

ER NiCrMo-13 (Alloy 59)

Nickel Alloy TIG/GTAW

Standards

EN/ISO-Standard - 18274

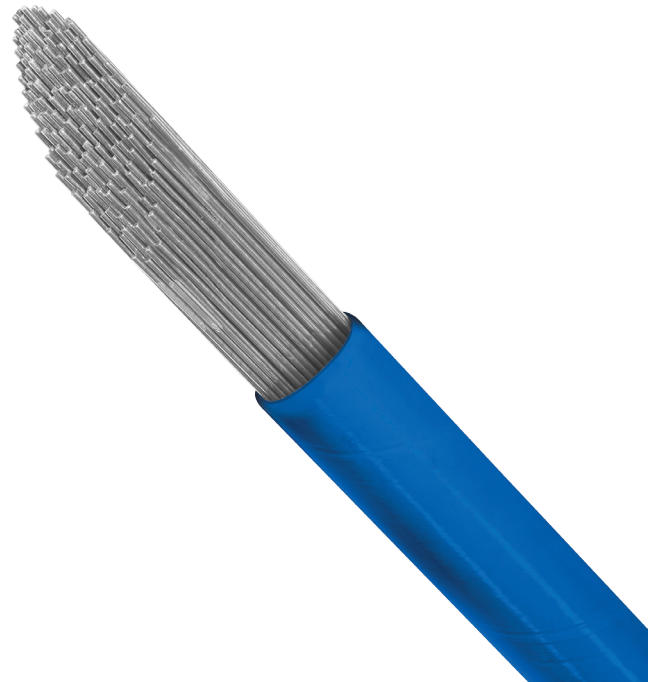
AWS-Standard - A5.14

EN/ISO-Classification - Ni 6059 - NiCr23Mo16

AWS-Classification - ER NiCrMo-13

Features and Applications

- Alloy 59 is a nickel-chromium-molybdenum alloy with an extra low carbon and silicon content.
- Versatile alloy with excellent wet corrosion resistance for the most demanding applications.
- The high level of Mo is similar to alloy C276 but performs better in a wider range of oxidising media's.
- Typically used in the welding of aggressively corrosive media's, including scrubbers for flue gas desulphurisation, digesters and papermaking equipment, chemical process plants, corrosion resistant overlays and in severe offshore and petrochemical industries etc.
- Test Certificates can be found online @wilkinsonstar247.com**



Typical Base Materials

Alloy 22, Alloy 625, Alloy 276, Alloy 686*

* Illustrative, not exhaustive list

Welding Positions

EN ISO 6947 - PA, PB, PC, PD, PE, PF

Shielding Gases

EN ISO 14175 - TIG: I1 (Argon)

Polarity

TIG DC (-)

Mechanical Properties

| Tensile Strength (N/mm ²) | Yield Strength (N/mm ²) | Elongation (%) | Impact Strength (J) |
|---------------------------------------|-------------------------------------|----------------|---------------------|
| ≥760 | - | - | - |

Mechanical properties are approximate and may vary based on the heat, shielding gas, welding parameters and other factors.

Chemical Composition of Weld Metal %

| C % | Mn % | Fe % | P % | S % | Si % | Ni % | Co % | Al % | Cr % | Mo % |
|-------|------|------|-------|-------|------|-------|------|------|-------|-------|
| max | max | max | max | max | max | 56.00 | max | 0.10 | 22.00 | 15.00 |
| 0.010 | 0.50 | 1.50 | 0.020 | 0.005 | 0.08 | min | 0.30 | 0.40 | 24.00 | 16.50 |

Packaging Data

| Part No. | Diameter Ø (mm) | Package Length (mm) | Package Weight (Kg) | Package Type |
|------------|-----------------|---------------------|---------------------|----------------|
| 6011100602 | 1.60 | 1000 | 5 | Cardboard Tube |
| 6011100603 | 2.40 | 1000 | 5 | Cardboard Tube |
| 6011100604 | 3.20 | 1000 | 5 | Cardboard Tube |

Liability: Whilst all reasonable efforts have been made to ensure the accuracy of the information contained, this information is subject to change without notice and can be only considered as suitable for general guidance.

