UTP A 68 MoLC

stainless steels

Classifications		TIG rod
EN ISO 14343-A	AWS A5.9	Material-No.
W 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 for working temperatures up to +350 °C. Application fields are chemical apparatus and vessels.

Base materials

Material-No.	EN Symbol
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	0.4	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 instructions

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

Approvals

TÜV (No. 05832), GL

Form of delivery and recommended welding parameters

Rod diameter x length [mm]	*Current type*	*Shielding gas (EN ISO 14175)*
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