

Classifications

| | | |
|----------------|---------------|--------------|
| EN ISO 14343-A | AWS A5.9 | Material-No. |
| W 18 8 Mn | ER 307 (mod.) | 1.4370 |

Characteristics and field of use

UTP A 63 is suitable for particularly crack resistant joining and surfacing of high-strength ferritic and austenitic steels, hard manganese steels and cold-tough steels, as cushioning layer under hard alloys, dissimilar metal joints.

The weld metal of UTP A 63 is scale resistant up to 850° C, cold-tough to -110° C. Work hardening.

Hardness of the pure weld metal: approx. 200 HB

Typical analysis in %

| | | | | | |
|------|-----|-----|------|-----|---------|
| C | Si | Mn | Cr | Ni | Fe |
| 0,08 | 0,8 | 6,5 | 19,5 | 9,0 | balance |

Mechanical properties of the weld metal

| | | |
|---------------------------|------------------------|--------------|
| Yield strength $R_{P0,2}$ | Tensile strength R_m | Elongation A |
| MPa | MPa | % |
| > 370 | > 600 | > 30 |

Welding instruction

Clean weld area thoroughly. Thick walled, ferritic elements have to be preheated to approx. 150-250° C.

Approvals

TÜV (No. 04097)

| 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

