnesium alloys in low to medium amperage applications using transformer based constant current power sources only. Balls easy, tends to spit at higher amperages. Used for non-critical welds only.



## 2% Ceriated (Grey) | EWCe-2/WC20

**Principal Oxide: 1.8 - 2.2% Cerium Oxide**

Non-Radioactive. Best for use in Alternating Current (A/C) or Direct Current (D/C) applications using inverter or transformer based constant current power sources. Good for low-alloyed steels, non corroding steels, aluminum alloys, magnesium alloys, titanium alloys, nickel alloys, copper alloys. Good ignition and re-ignition properties, long service life, excellent arc stability. Low erosion rate, best at low amperage range, no spitting, good D/C arc starts and stability.



## 2% Thoriated (Red) | EWTh-2/WT20

**Principal Oxide: 1.7 - 2.2% Thorium Oxide**

Radioactive. Best for use in Direct Current (D/C) applications using transformer based constant current power sources. Best for use on non corroding steels, titanium alloys, nickel alloys, copper alloys. Good D/C arc starts and stability, medium erosion rate, medium amperage range, medium tendency to spit.



## 1.5% Lanthanated (Gold) | EWLa-1.5/WL15

**Principal Oxide: 1.3 - 1.7% Lanthanum Oxide**

Non-Radioactive. Best for use in Direct Current (D/C) as an alternative to 2% Thoriated using inverter or transformer based constant current power sources. Best for non corroding steels, titanium alloys, nickel alloys, copper alloys. Best D/C arc starts and stability, low erosion rate, wide amperage range, no spitting.



## 2% Lanthanated (Blue) | EWLa-2/WL20

**Principal Oxide: 1.8 - 2.2% Lanthanum Oxide**

Non-Radioactive. Best general purpose electrode for both Alternating Current (A/C) or Direct Current (D/C) using inverter or transformer based constant current power sources. Good for low-alloyed steels, non corroding steels, aluminum alloys, magnesium alloys, titanium alloys, nickel alloys, copper alloys. Good arc starts and stability, medium to high amperage range, low erosion rate.









## 0.8% Zirconiated (White) | EWZr-8/WZ8

**Principal Oxide: 0.7 - 0.9% Zirconium Oxide**

Non-Radioactive. Best for use in Alternating Current (A/C) for aluminum alloys and magnesium alloys using inverter or transformer based constant current power sources. Balls well, handles higher amperage than pure tungsten with less pitting, better arc starts and arc stability than pure tungsten.



Tungsten Type	Pure	2% Ceriated	2% Thoriated	1.5% Lanthanated	2% Lanthanated	0.8% Zirconiated	
Color	 Green	 Grey	 Red	 Gold	 Blue	 White	
Designation	ISO 6848	WP	WC20	WT20	WL15	WL20	WZ8
	AWS A5.12	EWP	EWCe-2	EWTh-2	EWLa-1.5	EWLa-2	EWZr-8
Chemical Composition Impurities ≤0.1%	Oxide Additive	-	CeO <sub>2</sub> : 1.80-2.20%	ThO <sub>2</sub> : 1.70-2.20%	LaO <sub>2</sub> : 1.30-1.70%≥	La <sub>2</sub> O <sub>3</sub> : 1.80-2.20%	ZrO <sub>2</sub> : 0.70-0.90%
	Tungsten	≥99.95%	≥97.30%	≥97.30%	≥97.80%	≥97.30%	≥98.60%
Size	1.0 x 150 mm   1.6 x 150 mm   2.0 x 150 mm   2.4 x 150 mm   3.2 x 150 mm   4.0 x 150 mm 4.8 x 150 mm   6.0 x 150 mm						