

Classifications

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

Yield strength $R_{P0.2}$	Tensile strength R_m	Elongation A	Impact strength K_V
MPa	MPa	%	J (RT)
420	600	35	100

Welding instruction

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

Approvals

TÜV (No. 00188), GL

Wire diameter [mm]	Current type	Shielding gas (EN ISO 14175)		
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

