

Classifications TIG rod

EN ISO 14343-A	AWS A5.9	Material-No.
W 19 9 L (Si)	ER 308 L (Si)	1.4316

Characteristics and field of use

UTP A 68 LC is suitable for joining and surfacing in chem. apparatus and vessel construction for working temperatures of – 196 °C up to 350 °C.

Base materials

1.4301	X5 CrNiNi 18-10
1.4306	X2 CrNi 19-11
1.4311	X2 CrNiN 18-10
1.4312	G-X10 CrNi 18-8
1.4541	X6 CrNiTi 18-10
1.4546	X5 CrNiNb 18-10
1.4550	X6 CrNiNb 18-10

AISI 304; 304L; 302; 321; 347
 ASTM A 1576 Gr. C 9; A 320 Gr. B 8 C or D

Typical analysis in %

C	Si	Mn	Cr	Ni	Fe
0.02	0.4	1.5	20.0	10.0	balance

Mechanical properties of the weld metal

<i>Yield strength $R_{p0.2}$</i>	<i>Tensile strength R_m</i>	<i>Elongation A</i>	<i>Impact strength K_V</i>
<i>MPa</i>	<i>MPa</i>	<i>%</i>	<i>J [RT]</i>
400	600	35	100

Approvals

TÜV (No. 05831)

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>
1.0 x 1000*	DC (–)	I 1
1.2 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