Metals And Welding Specialities offers high-quality **ERNiCr-3 MIG & TIG Welding Wire** welding wires designed for superior performance across demanding industrial applications. This premium nickel-chromium alloy filler metal provides exceptional resistance to corrosion and oxidation, making it the preferred choice for welding nickel-based alloys and dissimilar metals. Known under the **UNS N06082** designation and conforming to **ASTM A494 Grade CW-6M** and **ISO 18274: S Ni 6082 (NiCr20Mo9Nb)**, this filler ensures consistent weld integrity even in extreme environments such as chemical plants, marine systems, and power generation units.

## Table Of Content



The **ERNiCr-3** wire from Metals And Welding Specialities is engineered for both **MIG (GMAW)** and **TIG (GTAW)** welding processes. It delivers smooth arc stability, low spatter levels, and excellent weld pool control, enabling welders to achieve clean, strong joints with minimal post-weld finishing. The composition includes a precise balance of nickel, chromium, iron, and trace elements that promote resistance to pitting and stress-corrosion cracking, particularly in oxidizing and reducing environments. This makes it

ideal for joining **Inconel 600**, **Inconel 601**, and **Inconel 690** alloys, as well as for overlaying and cladding carbon or stainless steels where superior corrosion resistance is needed.

ERNiCr-3 MIG & TIG Welding Wire, ERNiCr-3 MIG & TIG Welding Wire Manufacturers, ERNiCr-3 MIG & TIG Welding Wire Suppliers, ERNiCr-3 MIG & TIG Welding Wire Stockists, ERNiCr-3 MIG & TIG Welding Wire Exporters

Applications of **AWS Class ERNiCr-3** filler wires span across industries requiring high heat and corrosion endurance. These include nuclear reactors, gas turbines, chemical processing equipment, and aerospace components. The filler metal maintains high strength and ductility even under cyclic thermal stresses, ensuring reliability in service conditions involving fluctuating temperatures and aggressive chemicals. Metals And Welding Specialities ensures every spool or rod meets stringent quality standards through advanced testing and precision manufacturing, guaranteeing weld metal purity and mechanical stability. Another key advantage of **ERNiCr-3** is its versatility in joining dissimilar metals. It is widely used for welding between nickel-chromium alloys and stainless steels, offering outstanding metallurgical compatibility. This property minimizes the risk of intergranular corrosion and thermal fatigue, improving service life in pressure vessels, pipelines, and heat exchangers. Welders appreciate its easy arc initiation and excellent bead appearance, while engineers value its predictable performance under pressure and heat.

ERNiCr-3 MIG & TIG Welding Wire in India, ERNiCr-3 MIG & TIG Welding Wire Manufacturers in India, ERNiCr-3 MIG & TIG Welding Wire Suppliers in India, ERNiCr-3 MIG & TIG Welding Wire Stockists in India, ERNiCr-3 MIG & TIG Welding Wire Exporters in India

Metals And Welding Specialities stands as a trusted supplier of **ERNiCr-3 MIG & TIG welding wires** due to its commitment to precision, quality assurance, and technical excellence. Each product is manufactured using premium-grade raw materials and packed with care to preserve cleanliness and weldability. Whether for critical repair work or high-performance fabrication, **Metals And Welding Specialities' AWS Class ERNiCr-3** ensures dependable results every time.

## Specification AWS Class ERNiCr-3 Welding Wire

| | |
|---|---|
| **Classification** | **AWS A5.14** |
| **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. |

| | |
|---|---|
| **ERNiCr-3 MIG & TIG Welding Wire Filler Metal Application & uses** | Hardware tools<br>Metallurgy<br>Machinery<br>Construction<br>Shipbuilding<br>Petroleum<br>Chemical plant<br>Power sector<br>Gas Industry |

## Equivalent Grade Of AWS Class ERNiCr-3 Welding Wire

| Class | UNS | Oxford Alloys | Special Metals | UTP | ESAB |
|---|---|---|---|---|---|
| ERNicr-3 | N02061 | Alloy 61 | NICKEL FILLER METAL 61 | OK AUTROD NI-1 | |

## AWS Class ERNiCr-3 Welding Wire Chemical Composition

| C | Mn | Si | S | P | Ni | Fe | Cu | Al | Ti |
|---|---|---|---|---|---|---|---|---|---|
| ≤0.15 | ≤1 | ≤0.75 | ≤0.015 | ≤0.02 | ≥93 | ≤1 | ≤0.25 | ≤1.5 | 2-3.5 |

## AWS Class ERNiCr-3 Welding Wire Parameters

| Diameter | | Process | Volt | Amps | Shielding Gas |
|---|---|---|---|---|---|
| In | mm | | | | |
| 0.035 | 0.9 | GMAW | 26-29 | 150-190 | Spray Transfer 100% Argon |
| 0.045 | 1.2 | GMAW | 28-32 | 180-220 | |
| 1/16 | 1.6 | GMAW | 29-33 | 200-250 | |
| 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 |

## People Also Searched

ERNiCr-3 welding wire, AWS ERNiCr-3 MIG wire, AWS ERNiCr-3 TIG rod, UNS N06082 filler metal, ASTM A494 CW-6M electrode, Nickel-Chromium alloy filler, Inconel 600 welding wire, Inconel 601 filler rod, Inconel 690 MIG wire, NiCr20Mo9Nb welding rod, ISO 18274 S Ni 6082 wire, High corrosion-resistant filler metal, Nickel-based welding wire, Heat-resistant filler alloy, GTAW nickel alloy

wire, GMAW nickel alloy filler, Chemical industry welding wire, Power plant welding electrode, Marine-grade nickel wire, Aerospace-grade filler metal, Welding dissimilar metals, Cladding wire for stainless steel, Overlay welding filler, Oxidation-resistant wire, Stress-corrosion resistant filler, Superalloy welding wire, High-temperature welding wire, Nickel alloy TIG rod, Nickel-chromium TIG filler, Industrial welding consumables, Inconel welding electrode, Nickel alloy MIG wire, Welding wire UNS N06082, AWS ERNiCr-3 specification, Metals And Welding Specialities filler wire, Nickel alloy welding consumables, TIG welding wire for Inconel, MIG welding wire for nickel alloys