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

AX-2594

Standards

EN ISO 14343-A:	W 25 9 4 N L / G 25 9 4 N L
EN ISO 14343-B:	SS2594
AWS A5.9:	ER2594

Properties

TIG-rod/solid wire of nitrogen containing ferrite-austenitic Cr-Ni-Mo-steels for TIG- or GMAW welding of stainless ferrite-austenitic super duplex steels for operating temperatures up to 250°C. Very good resistance to pitting and stress corrosion cracking.

Important base materials / Important applications

25% Cr super duplex steels like,
1.4507 X2CrNiMoCuN25-6-3, 1.4410 X2CrNiMoN25-7-4

ASTM A 182 Gr. F59; A 240 Gr. 255, A 473 UNS S32550, A 815 WPS32550.

Typical composition of welding rod / solid wire in %

C	Si	Mn	Cr	Ni	Mo	Cu	W	N
0,02	0,4	0,6	25,1	9,1	3,9	0,1	<0,1	0,25

Mechanical properties of all-weld metal (typical values)

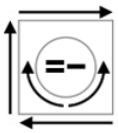
Yield strength $R_{p0,2}$	[MPa]	620
Tensile strength R_m	[MPa]	770
Elongation A ($L_0 = 5d_0$)	[%]	24
Impact work KV	[J]	120 at +20°C

Shielding gas: 100% Argon, PWHT: untreated

Operating data

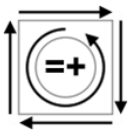
TIG:

Shielding gas: acc. to ISO 14175
I1 (100%Argon)
N2 (Ar+max.2%N_2)



GMAW:

M12 (Ar+20-30%He+0,5-2%CO_2)
M13 (Ar+20-30%He+max.1%O_2)



Approvals

(Please ask for current scope)

Packaging and available sizes

Spools	Ø mm	1,0	1,2				
Rods	Ø mm x 1000mm	2,0	2,4	3,2			

Other dimensions on request.