

Classifications

AWS A5.9	EN ISO 14343-A	YB/T5092
ER316L	W 19 12 3 L	H03Cr19Ni12Mo2Si

Characteristics and typical fields of application

- GTAW rod of type W 19 12 3 L/ ER316L engineered to a very precise analysis to create a weld deposit of high purity, superior hot cracking a corrosion resistance
- CVN toughness down to -196°C, resistance up to intergranular corrosion up to +400°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, AISI 316L, 316Ti, 316Cb

Typical analysis of all-weld metal

	C	Si	Mn	P	S	Cr	Ni	Mo		
wt-%	0.02	0.50	1.60	0.015	0.015	18.5	12.3	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	460(≥350)	590 (≥510)	41 (≥30)	180(≥47)	120 (≥32)

AW as welded

Operating data

	Polarity:	Electrode identification:	Shielding gas:	ø mm	L mm
	DC -	BÖHLER TIG 316L/ ER316L	(ISO14175) I1	2.0 2.4	1000 1000

Approvals

HAKC, CE