At Metals And Welding Specialities, we supply high-performance **ER320LR MIG & TIG Welding Wire** welding wire designed for superior corrosion resistance and dependable weld integrity in demanding industrial environments. Engineered to meet the most stringent metallurgical standards, this filler metal is ideal for joining materials that require exceptional strength and resistance to intergranular corrosion, particularly in aggressive chemical and marine applications.

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The **ER320LR** is a low-carbon version of the standard 320 stainless steel electrode, ensuring minimal carbide precipitation and greater stability during high-temperature service. Classified under UNS S32083, this alloy conforms to ASTM A580/A580M standards, guaranteeing consistent chemistry and mechanical properties across every batch. The “LR” (Low Residual) designation minimizes impurities such as sulfur and phosphorus, enhancing the weld’s ductility and reducing the risk of cracking under stress.

ER320LR MIG & TIG Welding Wire, ER320LR MIG & TIG Welding Wire Manufacturers, ER320LR MIG & TIG Welding Wire Suppliers, ER320LR MIG & TIG Welding Wire Stockists, ER320LR MIG & TIG Welding Wire Exporters

With its excellent combination of chromium, nickel, molybdenum, and iron, **ER320LR** filler wire provides reliable protection against oxidation and scaling in continuous service up to 870°C (1600°F). This composition delivers a strong austenitic structure, making it a preferred choice for welding materials exposed to harsh chloride-rich environments and high-temperature oxidizing conditions. Whether used in **MIG (GMAW)** or **TIG (GTAW)** processes, the wire maintains a smooth, stable arc and consistent bead appearance, ensuring optimal fusion and minimal spatter.

Industries such as petrochemical processing, pharmaceutical manufacturing, food production, and paper bleaching plants rely on **ER320LR MIG & TIG** wire for its ability to withstand severe chemical exposure, including acids and chlorides. The filler metal is also widely used for joining stainless steels containing high levels of molybdenum and for overlay welding where superior corrosion resistance is critical. Thanks to its low carbon and low residual formulation, welds made with this alloy resist sensitization, making post-weld heat treatment unnecessary in most cases.

ER320LR MIG & TIG Welding Wire in India, ER320LR MIG & TIG Welding Wire Manufacturers in India, ER320LR MIG & TIG Welding Wire Suppliers in India, ER320LR MIG & TIG Welding Wire Stockists in India, ER320LR MIG & TIG Welding Wire Exporters in India

At Metals And Welding Specialities, quality and performance are our priorities. Every spool and rod of **AWS ER320LR** welding wire undergoes stringent inspection to ensure compliance with international standards and to guarantee welders a clean, consistent feed during both manual and automated applications. The result is a filler metal that delivers high mechanical strength, superior metallurgical soundness, and long-term durability even in extreme service environments.

When reliability, corrosion resistance, and mechanical integrity are non-negotiable, trust Metals And Welding Specialities to deliver the genuine **ER320LR MIG & TIG Welding Wire** welding wire — engineered for precision, consistency, and long-lasting performance.

Specification ER320LR MIG & TIG Welding Wire

Classification	**AWS A5.9, ER320LR**
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 ER320LR MIG & TIG Filler Metal Application & uses	Hardware tools Metallurgy Machinery Construction Shipbuilding Petroleum Chemical plant Power sector Gas Industry

Equivalent Grade Of ER320LR MIG & TIG Welding Wire

Class	UNS	Oxford Alloys
ER320LR	S30888	Alloy 320LR

ER320LR MIG & TIG Welding Wire Chemical Composition

C	Cr	Ni	Mo	Mn	Si	P	S	Nb	Cu 8XC min/0.40 max
0.025	19.0-21.0	32.0-36.0	2.0-3.0	1.5-2.0	0.15	0.015	0.02	3.0-4.0	0.75

ER320LR MIG & TIG Welding Wire Parameters

Diameter		Process	Volt	Amps	Shielding Gas
in	(mm)				
.035	(0.9)	GMAW	22-23	180-210	Spray transfer 98% Argon/2% Oxygen
.045	(1.2)	GMAW	23-25	195-260	Spray transfer 98% Argon/2% Oxygen
1/16	(1.6)	GMAW	25-28	260-390	Spray transfer 98% Argon/2% Oxygen
.035	(0.9)	GMAW	19-23	55-170	Short Circuiting Transfer 90% Helium/ 7 ½% Argon / 2 ½% CO_2
.045	(1.2)	GMAW	19-23	100-185	Short Circuiting Transfer 90% Helium/ 7 ½% Argon / 2 ½% CO_2
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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ER320LR filler wire, ER320LR TIG wire, ER320LR MIG wire, UNS S32083 welding rod, ER320 stainless steel wire, 320LR stainless filler, AWS ER320LR chemical composition, ASTM A580 ER320LR, stainless steel welding filler, molybdenum stainless filler metal, low residual stainless wire, corrosion-resistant welding wire, 320LR TIG rod suppliers, ER320LR GMAW wire, austenitic stainless filler wire, AWS ER320LR specification, stainless steel overlay welding, marine-grade stainless wire, chemical plant welding alloy, heat-resistant stainless filler, ER320LR mechanical properties, UNS S32083 equivalent, 320LR vs 316L filler, ER320LR application, AWS ER320LR TIG rod price, ASTM A580/A580M stainless wire, ER320LR corrosion data, high-nickel stainless filler, ER320LR welding parameters, AWS ER320LR manufacturers, ER320LR composition chart, low carbon stainless wire, TIG stainless filler ER320LR, ER320LR welding procedure, UNS S32083 composition, AWS ER320LR datasheet, ER320LR electrode supplier.