

ES TIG NiCrMo-3

GTAW

ERNiCrMo-3

ESWECO
The Art of Welding

Description

A nickel-based, corrosion- and heat-resistant, 22% Cr, 9% Mo, 3.5% Nb rod for the GTAW of high-alloyed steel, heat-resistant steel, corrosion-resistant steel, 9% Ni steels and similar steel with high notch toughness at low temperatures. It is also suitable for joining dissimilar metals of the types mentioned above. ES TIG NiCrMo-3 is normally welded with pure Ar as the shielding gas.

Current

DC (-)

Classifications

SFA/AWS A5.14 ERNiCrMo-3
EN ISO 18274 S Ni 6625
(NiCr22Mo9Nb)

Typical all weld metal composition, %

| C | Si | Mn | Cr | Ni | Mo | Cu | Al | Fe | Ti |
|------|------|------|------|-------|-----|------|------|------|-----|
| <0.1 | <0.5 | <0.5 | 21.5 | >60.0 | 9.0 | <0.5 | <0.4 | <2.0 | 0.2 |

Typical mech. Properties all weld metal

| | |
|-----------------------|-----|
| Yield stress, MPa | 500 |
| Tensile strength, MPa | 780 |
| Elongation, % | 40 |

Charpy V

| Test temps, °C | Impact values, J |
|----------------|------------------|
| +20 | 130 |
| -105 | 120 |
| -196 | 110 |

Welding parameters

| Diameter, mm | Length, mm | Weight of rods/box, kg |
|--------------|------------|------------------------|
| 1.6 | 1000 | 5.0 |
| 2.0 | 1000 | 5.0 |
| 2.4 | 1000 | 5.0 |