

At Metals And Welding Specialities, we proudly supply the high-performance **ER312 MIG & TIG Welding Wire** welding wire—an exceptional filler metal engineered for critical welding applications that demand superior strength, corrosion resistance, and durability. Classified under **UNS S31280** and meeting the stringent requirements of **ASTM A580/A580M Grade ER312**, this alloy is widely recognized in both MIG and TIG welding for its remarkable versatility and metallurgical stability.



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The **ER312 stainless steel welding wire** is formulated with a high chromium (29–32%) and nickel (8–10%) composition, offering outstanding resistance to oxidation, scaling, and heat-induced cracking. It is the go-to choice when welding dissimilar steels or hard-to-weld materials such as high-carbon steels, tool steels, or stainless steels of unknown composition. The superior metallurgical balance of this alloy produces a tough, crack-resistant weld deposit that performs reliably even in extreme service conditions.



ER312 MIG & TIG Welding Wire, ER312 MIG & TIG Welding Wire Manufacturers, ER312 MIG & TIG Welding Wire Suppliers, ER312 MIG & TIG Welding Wire Stockists, ER312 MIG & TIG Welding Wire Exporters

When used in **MIG (GMAW)** or **TIG (GTAW)** processes, ER312 ensures clean, stable arc characteristics with minimal spatter and excellent slag detachability. Welders appreciate its smooth feedability and consistent bead appearance, which reduce post-weld cleanup time. Thanks to its high ferrite-austenite structure, the wire resists cracking and provides enhanced toughness at both high and low temperatures. Whether joining austenitic stainless steels to mild steel or repairing wear-resistant components, ER312 welding wire maintains superior integrity and corrosion resistance over the long term.

This product's compliance with ASTM A580/A580M specifications ensures dependable chemical and mechanical properties across all batches. The **UNS S31280** classification further attests to its precision engineering and adherence to global quality standards. Its reliable performance in structural fabrication, chemical processing, maintenance welding, and repair operations makes it a trusted choice across diverse industries such as petrochemical, power generation, mining, and manufacturing.



ER312 MIG & TIG Welding Wire in India, ER312 MIG & TIG Welding Wire Manufacturers in India, ER312 MIG & TIG Welding Wire Suppliers in India, ER312 MIG & TIG Welding Wire Stockists in India, ER312 MIG & TIG Welding Wire Exporters in India

At Metals And Welding Specialities, every spool of **ER312 MIG & TIG wire** undergoes stringent quality checks to guarantee consistent diameter, clean surface finish, and optimal wire feed efficiency. We understand that weld quality defines product life, so our focus remains on providing filler metals that deliver unmatched mechanical strength and corrosion resistance in every weld. For optimal results, use **ER312 filler wire** with argon or argon-based shielding gases to ensure smooth, stable arcs and superior penetration. Its unique metallurgical composition prevents dilution effects that typically reduce strength in mixed-metal welds. When durability, safety, and performance are non-negotiable, ER312 stands as a dependable solution engineered to exceed expectations in demanding welding environments.

Specification ER312 MIG & TIG Welding Wire



Classification	AWS A5.9, ER310
Form	MIG spools, TIG cut lengths, Reels and Coils
Type Of Welding	Inert Gas Welding
Current	MIG-DCEP / TIG-DCEN
Diameters	.023", .030", .035", .045", 1/16", 3/32", 1/8"
Standard TIG straight lengths are available	36" (914 mm) or 39" (1000 mm) lengths. Other lengths available upon request.

AWS ER310 MIG & TIG Filler Metal Application & uses

Hardware tools
Metallurgy
Machinery
Construction
Shipbuilding
Petroleum
Chemical plant
Power sector
Gas Industry

Equivalent Grade Of ER312 MIG & TIG Welding Wire



Class	UNS	Oxford Alloys	BOHLER
ER310	S31080	Alloy 310	BOHLER THERMAINT 310

ER312 MIG & TIG Welding Wire Chemical Composition



C	Cr	Ni	Mo	Mn	Si	P	S	Cu
0.08-0.15	25.0-28.0	20.0-22.5	0.75	1.0-2.5	0.30-0.65	0.03	0.03	0.75

ER312 MIG & TIG Welding Wire Parameters



Diameter		Process	Volt	Amps
in	(mm)			
.035	(0.9)	GTAW	12-15	60-90
.045	(1.14)	GTAW	13-16	80-110
1/16"	(1.6)	GTAW	14-16	90-130
3/32"	(2.4)	GTAW	15-20	120-175

People Also Searched

ER312 stainless steel wire, AWS ER312 filler metal, UNS S31280 TIG wire, ASTM A580 ER312, ER312 MIG wire, stainless steel filler wire, ER312 welding rod, dissimilar metal welding wire, ER312 vs ER309, ER312 wire composition, corrosion-resistant welding wire, high strength welding alloy, MIG TIG filler metal, ER312 mechanical properties, stainless steel MIG wire, GTAW ER312, austenitic-ferritic welding wire, welding filler for tool steel, stainless repair wire, hardfacing filler wire, stainless TIG electrode, AWS ER312 chemical composition, ER312 wire suppliers, ER312 welding wire price, welding alloy UNS S31280, ER312 weldability, high

chromium stainless filler wire, welding consumables ER312, stainless steel joining wire, industrial welding wire ER312, ER312 weld deposit, stainless fabrication filler, heat-resistant welding wire, ER312 applications, Metals And Welding Specialities welding wire, ASTM A580 stainless filler, ER312 for dissimilar joints.