

| Classifications | | | | | | |
|--|-------------------|------------------------|------|------------------------------|------|-----------------------|
| EN ISO 14343-A | | AWS A5.9 | | Material-No. | | |
| W 19 9 Nb Si | | ER 347 (Si) | | 1.4551 | | |
| Characteristics and field of use | | | | | | |
| UTP A 68 is suitable for joining and surfacing in chem. apparatus and vessel construction for working temperatures of -196°C up to 400°C . | | | | | | |
| Base materials | | | | | | |
| 1.4550 | X6 CrNiNb 18-10 | | | | | |
| 1.4541 | X6CrNiTi 18-10 | | | | | |
| 1.4552 | G-X5 CrNiNb 18-10 | | | | | |
| 1.4311 | X2 CrNiN 18-10 | | | | | |
| 1.4306 | X2 CrNi 19-11 | | | | | |
| AISI 347, 321, 302, 304, 3046, 304LN | | | | | | |
| ASTM A 296 Gr. CF 8 C, A 157 Gr. C 9 | | | | | | |
| Typical analysis in % | | | | | | |
| C | Si | Mn | Cr | Ni | Nb | Fe |
| 0,05 | 0,4 | 1,5 | 19,5 | 9,5 | 0,55 | balance |
| Mechanical properties of the weld metal | | | | | | |
| Yield strength $R_{P0,2}$ | | Tensile strength R_m | | Elongation A | | Impact strength K_V |
| MPa | | MPa | | % | | J [RT] |
| 420 | | 600 | | 30 | | 100 |
| Welding instruction | | | | | | |
| Degrease and clean weld area thoroughly (metallic bright). Preheating and post heat treatment are usually not necessary. | | | | | | |
| Approvals | | | | | | |
| TÜV (No. 04866) | | | | | | |
| Rod diameter x length [mm] | Current type | | | Shielding gas (EN ISO 14175) | | |
| 1,0 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 | | | | | | |