

TIG rod / Solid wire
High-alloyed, Corrosion-resistant

AX-308L AX-4316

Material no.: 1.4316

Standards

EN ISO 14343-A:	W 19 9 L Si / G 19 9 L Si
EN ISO 14343-B:	SS308LSi
AWS A5.9:	ER308LSi

Properties

Welding rod/solid wire for use in all branches of industry where steels and ferritic 13% chromium steels of the same type are welded, e.g. chemical apparatus and vessel construction, textile and cellulose industry, dye works, etc. Outstanding feeding characteristics. Very good welding and flow behaviour. Resistant to intercrystalline corrosion up to an operating temperature of 350°C. Cryogenic down to -196 °C. The structure is austenitic without delta ferrite.

Important base materials

Stainless austenitic Cr-Ni steel/cast steel e.g.

1.4306 X2CrNi19-11, 1.4301 X5CrNi18-10, 1.4311 X2CrNi18-10, 1.4541 X6CrNiTi18-10, 1.4546 X5CrNiNb18-10, 1.4550 X6CrNiNb18-10, 1.4312 GX10CrNi18-8

ASTM A 213 Gr. TP304L, TP347; A 240 Gr. 304L, 347; A 312 Gr. TP321, TP347; A 403 Gr. WP304L, WP304, WP321, WP347; A 451 Gr. CPF3, CPF8; A 743 Gr. CF3; A 813 Gr. TP304L, 304, TP321, TP347

Typical composition of the welding rod / solid wire in %

C	Si	Mn	Cr	Ni
0.02	0.9	1.8	19.7	9.2

Mechanical properties of the all-weld metal (typical values)

Yield strength $R_{p0.2}$	[MPa]	420
Tensile strength R_m	[MPa]	620
Elongation A ($L_0 = 5d_0$)	[%]	35
Impact energy KV	[J]	100 at +20°C

Shielding gas: 100% argon, PWHT: untreated

Operating data

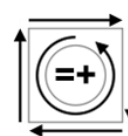
TIG:

Shielding gas: I1 (100%Argon)
acc. to ISO 14175



GMAW:

M12 (e.g. Ar+2.5%CO₂)
M13 (e.g. Ar+max.1.0%O₂)



Approvals

(Please ask for current scope)

Packaging and available sizes

Spools	Ø mm	0.8	1.0	1.2	1.6		
Rods	Ø mm x 1000mm	1.6	2.0	2.4	3.2		

Other dimensions on request.