

318Si

CATEGORY GMAW-GTAW Solid wires

TYPE Solid stabilized stainless steel wire with high Mo content

APPLICATIONS Developed for 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: G 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	X2CrNiMoNb 17 12 3	(TP)316LN

APPROVALS TUV (12390.00), DB (43.206.03), 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

Welding Parameters			Packing		
D (mm)	Voltage (V)	Current (A) DC+	spool type	kg / spool / Drum	kg / pallet
0.8	15-24	55-160	K-300 / Drum	15 / 250	1080 / 1000
1.0	15-28	80-240	K-300 / Drum	15 / 250	1080 / 1000
1.2	15-29	100-300	K-300 / Drum	15 / 250	1080 / 1000

REDRYING TEMPERATURE not required

GAS ACC. EN ISO 14175: M12, M13