

The **ER420** is a premium grade stainless steel welding wire designed for both **MIG** and **TIG** welding applications where strength, corrosion resistance, and wear performance are critical. Manufactured and supplied by **Metals And Welding Specialities**, this wire offers exceptional metallurgical consistency and weld integrity, making it the preferred choice for fabrication and repair of components exposed to high stress and abrasive conditions.



Table Of Content

- [What is ER420 MIG & TIG Welding Wire?](#)
- [Specification of ER420 MIG & TIG Welding Wire](#)
- [Equivalent Grade Of ER420 MIG & TIG Welding Wire](#)
- [Chemical Composition of ER420 MIG & TIG Welding Wire](#)
- [ER420 MIG & TIG Welding Wire Parameters](#)
- [People Searched for ER420 MIG & TIG Welding Wire](#)
- [Supply Cities of ER420 MIG & TIG Welding Wire](#)
- [Export Countries of ER420 MIG & TIG Welding Wire](#)

Classified under **UNS S42080** and conforming to **ASTM A580 Grade 420**, this alloy is a martensitic stainless steel designed to deliver high tensile strength and moderate corrosion resistance. It provides excellent resistance to scaling and oxidation up to 650°C (1200°F). The wire deposits are hardenable through heat treatment, allowing engineers and welders to achieve the precise balance between hardness and toughness needed for critical industrial applications.

ER420 MIG & TIG Welding Wire, ER420 MIG & TIG Welding Wire Manufacturers, ER420 MIG & TIG Welding Wire Suppliers, ER420 MIG & TIG Welding Wire



Stockists, ER420 MIG & TIG Welding Wire Exporters

The **ER420 MIG & TIG** wire from Metals And Welding Specialities is known for its clean arc stability, smooth bead appearance, and minimal spatter. Its composition—rich in chromium with low carbon content—ensures superior resistance to abrasion and galling, making it ideal for manufacturing and refurbishing of pump shafts, valve seats, turbine blades, and cutting tools. Whether you are working in petrochemical plants, pulp and paper industries, or heavy machinery fabrication, this filler metal provides reliable performance under demanding service conditions.

This wire is engineered for joining **420 stainless steels** and similar alloys, and can also be used for overlay applications on carbon steels to improve surface wear resistance. For maximum mechanical properties, a post-weld heat treatment or tempering process is recommended. Its compatibility with both **Gas Tungsten Arc Welding (GTAW)** and **Gas Metal Arc Welding (GMAW)** processes ensures flexibility and efficiency in production environments.



ER420 MIG & TIG Welding Wire in India, ER420 MIG & TIG Welding Wire Manufacturers in India, ER420 MIG & TIG Welding Wire Suppliers in India, ER420 MIG & TIG Welding Wire Stockists in India, ER420 MIG & TIG Welding Wire Exporters in India

Metals And Welding Specialities maintains stringent quality control standards, ensuring each spool of ER420 wire meets or exceeds AWS A5.9 specifications. Welders appreciate its easy feeding characteristics, stable arc performance, and high deposition efficiency. The result is a strong, clean weld joint with outstanding surface finish and minimal porosity. When your application demands precision, durability, and metallurgical reliability, the **ER420 welding wire** delivers consistent results you can trust.

At Metals And Welding Specialities, we take pride in offering high-performance welding consumables that meet global standards and deliver measurable value. Our **ER420** is not just a filler metal—it's a proven solution for stainless steel joining and cladding applications where performance and longevity matter most.

Specification ER420 MIG & TIG Welding Wire



Classification	AWS A5.9, ER420
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 ER420 MIG & TIG Filler Metal Application & uses

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

Equivalent Grade Of ER420 MIG & TIG Welding Wire



Class	UNS	Oxford Alloys
ER420	S30888	Alloy 420

ER420 MIG & TIG Welding Wire Chemical Composition



C	Cr	Ni	Mo	Mn	Si	P	S	Cu
0.03	19.5-22.0	9.0-11.0	0.75	1.0-2.5	0.65-1.00	0.03	0.03	0.75

ER420 MIG & TIG Welding Wire Parameters



Diameter		Process	Volt	Amps
in	(mm)			
.023	(0.6)	GMAW	14-19	30-85
.030	(0.8)	GMAW	15-20	45-125
.035	(0.9)	GMAW	16-22	60-150
.045	(1.14)	GMAW	17-22	90-210
1/16"	(1.6)	GTAW	12	80-150
3/32"	(2.4)	GTAW	12	150-250
1/8"	(3.2)	GTAW	12	200-375

People Also Searched

ER420 welding wire, AWS ER420, UNS S42080, ASTM A580 Grade 420, stainless steel filler metal, martensitic stainless wire, ER420 TIG wire, ER420 MIG wire, 420 stainless steel welding, AISI 420 welding rod, stainless steel electrode 420, ER420 welding consumables, stainless steel wire for repair, heat-treatable stainless filler, ER420 for pump shafts, stainless overlay wire, wear-resistant stainless wire, 420 hardfacing wire, 420 stainless cladding, GTAW stainless wire, GMAW stainless wire, high hardness welding wire, stainless welding rod 420, 420 stainless steel repair, martensitic alloy wire, stainless tool steel wire, stainless steel welding filler, corrosion resistant wire, high strength filler metal, stainless arc welding wire, ER420 spooled wire, stainless fabrication filler, 420 stainless applications, stainless welding consumables, 420 stainless rod, A5.9 ER420 wire, welding wire for turbine blades.