Technical Datasheet

# IGS-Silverin 400

**Wire Electrode / Welding Wire / GTAW Rod**


## Characteristics and scope of application

- Filler metal for NiCu Alloys, excellent corrosion resistance in seawater environments
- Application in desalination plants and chemical process industry
- Recommended for dissimilar welds of NiCu alloys and mild steels

## Standard designations

| DIN EN ISO 18274 | AWS A5.14 | DIN Mat.-No. |
|---|---|---|
| S Ni 4060 (NiCu30Mn3Ti) | ERNiCu-7 | 2.4377 |

## Typical chemical composition of filler metal

| | C | Si | Mn | Cu | Ni | Ti |
|---|---|---|---|---|---|---|
| Mass % | 0.02 | 0.3 | 3.3 | 29 | Bal. | 2.3 |

## All weld metal properties (min. values at rt)

| Heat treatment | Yield strength | Tensile strength | Elongation | Impact toughness | |
|---|---|---|---|---|---|
| | $R_{p0.2}$ | $R_m$ | $A_5$ | ISO-V | |
| as welded | 300 MPa | 450 MPa | 30% | 120 J | |

## Welding instructions

| Polarity | Shielding gas acc. to DIN EN ISO 14175 |
|---|---|
| DC / + | I1, I3, Z (ArHeHC-30/2/~0.1) |
| DC / - | I1, I3, R1 (max. 5% $H_2$) |
| Low heat input and interpass temperature < 120°C. Stringer bead technique recommended. | |
| Base materials | |
| 2.4360 – NiCu30Fe – Alloy 400 | |
| 2.4375 – NiCu30Al – Alloy K500 | |

## Packaging (tolerances acc. to DIN EN ISO 544)

| Diameter (mm) | | Kg |
|---|---|---|
| 1.6 / 2.0 / 2.4 / 3.2 | X 1000 mm | 5 / 10 |
| 0.8 / 1.0 / 1.2 | BS 300 spool | 15 |
| 1.6 / 2.4 / 3.2 | K 415 / K 435 spool | 25 |

Approvals on request

Deutsche Nickel