

## Classifications

TIG rod

EN 14700

DIN 8555

S Z Fe3

W3-GZ-40-T

## Characteristics and field of use

UTP A 73 G 4 is, due to its excellent hot wear resistance and toughness, used for build-ups on hot working tools and structural parts subject to impact, compression and abrasion at elevated temperatures, such as forging dies, die cast moulds, plastic moulds, guides, recipients, continuous casting rolls. Hot wear resistant claddings can be made on non-alloy or low-alloy base materials, such as e. g. boiler tubes in coal burning power stations. The deposit is machinable with cutting tools.

UTP A 73 G4 has very good welding properties, good weld build-up and an even flow of the weld pool.

Hardness of the pure weld deposit :

|                            |                |
|----------------------------|----------------|
| untreated                  | 38 – 42 HRC    |
| soft-annealed 800 °C       | approx. 230 HB |
| hardened 1030 °C / oil     | approx. 48 HRC |
| tempered 550 °C            | approx. 42 HRC |
| 1 layer on non-alloy steel | approx. 30 HRC |

## Typical analysis of rod and wire in %

| C   | Si  | Mn  | Cr  | Mo  | Fe      |
|-----|-----|-----|-----|-----|---------|
| 0.1 | 0.4 | 0.6 | 6.5 | 3.3 | balance |

## Welding instructions

Machine welding area to metallic bright. Cracks in the base material have to be gouged out completely. Preheating temperature of 400 °C on tools should be maintained. Stress relief/annealing is recommended at 550 °C. Preheating on non- and low-alloy materials is generally not required.

## Approvals

TÜV (No. 1896), GL

## Form of delivery and recommended welding parameters

| Rod diameter x length [mm] | Current type | Shielding gas (EN ISO 14175) |
|----------------------------|--------------|------------------------------|
| 1.2 x 1000*                | DC (-)       | I 1                          |
| 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                          |

\*available on request

This product is also available as solid wire for MIG/MAG.