# UTP 6222 Mo

basic coated NiCrMo-stick electrode

| Classifications | | |
|---|---|---|
| EN ISO 14172 | AWS A5.11 | Material-No. |
| E Ni 6625 (NiCr22Mo9Nb) | ENiCrMo-3 | 2.4621 |

## Characteristics and field of use

UTP 6222 Mo is particularly suited for joining and surfacing on nickel alloys, austenitic steels, low temperature nickel steels, austenitic-ferritic-joints and claddings of the same or similar nature, like 2.4856 (NiCr22Mo 9 Nb), 1.4876 (X30 NiCrAlTi 32 20), 1.4529 (X2 NiCrMoCu 25 20 5).

The weld metal is heat resistant and suitable for operating temperatures up to 1000 °C. It must be noted that a slight decrease in ductility will occur if prolonged heat treatment is given within the temperature range 600 – 800 °C. Scale-resisting in low-sulphur atmosphere up to 1100 °C. High creep strength.

## Typical analysis in %

| C | Si | Mn | Cr | Mo | Ni | Nb | Fe |
|---|---|---|---|---|---|---|---|
| 0.03 | 0.4 | 0.6 | 22.0 | 9.0 | balance | 3.3 | < 1 |

## Mechanical properties of the weld metal

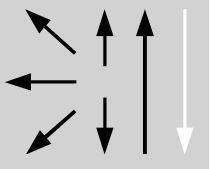
| Yield strength $R_{P0,2}$ | Tensile strength $R_m$ | Elongation A | Impact strength $K_V$ | |
|---|---|---|---|---|
| MPa | MPa | % | J | –196 °C |
| > 450 | > 760 | > 30 | > 75 | >45 |

## Welding instruction

Opening angle of the prepared seam approx. 70°, root gap approx. 2 mm. Weld stick electrode with slight tilt and short arc. String beads are welded. The interpass temperature of 150 °C and a max. weaving with 2.5 x diameter of the stick electrode core wire should not be exceeded.

Redry the stick electrodes 2 – 3 hours at 250 – 300 °C before use and weld them out of a warm electrode carrier.

## Welding positions



Current type DC (+)

## Approvals

TÜV (No. 03610), DNV, ABS, BV

## Recommended welding parameters

| Electrodes Ø x L [mm] | 2.5 x 300 | 3.2 x 300 | 3.2 x 350 | 4.0 x 350 | 5.0 x 400 |
|---|---|---|---|---|---|
| Amperage [A] | 50 – 65 | 70 – 95 | 70 – 95 | 90 – 120 | 120 – 160 |