

# AX-308L AX-4316

## Standard

EN ISO 14343-A  
EN ISO 14343-B  
Material number  
AWS A5.9

W 19 9 L Si/G 19 9 L Si  
SS308LSi  
1.4316  
ER308L Si

## Area of application

Filler rod/filler wire for use in all branches of industry where steels of similar composition and ferritic 13% chromium steels are welded together, e.g. chemical apparatus and tank construction, textile and cellulose industry, dyeworks and many more. Excellent sliding and conveying properties. Very good weld and flow behaviour. Resistant to intercrystalline corrosion up to 350°C operating temperature. Tough at sub-zero down to -196°C

## Special hints

The structure is created austenitically with delta ferrite.

## Composition of the filler rod/filler wire (typical data in %)

C	Si	Mn	Cr	Ni			
0.02	0.8	1.7	20	10			

## Important base materials

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

1.4306 X2CrNi19-11, 1.4301 X5CrNi18-10, 1.4311 X2CrNiN18-10, 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, TP347i; A 403 Gr. WP304L, WP304, WP321, WP347; A 451 Gr. CPF3, CPF8; A 743 Gr. CF3; A 813 Gr. TP304L, 304, TP321, TP347

## Material properties

Shielding gas	Argon	Mechanical properties of the weld metal according to EN ISO 15792-1
Heat treatment	untreated	
Test temperature	20°C	
0.2%-yield strength $R_{p0.2}$	[MPa]	420
Tensile strength $R_m$	[MPa]	620
Elongation A ( $L_0 = 5d$ ) %	[%]	35
Impact strength $A_v$	[J]	100

## Applicable shielding gases (EN ISO 14175)

TIG: argon I1, MAG: mixed gases e.g. M12

## Approval

(Request current scope if required)

## Product form (other dimensions available on request)

Spools	Ø mm	0.8	1.0	1.2	1.6		
Rods	Ø mm x 1000 mm	1.6	2.0	2.4	3.2	4.0	5.0