

# ER NiCrMo-10 (Alloy C22)

Nickel Alloy WIRE/GTAW

## Standards

EN/ISO-Standard - 18274

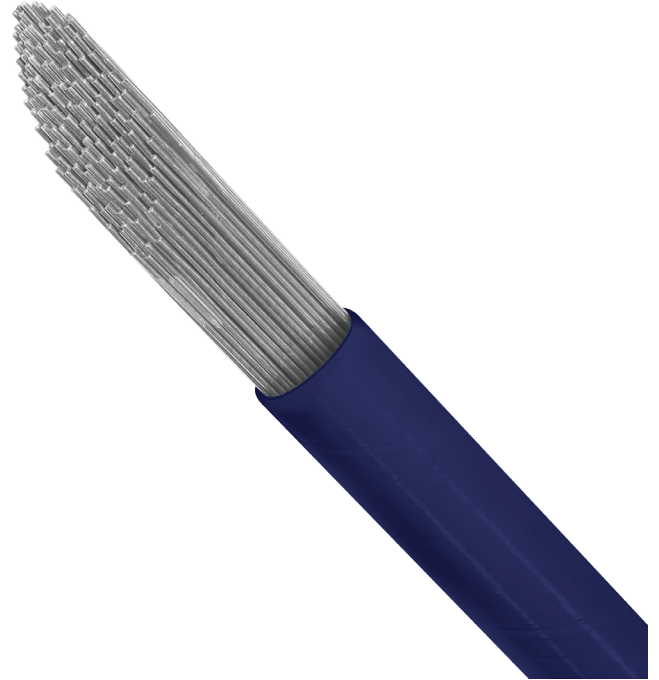
AWS-Standard - A5.14

EN/ISO-Classification - S Ni 6022 - NiCr21Mo13Fe4W3

AWS-Classification - ER NiCrMo-10

## Features and Applications

- Nickel-chromium-molybdenum alloy designed for joining C22, 625, 825 or combinations of these alloys.
- Provides a tough Nb-free weld metal for dissimilar welds in super austenitic and super duplex stainless steels.
- Offers excellent resistance against stress & corrosion cracking, pitting and crevice corrosion.
- Extensively used for overlays and cladding of lower alloy steels.
- Typically used in the welding of aggressively corrosive media in chemical processing plants, corrosion resistant overlays and in severe offshore and petrochemical environments etc.
- **Test Certificates can be found online @wilkinsonstar247.com**



## Typical Base Materials

Alloy 22, Alloy 625, Alloy 825, Alloy 926\*

\* Illustrative, not exhaustive list

## Welding Positions

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

## Shielding Gases

EN ISO 14175 - TIG: I1 (Argon)

## Polarity

DC (-)

## Mechanical Properties

| Tensile Strength (N/mm <sup>2</sup> ) | Yield Strength (N/mm <sup>2</sup> ) | Elongation (%) | Impact Strength (J) |
|---------------------------------------|-------------------------------------|----------------|---------------------|
| ≥690                                  | -                                   | -              | -                   |

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

## Chemical Composition % (Range)

| C %   | Mn % | Fe % | P %   | S %   | Si % | Cu % | Ni %  | Co % | Cr %  | Mo %  | V %  | W %  |
|-------|------|------|-------|-------|------|------|-------|------|-------|-------|------|------|
| max   | max  | 2.00 | max   | max   | max  | max  | 49.00 | max  | 20.00 | 12.50 | max  | 2.50 |
| 0.010 | 0.50 | 6.00 | 0.020 | 0.010 | 0.08 | 0.50 | min   | 2.50 | 22.50 | 14.50 | 0.30 | 3.50 |

## Packaging Data

| Part No.   | Diameter Ø (mm) | Package Length (mm) | Package Weight (Kg) | Package Type   |
|------------|-----------------|---------------------|---------------------|----------------|
| 6011100599 | 1.60            | 1000                | 5                   | Cardboard Tube |
| 6011100600 | 2.40            | 1000                | 5                   | Cardboard Tube |
| 6011100601 | 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.

