

318Si Tig

CATEGORY	GMAW-GTAW Solid wires		
TYPE	Solid stabilized stainless steel Tig wire with high Mo content		
APPLICATIONS	Developed for Tig welding stabilized CrNi(N) and CrNiMo(N) types.		
PROPERTIES	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		
CLASSIFICATION	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	
SUITABLE FOR	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 _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	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