

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

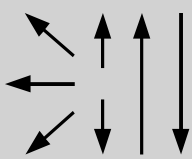
	C	Si	Mn	Cr	Ni	Mo
wt.-%	0.02	0.8	1.7	18.4	12.4	2.8

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	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