

## Classifications

EN ISO 14343-A	AWS A5.9	Material-No.
G 19 12 3 Nb (Si)	ER 318 (Si)	1.4576

## Characteristics and field of use

UTP A 68 Mo is applicable for joinings and surfacings of stabilized, corrosion resistant CrNiMo steels of similar nature in the construction of chemical apparatus and vessels up to working temperatures of 120 °C up to 400 °C.

## Base materials

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	G-X2 CrNiMo 19-112

UNS S31653; AISi 361L; 316Ti; 316Cb

## Typical analysis in %

C	Si	Mn	Cr	Mo	Ni	Nb	Fe
0.03	0.65 – 1.0	1.5	19.0	2.8	11.5	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)
460	680	35	100

## Welding instruction

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

## Approvals

TÜV (No. 04867)

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

