

Classifications

EN ISO 14343-A	EN ISO 14343-B	AWS A5.9
G 19 12 3 L Si	SS316LSi	ER316LSi

Characteristics and typical fields of application

GMAW solid wire designed for first class welding, good wetting and feeding characteristics as well as reliable corrosion resistance up to +400 °C.

Low temperature service down to –196 °C.

Base materials

1.4401 X5CrNiMo17-12-2, 1.4404 X2CrNiMo17-12-2, 1.4435 X2CrNiMo18-14-3,
 1.4436 X3CrNiMo17-13-3, 1.4571 X6CrNiMoTi17-12-2, 1.4580 X6CrNiMoNb17-12-2,
 1.4583 X10CrNiMoNb18-12, 1.4409 GX2CrNiMo19-11-2
 UNS S31603, S31653; AISI 316L, 316Ti, 316Cb

Typical analysis of solid wire

	C	Si	Mn	Cr	Ni	Mo
wt.-%	0.02	0.8	1.7	18.4	12.4	2.8

Mechanical properties of all-weld metal

Condition	Yield strength $R_{p0,2}$	Tensile strength R_m	Elongation ($L_0=5d_0$)	Impact work ISO-V KV J			
				MPa	%	+20 °C	-196 °C
u	420 (≥ 320)	560 (≥ 510)	35 (≥ 25)	70	≥ 32		

u untreated, as welded – shielding gas Ar + 2.5 % CO₂

Operating data

Polarity: DC (+)	Shielding gases: Argon + max. 2.5 % CO ₂	ø (mm) BS300, S300
		0.8
		0.9
		1.0
		1.2
		1.6

Approvals

TÜV (12937.), DB (43.132.39), CE