

UTP A 68 H

Standards :

Material-No. : 1.4842
 EN ISO 14343-A : W/G 25 20
 AWS A5.9 : ~ ER 310 (Si)

Rods and wires for heat and scale resistant CrNi-steels

Application field

UTP A 68 H is suitable for joining and surfacing heat - and scale-resistant 25/20 CrNi-steels and cast steels, such as

| Material-No. | DIN | Material-No. | DIN |
|--------------|------------------|--------------|-----------------------|
| 1.4713 | X10 CrAl 7 | 1.4849 | G- X40 NiCrSiNb 38 18 |
| 1.4762 | X10 CrAl 24 | 1.4846 | X12 CrNi 25 21 |
| 1.4845 | X12 CrNi 25 21 | 1.4742 | X10 CrAl 18 |
| 1.4841 | X15 CrNiSi 25 20 | | |

Properties of the weld metal

The weld metal is heat resistant in air and nitrogenous atmosphere at temperatures up to 1100° C, non-resistant to sulphurous combustion gases.

Mechanical properties of the weld metal

| Yield strength R _{p0,2} MPa | Tensile strength R _m MPa | Elongation A % | Impact strength K _v Joule |
|--|---|----------------------|--|
| > 400 | > 650 | > 30 | > 60 |

Weld metal analysis in %

| C | Si | Mn | Cr | Ni | Fe |
|------|-----|-----|------|------|---------|
| 0,12 | 0,9 | 3,2 | 25,0 | 21,0 | balance |

Welding instructions

Clean welding area thoroughly. No preheating and post heat treatment. Low heat input. Interpass temperature max. 150° C.

Welding procedure and availability

| Ø (mm) | Current type | Shielding gas EN ISO 14175 | | Availability | |
|-----------|--------------|-------------------------------|-----|--------------|------------|
| | | M 12 | I 1 | Spools | Rods |
| | | | | EN ISO 544 | L = 1000mm |
| 1,0 | DC (+) | x | x | x | |
| 1,2 | DC (+) | x | x | x | |
| 1,6 | DC (-) | | x | | x |
| 2,0 | DC (-) | | x | | x |
| 2,4 | DC (-) | | x | | x |
| 3,2 | DC (-) | | x | | x |