# UTP 63

**Rutile coated, fully austenitic CrNiMn-stick electrode. Universally applicable**

**Standards :**

| | | |
|---|---|---|
| Material-No.. | : | 1.4370 |
| DIN 8555 | : | E 8-UM-200-KRZ |
| EN 1600 | : | E 18 8 Mn R 32 |
| EN 14700 | : | E Fe10 |

## Application field

With the fully austenitic **UTP 63**, non-alloy structural and heat-treatable steels can be welded, also in combination with austenitic CrNi steels. Furthermore scale-resisting steels for operating temperatures up to 850° C as well as higher carbon materials and high manganese steel can be joined, also in combination with other steels, with **UTP 63**. For surfacing on workpieces exposed to impact, pressure and rolling wear, such as curved rails, points, crusher and excavator teeth. Moreover it provides crack-proof buffer layers under hard alloys.

## Welding properties and special properties of the weld metal

**UTP 63** has good welding properties, stable arc, finely rippled bead appearance. The weld deposit resists to scaling, rust and cracks, work-hardened.

## Hardness of the pure weld metal

| | | |
|---|---|---|
| untreated | : | approx. 200 HB |
| work-hardened | : | approx. 350 HB |

## Mechanical properties of the weld metal

| Yield strength $R_{p0,2}$ MPa | Tensile strength $R_m$ MPa | Elongation A % | Impact strength $K_v$ Joule |
|---|---|---|---|
| > 350 | > 600 | > 40 | > 60 |

## Weld metal analysis in %

| C | Si | Mn | Cr | Ni | Fe |
|---|---|---|---|---|---|
| 0,1 | 0,5 | 5,5 | 19,0 | 8,5 | balance |

## Welding instruction

Clean welding area thoroughly. Pre-heating of thick-walled ferritic parts to 150 - 250° C. Hold stick electrode vertically with a short arc. Re-dry stick electrodes that have got damp for 2 h / 250 - 300° C.

**Current type** DC (+) / AC

**Welding positions**




## Availability / Current adjustment

| Stick electrodes | Ø mm x L | 2,5 x 250 | 3,2 x 350 | 4,0 x 400 | 5,0 x 450 |
|---|---|---|---|---|---|
| Amperage | A | 50 – 70 | 70 – 100 | 100 – 130 | 150 – 180 |

All data on our products are based upon careful investigation and intensive research. However, we do not assume any liability for their correctness.

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