

## 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 of type G 19 12 3 L Si / ER316LSi 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 (wt.-%)

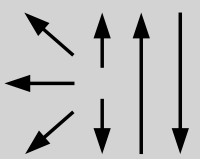
	C	Si	Mn	Cr	Ni	Mo
wt.-%	0.02	0.8	1.7	18.4	12.4	2.8

## Mechanical properties of all-weld metal

Condition	Yield strength R <sub>p0,2</sub>	Tensile strength R <sub>m</sub>	Elongation (L <sub>0</sub> =5d <sub>0</sub> )	Impact work ISO-V KV J	
	MPa	MPa	%	+20 °C	-196 °C
u	<b>430</b> (≥ 320)	<b>580</b> (≥ 510)	<b>38</b> (≥ 25)	<b>120</b>	≥ 32

u untreated, as welded – shielding gas Ar + 2.5 % CO<sub>2</sub>

## Operating data

	Polarity: DC (+)	Shielding gases: Argon + max. 2.5 % CO <sub>2</sub>	ø (mm) 0.8 1.0 1.2

## Approvals

TÜV (03233.), DB (43.014.11), DNV (316L), GL (4429S), Statoil, SEPROZ, CE