

ALPHA Tungsten Electrodes

W (WP)	WT 10	WT 20	WT 40	WZ 8	WC 20	WL 10	WL 20	WL 15
GREEN	YELLOW	RED	ORANGE	WHITE	GREY	BLACK	BLUE	GOLD

PURE Tungsten Color Coded GREEN
 PURE Tungsten Color Coded GREEN, are best suited for AC Tig welding applications. Pure Tungsten, Green, AWS Class EWP, AC welding applications. Least expensive of all electrodes. Applications: aluminum and magnesium alloys.



THORIATED Tungsten Color Code RED, YELLOW, or ORANGE

THORIATED Tungsten Color Code RED, YELLOW, or ORANGE, are best suited for DC Tig welding applications. 2% Thoriated, Red, AWS Class EWTH-2, DC welding applications. The most common type of electrode used today. Applications: carbon & stainless steel, nickel alloys and titanium.

LANTHANATED Tungsten Color Code BLACK, GOLD or BLUE
 LANTHANATED Tungsten Color Code BLACK, GOLD or BLUE, are suitable for AC & DC welding applications. Lanthanides, Black, AWS Class EWLA-1.5, AC & DC welding applications. Non-Radioactive Good arc characteristics in ac/dc applications. Applications: carbon & stainless steel, nickel alloys and titanium.

CERIATED Tungsten Color Code GREY or ORANGE
 CERIATED Tungsten Color Code GREY or ORANGE, are best suited for low amperage DC welding applications. Ceriated, Grey, An excellent alternative to Thoriated tungsten especially in low amperage welding. Takes 10% less current to start and has a very stable arc.

ZIRCONIATED Tungsten Color Code WHITE or BROWN
 ZIRCONIATED Tungsten Color Code WHITE or BROWN, are best suited for AC Tig welding applications. Zirconiated, White, AC Welding applications. Better start up than Pure Tungsten, Balls up well and has a more stable arc than Pure Tungsten. Better current carrying capacity

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Technical Data:

Type	Grade	Color	Chemical Composition (%)			Surface	Features
			Rare Earth	Impurities	W		
Pure Tungsten	WP	Green	-	≤0.05	the rest	D,E G,S	Non-radioactive; suitable for AC welding of aluminum, magnesium, and their alloy
Thoriated Tungsten	WT10	Yellow	0.9~1.1ThO ₂	≤0.05	the rest	D,E	Excellent electron emission and overall performances; high current-carrying capacity; radioactivity; suitable for DC welding of carbon steel, stainless steel, nickel alloy and titanium alloy.
	WT20	Red	1.8~2.2ThO ₂	≤0.05	the rest	G,S	
Lanthanated Tungsten	WL10	Black	0.8~1.2La ₂ O ₃	≤0.05	the rest	D,E G,S	Non-radioactive; excellent electric conductivity and welding capacity; high current-carrying capacity; minimum ratio of burnt area; substitute for thoriated tungsten electrode; mainly used in DC welding.
	WL15	Golden Yellow	1.3~1.7 La ₂ O ₃	≤0.05	the rest		
	WL20	Blue	1.8~2.2 La ₂ O ₃	≤0.05	the rest		
Ceriated Tungsten	WC10	Pink	0.8~1.2CeO ₂	≤0.05	the rest	D,E G,S	Non-radioactive; easier arc initiation under low current circumstances, and low arc-maintaining current; suitable for the welding of pipelines, small components and discontinuous welding.
	WC15	Orange	1.3~1.7CeO ₂	≤0.05	the rest		
	WC20	Grey	1.8~2.2CeO ₂	≤0.05	the rest		
Zirconiated Tungsten	WZ8	White	0.5~0.40ZrO ₂	≤0.05	the rest	D,E G,S	Non-radioactive; suitable for AC welding, have higher resistance to contamination, is preferred for radiographic quality welding.

Note: D : As Drawn E : Electrolytic Polished G : Ground S : Swaged