

**UTP A 68 MoLC**

stainless steels

**Classifications** solid wire

EN ISO 14343-A	AWS A5.9	Material-No.
G 19 12 3 L (Si)	ER 316 L (Si)	1.4430

**Characteristics and field of use**

UTP A 68 MoLC is used for joining and surfacing of low-carbon, corrosion resistant CrNiMo steels exposed to high corrosion environments. For service temperatures up to +350 °C. Application fields are chemical apparatus and vessels.

**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	GX2 CrNiMo 19-11-2

S31653, AISi 316 L, 316 Ti, 316 Cb

**Typical analysis in %**

C	Si	Mn	Cr	Mo	Ni	Fe
0.02	0.65 – 1.0	1.5	18.5	2.8	12.0	balance

**Mechanical properties of the weld metal**

<i>Yield strength <math>R_{p0.2}</math></i>	<i>Tensile strength <math>R_m</math></i>	<i>Elongation <math>A</math></i>	<i>Impact strength <math>K_V</math></i>
<i>MPa</i>	<i>MPa</i>	<i>%</i>	<i>J (RT)</i>
420	600	35	100

**Welding instructions**

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

**Approvals**

TÜV (No. 00188), GL

**Form of delivery and recommended welding parameters**

<i>Wire diameter [mm]</i>	<i>Current type</i>	<i>Shielding gas (EN ISO 14175)</i>		
0.8	DC (+)	M 11	M 12	M 13
1.0	DC (+)	M 11	M 12	M 13
1.2	DC (+)	M 11	M 12	M 13