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

AX-310

Material-No.: ~1.4842

Standards

EN ISO 14343-A:	W 25 20 / G 25 20
EN ISO 14343-B:	SSZ310
AWS A5.9:	ER310 mod.

Properties

Welding rod/ solid wire for heat-resistant rolled, forged and cast steels of the same type, e.g. for use in annealing shops, hardening shops, the petroleum industry and in steam boiler construction. The weld metal forms fully austenitic. Good resistance to oxidising, nitrogenous and low-oxygen gases. Joint welds on heat resistant Cr-Al-Si steels exposed to sulphurous gases must be welded with AX-2551 on the medium side. Scale resistant up to +1200°C. Due to the risk of embrittlement between +650°C - +900°C, this temperature range should be avoided.

Important base materials / Important applications

Heat and scale resistant steels as 1.4841 X15CrNiSi25-21, 1.4845 X8CrNi25-21, 1.4840 GX15CrNi 25-20, 1.4846 X40CrNi25-21, 1.4713 X10CrAlSi7, 1.4724 X10CrAlSi13, 1.4742 X10CrAlSi18, 1.4762 X10CrAlSi25.

Typical composition of welding rod / solid wire in %

C	Si	Mn	Cr	Ni
0,11	0,5	1,7	25,7	20,7

Mechanical properties of all-weld metal (typical values)

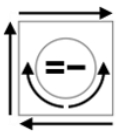
Yield strength $R_{p0,2}$	[MPa]	360	
Tensile strength R_m	[MPa]	580	
Elongation A ($L_0 = 5d_0$)	[%]	30	
Impact work KV	[J]	75	at +20°C

Shielding gas: 100% Argon, PWHT: untreated

Operating data

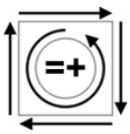
TIG:

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



GMAW:

M12 (e.g. Ar+2,5%CO_2)



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	4,0	5,0

Other dimensions on request.