

## 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  $-196^{\circ}\text{C}$  up to  $400^{\circ}\text{C}$ .

## 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

