

The **ER2594 MIG & TIG Welding Wire** welding wire from **Metals And Welding Specialities** is engineered for precision, strength, and corrosion resistance in demanding fabrication environments. Classified under **UNS S32750** and conforming to **ASTM A240 Grade 2507**, this super duplex stainless steel filler metal delivers exceptional mechanical properties combined with superior resistance to pitting and stress corrosion cracking. Designed for both **MIG** and **TIG** processes, it provides consistent arc stability and clean weld deposits, making it ideal for high-performance applications in the oil, gas, petrochemical, and marine industries.



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This welding wire is known for its high chromium, molybdenum, and nitrogen content, giving welds outstanding strength and resistance to aggressive chemical and chloride-rich environments. The **ER2594** composition ensures excellent ferrite-austenite balance, which results in low thermal expansion and high tensile strength – critical for offshore platforms, heat exchangers, and pressure vessels. Each spool or rod is manufactured to strict industry standards, guaranteeing uniformity, high weld integrity, and compatibility with matching base metals like UNS S32750 and S32760.



ER2594 MIG & TIG Welding Wire, ER2594 MIG & TIG Welding Wire Manufacturers, ER2594 MIG & TIG Welding Wire Suppliers, ER2594 MIG & TIG Welding Wire Stockists, ER2594 MIG & TIG Welding Wire Exporters

When used in **GTAW** (TIG) or **GMAW** (MIG) operations, the **ER2594 filler wire** delivers smooth feeding characteristics and excellent slag detachability, allowing welders to achieve clean, spatter-free joints. Its optimized chemistry minimizes hot cracking and provides superior impact toughness even at sub-zero temperatures. The filler metal also maintains excellent corrosion resistance after post-weld heat treatments and extended service in harsh environments.

The **Metals And Welding Specialities** ER2594 wire is recommended for critical fabrication where reliability cannot be compromised. Industries rely on it for constructing desalination plants, chemical process equipment, and components exposed to seawater or acidic solutions. Its dual-phase microstructure combines the best attributes of both ferritic and austenitic stainless steels, offering remarkable structural integrity under mechanical stress. This balance ensures long-term performance and lower maintenance costs, making it a cost-effective choice for professionals seeking durability and efficiency.



ER2594 MIG & TIG Welding Wire in India, ER2594 MIG & TIG Welding Wire Manufacturers in India, ER2594 MIG & TIG Welding Wire Suppliers in India, ER2594 MIG & TIG Welding Wire Stockists in India, ER2594 MIG & TIG Welding Wire Exporters in India

Every batch of **ER2594 MIG & TIG Welding Wire** welding wire is carefully tested for composition accuracy, mechanical performance, and corrosion resistance. With our commitment to precision manufacturing, **Metals And Welding Specialities** ensures that each product meets or exceeds the expectations of international standards. Whether used for fabrication, repair, or overlay welding, this filler wire consistently delivers strong, ductile, and corrosion-resistant welds that stand the test of time.

### Specification ER2594 MIG & TIG Welding Wire



<b>Classification</b>	<b>AWS A5.9, ER2594</b>
<b>Form</b>	MIG spools, TIG cut lengths, Reels and Coils
<b>Type Of Welding</b>	Inert Gas Welding
<b>Current</b>	MIG-DCEP / TIG-DCEN
<b>Diameters</b>	.023", .030", .035", .045", 1/16", 3/32", 1/8"
<b>Standard TIG straight lengths are available</b>	36" (914 mm) or 39" (1000 mm) lengths. Other lengths available upon request.

## AWS ER2594 MIG & TIG Filler Metal Application & uses

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

## Equivalent Grade Of ER2594 MIG & TIG Welding Wire



Class	UNS	Oxford Alloys	SANDVIK	BOHLER	UTP
ER2594	S39209	Alloy 2594	EXATON 25.10.4.L	BOHLER AVESTA 2507/P100	

## ER2594 MIG & TIG Welding Wire Chemical Composition



Diameter	Type of Power	Amperage	Volts	Stickout	98% Ar/ 2% O2 (cfh)
.035"	DCEP	150-225	23-26	1/2"-3/4"	35
.045"	DCEP	200-325	24-28	1/2"-3/4"	35
1/16"	DCEP	300-350	24-27	1/2"-3/4"	35

## ER2594 MIG & TIG Welding Wire Parameters



Diameter		Process	Volt	Amps	Shielding Gas
in	(mm)				
.035	0.9	GMAW	22-23	180-210	<b>Spray Transfer</b> 98% Argon / 2% Oxygen
.045	1.2	GMAW	23-25	195-260	
1/16	1.6	GMAW	25-28	260-390	
.035	0.9	GMAW	19-23	55-170	<b>Short Circuiting Transfer</b> 90% Helium / 7 ½ % Argon / 2 ½ CO2
.045	1.2	GMAW	19-23	100-185	
1/16	1.6	GMAW			
1/16	1.6	GTAW	14-18	90-130	100% Argon
3/32	2.4	GTAW	15-20	120-175	100% Argon

1/8	3.2	GTAW	15-20	150-220	100% Argon
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## People Also Searched

ER2594 welding wire, AWS ER2594 filler metal, super duplex ER2594 TIG wire, MIG wire 2594, UNS S32750 filler rod, ASTM A240 2507 wire, duplex stainless welding wire, ER2594 TIG rod suppliers, ER2594 MIG spool, 2507 super duplex filler, S32750 TIG filler, ER2594 mechanical properties, duplex welding consumables, ER2594 corrosion resistance, ER2594 vs ER2209, duplex stainless MIG filler, super duplex TIG welding, ER2594 for offshore welding, ER2594 chemical composition, AWS ER2594 datasheet, duplex 2507 filler wire, ER2594 applications, ER2594 welding parameters, ER2594 rod manufacturer, duplex ER2594 tensile strength, S32750 welding filler, ASTM A240 2507 welding, ER2594 supplier India, ER2594 marine welding, ER2594 oil and gas industry, super duplex filler wire 2594, UNS S32750 MIG filler metal, ER2594 wire for heat exchangers, 2507 duplex welding consumable.