

Classification

AWS A5.9 : ER308L

ISO 14343-A : S 19 9 L

Description & Applications

Low carbon solid wire for GMAW of stainless steels like 304, 304L. Mainly used for general construction with service temperature from -120°C up to +400°C. Recommended then a low ferrite content (< 5%) is needed.

Main applications: Boiler making, piping system, pressure vessels, power plant, chemical and petrochemical industries, refineries, food industries...

Base materials:

Stainless steels for general uses:

UNS	Alloy	EN 10088	Material N°
S31600	316	X5CrNiMo17-12-2	1.4401
S31603	316L	X2CrNiMo17-12-2	1.4404
S30400	304	X5CrNi18-10	1.4301
S30403	304L	X2CrNi18-10	1.4306

Typical Chemical Composition (%)

	C	Si	Mn	Cr	Ni	Mo	Cu	Nb	P	S	Co	N	Fe
Min		0.30	1.0	19.5	9.0								
Max	0.03	0.65	2.5	21.0	11.0	0.5	0.5	-	0.03	0.02	-	-	Rem.
Type	0.010	0.32	1.9	19.8	10.8	0.14	0.09	0.01	0.015	0.009	0.07	0.07	Rem.

Delong ferrite: < 5%

WRC (1992): < 6

All Weld Metal Mechanical Properties

	R _e (MPa)	R _m (MPa)	A ₅ (%)	KV (J)
Min	320	510	25	-
Max				-
Type	430	600	38	+20°C -196°C

Welding Current & Instructions

Welding mode	Wire Ø (mm)	Welding parameters	Flux
		Current (A)	
SAW = +	2.4 3.2	200 - 400 300 - 500	WP380 WP380M

FT En-SN14-170331

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