

Coated Electrode for Stainless Steels

Classification

EN ISO 3581-A : E 19 9 LR 12

AWS A5.4 : E308L-17

General Description

AS P-308L-17 is an extra low carbon rutile coated electrode. It gives Cr-Ni type filler metal. Excellent quality smooth weld beads are highly resistant to acids and to intergranular corrosion at operating temperatures up to 350°C and to oxidation up to 800°C. The excellent side wall wetting characteristic, no undercut and very fine ripple minimize crevice corrosion and grinding time. This is particularly useful in the food and drink industry where a smooth polished surface (mirror like bead appearance) is required. It gives a stable arc and the slag is easy to remove.

Chemical Composition (w%), Typical, All Weld Metal

C	Si	Mn	Cr	Ni
0.03	0.95	0.75	19	10

Mechanical Properties, Typical, All Weld Metal

Yield Strength : 420 N/mm²
 Tensile Strength : 570 N/mm²
 Elongation (L=5d) : 45 %
 Impact (ISO-V) : 80 J (+20°C)

Applications and Materials to be Welded

In addition to the welding of steels corresponding to AISI 301, 302, 304, 304L, 308 and 308L; AS P-308 L can also be used in the welding of niobium or titanium stabilized austenitic stainless steels. Welding of vapor and pressure fittings, storage tanks and equipment that are used in milk and other food industries, stainless steel or stainless steel plated steels operating under chemical attack are among its application areas. It is an ideal electrode for the joining of stainless steel parts (having similar chemical composition with the electrode) with steel cast pieces. Up to and including 3.25 mm diameter electrodes can be used in all positions; whereas 4 mm and 5 mm electrodes should be used in the flat position.

	EN 10088-1/-2	EN 10213-4	W. Nr.
Extra Low Carbon Stainless Steels (C < %0.03)	X2 CrNi 19 11	-	1.4306
	X2 CrNiN 18 10	-	1.4311
Medium Carbon Stainless Steels C > %0.03)	X4 CrNi 18 10	-	1.4301
	X4 CrNi 18 12	-	1.4303
	-	G-X5 CrNi 19 10	1.4308
Stabilized Stainless Steels (Nb/Ti)	X6 CrNiTi 18 10	-	1.4541
	X6 CrNiNb 18 10	-	1.4550
	-	G-X5 CrNiNb 19 10	1.4552

Welding Parameters / Packing and Diameter Informations / Welding Positions

Current Type and Polarity : AC min 50 V ; DC (+)

Diameter [mm]	Length [mm]	Current [A]	Electrode Weight [g/100 pcs]	Box Weight [kg] Quantity [pcs/box]	Export Box Box Weight [kg]
2.00	250	45 - 60	990	1.6 / 160	1.5
2.50	250	60 - 80	1660	1.6 / 40	1.5
3.25	300	75 - 115	3230	2.1 / 65	2.0
4.00	350	115 - 150	5420	2.2 / 40	2.5
5.00	350	140 - 160	8112	2.1 / 25	2.5

