

AX-316L
AX-4430

Material-No.: 1.4430

Standards

EN ISO 14343-A:	W 19 12 3 L Si / G 19 12 3 L Si
EN ISO 14343-B:	SS316LSi
AWS A5.9:	ER316LSi

Properties

TIG-rod/solid wire of austenitic chromium-nickel-molybdenum steel with low carbon content for TIG- or GMAW welding of corrosion-resistant, cryogenic, austenitic Cr-Ni-Mo steels. The welding metal is cryogenic down to -196°C and resistant to intergranular corrosion up to 400°C.

Important base materials / Important applications

1.4306 X2CrNi19-11, 1.4301 X5CrNi18-10, 1.4311 X2CrNi18-10, 1.4541 X6CrNiTi18-10, 1.4401 X5CrNiMo17-12-2, 1.4404 X2CrNiMo17-12-2, 1.4406 X2CrNiMoN17-11-2, 1.4429 X2CrNiMo17-13-3, 1.4435 X2CrNiMo18-14-3, 1.4432 X2CrNiMo17-12-3, 1.4436 X3CrNiMo17-13-3, 1.4409 GX2CrNiMo19-11-2, 1.4571 X6CrNiMoTi17-12-2, 1.4580 X6CrNiMoNb17-12-2, 1.4583 X10CrNiMoNb18-12

ASTM A 182 Gr. F316, F316L, F316LN, F316Ti; A213 Gr. TP316, TP316L, TP316LN, TP316Ti; A 312 Gr. TP316, TP316J, TP316LN, TP316Ti; A 314 Gr. 316, 316L, 316Ti, 316Cb; A 351 Gr. CFMN; A 403 Gr. WP316, WP316L, WP316LN; A 580 Gr. 316, 316L; A 688 Gr. AISI 316, TP316L, TP316LN; A 988 Gr. UNS31600, UNS S31603, UNS S31653

Typical composition of welding rod / solid wire in %

C	Si	Mn	Cr	Ni	Mo
0,02	0,9	1,8	18,3	11,4	2,6

Mechanical properties of all-weld metal (typical values)

Yield strength $R_{p0,2}$	[MPa]	440
Tensile strength R_m	[MPa]	630
Elongation A ($L_0 = 5d_0$)	[%]	35
Impact work KV	[J]	110 at +20°C

Shielding gas: 100% Argon, PWHT: untreated

Operating data

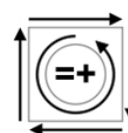
TIG:

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.