

The **ER90S-B3 MIG & TIG Welding Wire** from **Metals And Welding Specialities** is a premium low-alloy filler metal engineered for exceptional performance in critical high-temperature applications. Designed to meet demanding industrial standards, this wire delivers outstanding weld integrity, strength, and resistance to creep and oxidation. Manufactured to the highest quality specifications, it meets **UNS K90941** and conforms to **ASTM A5.28 ER90S-B3** standards, ensuring reliability and consistency across every weld.



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This **ER90S-B3 welding wire** is specifically formulated for joining materials such as 2.25% Cr – 1% Mo steels, which are widely used in pressure vessels, power generation systems, refineries, and petrochemical plants. Its controlled chemistry provides excellent resistance to hydrogen-induced cracking and delivers a fine, clean weld bead with superior mechanical properties. Whether used in **MIG (GMAW)** or **TIG (GTAW)** applications, the wire ensures deep penetration, stable arc performance, and minimal spatter, resulting in reduced post-weld cleanup and higher productivity.



ER90S-B3 MIG & TIG Welding Wire, ER90S-B3 MIG & TIG Welding Wire Manufacturers, ER90S-B3 MIG & TIG Welding Wire Suppliers, ER90S-B3 MIG & TIG Welding Wire Stockists, ER90S-B3 MIG & TIG Welding Wire Exporters

The wire's balanced alloy composition makes it ideal for fabrication and repair of components operating in temperatures up to 600°C (1110°F). Typical applications include boiler tubes, headers, steam piping, and other components exposed to high-pressure and high-temperature service. With precise deoxidizers such as silicon and manganese, **ER90S-B3** offers smooth metal transfer and low porosity, ensuring a clean, defect-free weld even under challenging conditions.

At **Metals And Welding Specialities**, every spool of **ER90S-B3 MIG & TIG wire** undergoes strict quality testing to ensure conformity with international welding standards. The result is a dependable product that offers excellent tensile strength, toughness, and creep resistance – qualities essential for the long-term performance of critical weldments in demanding environments. The wire's smooth feedability also allows consistent performance in both automated and manual welding operations, providing professionals with a versatile and dependable filler metal they can trust.



ER90S-B3 MIG & TIG Welding Wire in India, ER90S-B3 MIG & TIG Welding Wire Manufacturers in India, ER90S-B3 MIG & TIG Welding Wire Suppliers in India, ER90S-B3 MIG & TIG Welding Wire Stockists in India, ER90S-B3 MIG & TIG Welding Wire Exporters in India

By maintaining precise metallurgical control and exceptional surface finish, **Metals And Welding Specialities ER90S-B3** wire ensures superior arc stability and consistent weld bead appearance. Its compatibility with argon or argon/CO₂ shielding gases enhances weld quality and protects against atmospheric contamination. Whether you're fabricating new components or performing maintenance on high-temperature systems, this wire delivers the durability, reliability, and weld quality you expect from an industry leader in welding consumables.

Trust **Metals And Welding Specialities** to supply **ER90S-B3 MIG & TIG Welding Wire** wire that meets the highest performance and safety standards, ensuring your operations maintain peak efficiency and reliability.

Specification ER90S-B3 MIG & TIG Welding Wire



Classification	AWS A5.28, ER90S-B3
Form	MIG spools, TIG cut lengths, Reels and Coils
Type Of Welding	Inert Gas Welding
Standard TIG straight lengths are available	36" (914 mm) or 39" (1000 mm) lengths. Other lengths available upon request.

AWS ER90S-B3 MIG & TIG Filler Metal Application & uses

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

Equivalent Grade Of ER90S-B3 MIG & TIG Welding Wire



Class	UNS	Oxford Alloys	BOHLER
ER90S-B3	K30960	Alloy 90S-B3	UNION ER90S-B3

ER90S-B3 MIG & TIG Welding Wire Chemical Composition



C	Mn	Si	Cr	Mo	S	P	Ni	Cu	OET
0.10 max	0.40- 0.70	0.50 max	8.00- 10.5	0.8- 1.2	0.025 max	0.025 max	0.5 max	0.35 max	0.50 max

ER90S-B3 MIG & TIG Welding Wire Parameters



PROCESS	DIA. OF WIRE	AMPERAGE	VOLTAGE	GAS/FLUX
GTAW (TIG)	1/16"	50-120	7-13	Ar Ar
	3/32"	120-200	10-16	
GMAW (MIG) SHORT ARC	1/8"	150-220	12-18	Ar
	.035"	90-160	14-20	Co2
	.045" 1/16"	120-200 -	16-20 -	CO2 or 75 Ar/25 CO2 CO2 or 75 Ar/25 CO2
GMAW (MIG) SPRAY TRANSFER	.035" .045" 1/16"	180-230	25-28	98 Ar/2 O2
		250-350	25-30	75 Ar/25 CO2
		280-400	26-36	75 Ar/25 CO2
SUBMERGED	3/32"	250-400	28-32	UV420TTR
ARC	1/8"	400-600	30-34	UV420TTR

ER90S-B3 filler wire, AWS ER90S-B3 welding wire, UNS K90941 welding rod, ASTM A5.28 ER90S-B3, ER90S-B3 TIG rod, low alloy steel welding wire, Cr-Mo welding wire, 2.25Cr-1Mo filler metal, high temperature welding wire, pressure vessel welding rod, boiler tube welding wire, steam piping filler wire, creep-resistant welding wire, ER90S-B3 MIG wire, GTAW filler metal, GMAW welding wire, refinery welding wire, petrochemical welding consumable, ER90S-B3 composition, ER90S-B3 tensile strength, ER90S-B3 welding applications, ER90S-B3 wire price, ER90S-B3 mechanical properties, ER90S-B3 chemical composition, ER90S-B3 standard, ER90S-B3 vs ER80S-B2, ER90S-B3 uses, UNS K90941 standard, ASTM A5.28 specifications, ER90S-B3 wire for Cr-Mo steels, high temperature alloy welding, creep resistant filler wire, TIG welding wire for power plants, ER90S-B3 spool, low hydrogen filler metal, high-strength steel welding wire, ER90S-B3 availability, Metals And Welding Specialities products.