

At Metals And Welding Specialities, we supply premium-grade **ER80S-B2 MIG & TIG Welding Wire**, designed to deliver precision, consistency, and superior mechanical performance across demanding industrial applications. This wire, classified under UNS K21590 and meeting ASTM A5.28 ER80S-B2 specifications, is an industry-standard choice for welding 1.25% Cr – 0.5% Mo steels used in high-temperature and pressure environments. Known for its reliable weld metal quality and excellent creep strength, the ER80S-B2 alloy provides exceptional toughness and stability even under long-term thermal exposure.



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The **ER80S-B2 welding wire** is specifically engineered for both MIG (GMAW) and TIG (GTAW) processes, offering low hydrogen levels and smooth arc transfer that result in clean, spatter-free welds. Its balanced chemical composition ensures uniform weld metal properties, reducing the risk of cracking and distortion in critical joints. Whether used for fabrication, maintenance, or repair, this wire ensures solid performance in pipelines, boiler tubes, pressure vessels, and heat exchangers. Industries such as power generation, oil and gas, petrochemical processing, and refineries depend on ER80S-B2 for its unmatched metallurgical integrity and durability.



ER80S-B2 MIG & TIG Welding Wire, ER80S-B2 MIG & TIG Welding Wire Manufacturers, ER80S-B2 MIG & TIG Welding Wire Suppliers, ER80S-B2 MIG & TIG Welding Wire Stockists, ER80S-B2 MIG & TIG Welding Wire Exporters

The filler metal contains chromium and molybdenum, enhancing its resistance to oxidation, corrosion, and scaling at elevated temperatures. When used with proper preheat and post-weld heat treatment, the **AWS ER80S-B2 wire** delivers weld deposits with outstanding creep resistance, making it suitable for service temperatures up to 600°C (1110°F). Welders appreciate its smooth feedability, consistent droplet transfer, and controlled puddle that provide excellent weld bead appearance and minimal cleanup. At Metals And Welding Specialities, we ensure that every spool and rod of **ER80S-B2 MIG & TIG wire** undergoes rigorous quality inspection to meet or exceed international standards. Our manufacturing partners use high-purity raw materials and advanced drawing techniques to produce wire with consistent diameter, precise chemistry, and low moisture pickup – ensuring reliability in every weld pass. The wire is compatible with multiple shielding gases, including argon or argon/CO₂ mixtures for MIG applications and pure argon for TIG welding, giving welders flexibility across various setups and positions.



ER80S-B2 MIG & TIG Welding Wire in India, ER80S-B2 MIG & TIG Welding Wire Manufacturers in India, ER80S-B2 MIG & TIG Welding Wire Suppliers in India, ER80S-B2 MIG & TIG Welding Wire Stockists in India, ER80S-B2 MIG & TIG Welding Wire Exporters in India

For industries demanding dependable weld performance under extreme service conditions, **ER80S-B2** remains the go-to filler metal. It represents a perfect balance of strength, toughness, and temperature resistance that aligns with critical codes and specifications such as ASME Section IX and ANSI/AWS A5.28. Choosing Metals And Welding Specialities means partnering with a trusted supplier that prioritizes metallurgical excellence, consistency, and customer satisfaction.

Specification ER80S-B2 MIG & TIG Welding Wire



Classification	AWS A5.28, ER80S-B2
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 ER80S-B2 MIG & TIG Filler Metal Application & uses	Hardware tools Metallurgy Machinery Construction Shipbuilding Petroleum Chemical plant Power sector Gas Industry

Equivalent Grade Of ER80S-B2 MIG & TIG Welding Wire



Class	UNS	Oxford Alloys	BOHLER
ER80S-B2	K20900	Alloy 80S-B2	UNION ER80S-B2

ER80S-B2 MIG & TIG Welding Wire Chemical Composition



C	Mn	Si	Cr	Mo	P	S	Cu
.09	.55	.48	1.35	.55	.012	.006	.15

ER80S-B2 MIG & TIG Welding Wire Parameters



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

People Also Searched

ER80S-B2 filler metal, AWS A5.28 ER80S-B2, UNS K21590 welding wire, ASTM A5.28 filler wire, chromium molybdenum steel welding wire, low alloy steel TIG rod, ER80S-B2 MIG wire, GMAW wire for Cr-Mo steel, TIG wire for pressure vessel welding, ER80S-B2 wire price, ER80S-B2 chemical composition, ER80S-B2 mechanical properties, ASME Section IX welding wire, ER80S-B2 heat treatment, high-temperature welding wire, ER80S-B2 WPS, ER80S-B2 for refinery piping, ER80S-B2 vs ER90S-B3, ER80S-B2 creep resistant wire, power plant welding filler, ASTM A5.28 specification, UNS K21590 equivalent, ER80S-B2 datasheet, chromium molybdenum alloy wire, low hydrogen welding wire, TIG filler for alloy steel, ER80S-B2 rod supplier, ER80S-B2 hardness, ER80S-B2 weldability, ER80S-B2 tensile strength, ER80S-B2 shielding gas, ER80S-B2 electrode, ER80S-B2 manufacturing standards, ER80S-

B2 applications, ER80S-B2 for heat exchangers, ER80S-B2 welding procedures, ER80S-B2 arc stability, ER80S-B2 filler classification.