

## 318Si Tig

<b>CATEGORY</b>	GMAW-GTAW Solid wires		
<b>TYPE</b>	Solid stabilized stainless steel Tig wire with high Mo content		
<b>APPLICATIONS</b>	Developed for Tig welding stabilized CrNi(N) and CrNiMo(N) types.		
<b>PROPERTIES</b>	Excellent corrosion resistance as needed in chemical industry up to 400°C and good weldability with excellent flowing properties due to the increased Silicon content		
<b>CLASSIFICATION</b>	AWS	A 5.9: ER 318 Si	
	EN ISO	14343-A: W 19 12 3 Nb Si	
	DIN: W.Nr.	1.4576	
	DIN	8556: SG-X5CrNiMoNb 19 12	
<b>SUITABLE FOR</b>	1.4583	X102CrNiMoNb 18 12	316Cb
	1.4404	X2CrNiMo 17 12 2	(TP) 316L
	1.4401	X4CrNiMo 17 12 2	(TP) 316
	1.4571	X6CrNiMo 17 12 2	316 Ti
	1.4580	X6CrNiMoNb 17 12 3	316Cb
	1.4581	G-X5CrNiMoNb 19 11 2	-
	1.4437	G-X6CrNiMo 18 12	-
	1.4406	X2CrNiMoN 17 12 3	(TP)316LN

**APPROVALS** TUV (12391.00), CE approved

**WELDING POSITIONS:**



**WELD METAL ANALYSIS %**

C	Mn	Si	Cr	Ni	Mo	Nb
<0.05	1.50	0.8	19	12-14	2.8	12 x C

**MECHANICAL PROPERTIES**

Heat Treatment	R <sub>p0,2</sub> (N/mm <sup>2</sup> )	R <sub>m</sub> (N/mm <sup>2</sup> )	A <sub>5</sub> (%)	Impact Energy (J) ISO-V			Hardness HRc / HV
				20°C	-40°C	-60°C	
AW	460	615	35	100		70	

AW: as welded

**WELDING PARAMETERS / PACKING**

D (mm)	Welding Parameters		Packing (kg)	
	Current (A) DC-		single	master
1.0 x 1000	20-50		5	25
1.2 x 1000	30-70		5	25
1.6 x 1000	50-80		5	25
2.0 x 1000	70-110		5	25
2.4 x 1000	110-180		5	25
3.2 x 1000	150-300		5	25
4.0 x 1000	230-380		5	25

**REDRYING TEMPERATURE** not required

**GAS ACC. EN ISO 14175:** I1