# UTP A 80 M

TIG rod

| Classifications | | |
|---|---|---|
| EN ISO 18274 | AWS A5.14 | Material-No. |
| S Ni 4060 (NiCu30Mn3Ti) | ER NiCu-7 | 2.4377 |

## Characteristics and field of use

UTP A 80 M is suitable for joining and surfacing of nickel-copper alloys and of nickel-copper-clad steels. Particularly suited for the following materials: 2.4360 NiCu30Fe, 2.4375 NiCu30Al.

UTP A 80 M is also used for joining different materials, such as steel to copper and copper alloys, steel to nickel-copper alloys. These materials are employed in high-grade apparatus construction, primarily for the chemical and petrochemical industries. A special application field is the fabrication of seawater evaporation plants and marine equipment.

The weld metal has an excellent resistance to a large amount of corrosive medias, from pure water to nonoxidising mineral acids, alkali and salt solutions.

## Typical analysis in %

| C | Si | Mn | Cu | Ni | Ti | Fe |
|---|---|---|---|---|---|---|
| < 0,02 | 0,3 | 3,2 | 29,0 | balance | 2,4 | 1,0 |

## Mechanical properties of the weld metal

| Yield strength $R_{P0,2}$ | Tensile strength $R_m$ | Elongation A | Impact strength $K_V$ |
|---|---|---|---|
| MPa | MPa | % | J [RT] |
| > 300 | > 480 | > 30 | > 80 |

## Welding instruction

Clean the weld area thotoughly to avoid porosity. Opening groove angle about 70°. Weld stringer beads.

## Approvals

TÜV (No. 00249), ABS, DNV

| Rod diameter x length [mm] | Current type | Shielding gas (EN ISO 14175) |
|---|---|---|
| 1,6 x 1000 | DC (-) | I 1 |
| 2,0 x 1000 | DC (-) | I 1 |
| 2,4 x 1000 | DC (-) | I 1 |
| 3,2 x 1000 | DC (-) | I 1 |

All information provided is based upon careful investigation and intensive research.
However, we do not assume any liability for correctness and information is subject to change without notice.