

Classifications

AWS A5.9	EN ISO 14343-A	GB/T 5092
ER316LSi	G 19 12 3 L Si	H 03 Cr 19 Ni 12 Mo 2 Si 1

Characteristics and typical fields of application

- GMAW solid wire of type G 19 12 3 L Si / ER316LSi designed for high quality 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

1.4410 / 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 / GX2CrNiMoNb19-11-2,
S31653, AISI316L, 316Ti, 316Cb

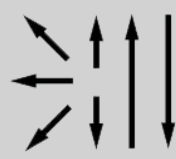
Typical analysis of all-weld metal

	C	Si	Mn	P	S	Cr	Ni	Mo	
wt-%	0.02	0.80	1.70	0.015	0.015	18.4	12.4	2.3	

Mechanical properties of all-weld metal – typical values (min. values)

Condition	Yield strength R _{p0,2}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact work ISO-V KV J	
	MPa	MPa	%	+20 °C	-120 °C
AW	440 (≥ 350)	580 (≥510)	38(≥ 30)	100 (≥ 47)	65 (≥32)

Operating data

	Polarity:	Electrode identification	Shielding gas:	ø mm
	DC +	BÖHLER GMA 316LSi/ ER316LSi	(ISO14175) M12	0.8
				0.9
				1.0
				1.2

Approvals

CE