

UTP A 2133 Mn

TIG rod

## Classifications

| EN ISO 14343   | Material-No. |
|----------------|--------------|
| WZ 21 33 Mn Nb | ~ 1.4850     |

## Characteristics and field of use

UTP A 2133 Mn is suitable for joining and surfacing heat resistant base materials of identical and of similar nature, such as

| 1.4859 | G X 10 NiCrNb 32 20 |            |  |  |
|--------|---------------------|------------|--|--|
| 1.4876 | X 10 NiCrAlTi 32 21 | UNS N08800 |  |  |
| 1.4958 | X 5 NiCrAlTi 31 20  | UNS N08810 |  |  |
| 1.4959 | X 8 NiCrAITI 31 21  | UNS N08811 |  |  |

A typical application is the root welding of centrifugally cast pipes in the petrochemical industry for operation temperatures up to 1050° C in dependence with the atmosphere.

Scale resistant up to 1050° C. Good resistance to carburising atmosphere.

| Typical analysis in %  |                   |                                 |      |              |      |                    |  |         |
|--|-------------------|---------------------------------|------|--------------|------|--------------------|--|---------|
| С  | Si                | Mn                              | Cr   |              | Ni   | Nb                 |  | Fe      |
| 0,12   | 0,3               | 4,5                             | 21,0 |              | 33,0 | 1,2                |  | balance |
| Mechanical properties of the weld metal  |                   |                                 |      |              |      |                    |  |         |
| Yield strength   | R <sub>P0,2</sub> | Tensile strength R <sub>m</sub> |      | Elongation A |      | Impact strength Kv |  |         |
| MPa  |                   | MPa                             | %    |              |      | J [RT]             |  |         |
| 400  |                   | 600                             | 20   |              |      | 70                 |  |         |
| Welding instruction  |                   |                                 |      |              |      |                    |  |         |
| Clean the weld area thoroughly. Low heat input. Max. interpass temperature 150° C. |                   |                                 |      |              |      |                    |  |         |

## Approvals

TÜV (No. 10451)

| Rod diameter x length [mm] | Current type | Shielding gas (EN ISO 14175) |
|----------------------------|--------------|------------------------------|
| 2,0 x 1000                 | DC (-)       | 11                           |
| 2,4 x 1000                 | DC (-)       | 11                           |
| 3,2 x 1000                 | DC (-)       | 11                           |