

NiCu30Mn Tig

CATEGORY GMAW-GTAW Solid wires

TYPE Solid Nickel based filler metal alloyed with Copper for Tig welding.

APPLICATIONS Shipbuilding, seawater evaporation plants, tubes, pump building, offshore etc.

PROPERTIES This Nickel - Copper weld metal has properties similar to "Monel 400". It has good strength and resists corrosion in many media, including sea water, salts and reducing acids. The weld metal is not age hardenable and when used to join Monel K-500 it has lower strength than the base metal.

CLASSIFICATION

| | |
|------------|---------------------|
| AWS | A 5.14: ER NiCu-7 |
| EN ISO | 18274: S Ni 4060 |
| DIN: W.Nr. | 2.4377 |
| DIN | 1736: SG-NiCu30MnTi |

SUITABLE FOR 2.4360, 2.4375, NiCu30Fe, NiCu30Al, Monel alloy 400, R405, alloy K500 and dissimilar welding between these alloys.

APPROVALS CE approved

WELDING POSITIONS:



WELD METAL ANALYSIS %

| Mn | Ni | Fe | Si | Cu | Ti | C |
|-------|-------|-------|--------|------|----------|--------|
| < 4.0 | 62-69 | < 2.5 | < 1.25 | base | 1.50-3.0 | < 0.15 |

MECHANICAL PROPERTIES

| Heat Treatment | R _{p0,2} (N/mm ²) | R _m (N/mm ²) | A ₅ (%) | Impact Energy (J) ISO-V | | | Hardness HRc / HV |
|----------------|--|-------------------------------------|--------------------|-------------------------|-------|-------|-------------------|
| | | | | 20°C | -40°C | -60°C | |
| AW | >300 | >450 | >30 | >80 | | | |

AW: as welded

WELDING PARAMETERS / PACKING

| D (mm) | Welding Parameters | | Packing (kg) | |
|------------|--------------------|--|--------------|--------|
| | Current (A) DC- | | single | master |
| 1,6 x 1000 | 50-80 | | 5 | 25 |
| 2.0 x 1000 | 70-110 | | 5 | 25 |
| 2.4 x 1000 | 110-180 | | 5 | 25 |
| 3.2 x 1000 | 150-250 | | 5 | 25 |

REDRYING TEMPERATURE not required

GAS ACC. EN ISO 14175: I1