

UTP A 68 Mo

stainless steels

Classifications

TIG rod

EN ISO 14343-A	AWS A5.9	Material-No.
W 19 12 3 Nb (Si)	ER 318 (Si)	1.4576

Characteristics and field of use

UTP A 68 Mo is applicable for joinings and surfacings of stabilized, corrosion resistant CrNiMo steels of similar nature in the construction of chemical apparatus and vessels up to working temperatures of 120 °C up to 400 °C.

Base materials

1.4401	X5 CrNiMo 17-12-2
1.4404	X2 CrNiMo 17-12-2
1.4435	X2 CrNiMo 18-14-3
1.4436	X3 CrNiMo 17-13-3
1.4571	X6 CrNiMoTi 17-12-2
1.4580	X6 CrNiMoNb 17-12-2
1.4583	X10 CrNiMoNb 18-12
1.4409	G-X2 CrNiMo 19-112

UNS S31653; AISi 361L; 316Ti; 316Cb

Typical analysis in %

C	Si	Mn	Cr	Mo	Ni	Nb	Fe
0.03	0.4	1.5	19.0	2.8	11.5	0.55	balance

Mechanical properties of the weld metal

<i>Yield strength</i> $R_{p0.2}$	<i>Tensile strength</i> R_m	<i>Elongation</i> A	<i>Impact strength</i> K_V
<i>MPa</i>	<i>MPa</i>	<i>%</i>	<i>J [RT]</i>
460	680	35	100

Welding instructions

Degrease and clean weld area thoroughly (metallic bright). Preheating and post heat treatment are usually not necessary.

Approvals

TÜV (No. 04868)

Form of delivery and recommended welding parameters

<i>Rod diameter x length [mm]</i>	<i>Current type</i>	<i>Shielding gas (EN ISO 14175)</i>
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
4.0 x 1000*	DC (-)	I 1

*available on request