# UTP 6225 Al

basic coated NiCrFe stick electrode

| Classifications | | |
|---|---|---|
| EN ISO 14172 | AWS A5.11 | Material-No. |
| E Ni 6704 (NiCr25Fe10Al3YC) | E NiCrFe-12 (mod.) | 2.4649 |

## Characteristics and field of use

UTP 6225 Al is suitable for join and repair weldings of high-temperature and heat resistant nickel alloys of identical and similar nature, such as 2.4633 (NiCr25-FeAlY), 2.4851 (NiCr23Fe) and high nickel containing cast alloys.

The special features of the weld metal include an excellent resistance against oxidation and carburization and a good creep rupture strength. For service temperature up to 1200 °C, e. g. steel tubes, rolls and baffles in ovens, ethylene cracking tubes, muffles.

## Typical analysis in %

| C | Si | Mn | Cr | Ni | Ti | Zr | Al | Fe | Y |
|---|---|---|---|---|---|---|---|---|---|
| 0.2 | 0.6 | 0.1 | 25.0 | balance | 0.1 | 0.03 | 1.8 | 10.0 | 0.02 |

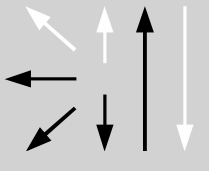
## Mechanical properties of the weld metal

| Yield strength $R_{p0,2}$ | Tensile strength $R_m$ | Elongation A | Impact strength $K_V$ |
|---|---|---|---|
| MPa | MPa | % | J |
| 550 | 740 | 15 | 40 |

## Welding instruction

Hold stick electrode as vertically as possible, keep a short arc. Use string beads technique and fill end crater carefully. Interpass temperature max. 150 °C.
Redry stick electrodes for 2 – 3 h / 250 – 300 °C.

## Welding positions



Current type DC (+)

## Recommended welding parameters

| Electrodes Ø x L [mm] | 2.5 x 250 | 3.2 x 300 | 4.0 x 350 |
|---|---|---|---|
| Amperage [A] | 50 – 65 | 80 – 95 | 90 – 120 |