

Coated Electrode for Stainless Steels

Classification

EN 1600 : E 19 12 3 R 73
 AWS A5.4 : (E316-16)
 Werkstoff-Nr : 1.4430

General Description

AS P-316 S is a rutile coated electrode with an unalloyed core. Therefore it can tolerate higher currents than AS P-316 L. It has 160 % metal recovery. It gives a filler metal of the Cr-Ni-Mo type. Excellent quality smooth weld beads are highly resistant to acids and to intergranular corrosion at operating temperatures up to 350°C. It gives a stable arc and the slag is easy to remove.

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

C	Si	Mn	Cr	Ni	Mo
0.06	0.70	0.60	17	11	2.9

Mechanical Properties, Typical, All Weld Metal

Yield Strength : 440 N/mm²
 Tensile Strength : 565 N/mm²
 Elongation (L=5d) : 30 %
 Impact (ISO-V) : 70 J (+20°C)

Approvals

GOST, SEPRO

Applications and Materials to be Welded

It is an ideal electrode for the welding of austenitic steels and acid resistant steels of the AISI 316 type. It is used for welding mild and low alloyed steels to stainless steels or austenitic manganese steels. It can also be used for stainless cladding of carbon and manganese steels. AS P-316 S can be used in the welding of pipes, tanks and vessels that are used in chemical, paint and paper industries. Cr-Ni-Mo steels, steel cast parts and pipes that are used for acid, gas and vapor transmission can also be welded with this electrode. AS P-316 S can also be used in the build up welding of leakproof surfaces. Electrode diameters up to 3.25 mm can be used in all positions; whereas 4 and 5 mm electrodes should be used in flat and nearly flat position only.

	EN 10088-1/-2	EN 10213-4	W. Nr.
Extra Low Carbon Stainless Steels (C < %0.03)	X2 CrNiMo 17 12 2	–	1.4404
	X2 CrNiMo 18 14 3	–	1.4435
	X2 CrNiMoN 17 11 2	–	1.4406
	X2 CrNiMoN 17 13 3	–	1.4429
Medium Carbon Stainless Steels (C > %0.03)	X4 CrNiMo 17 12 2	–	1.4401
	X4 CrNiMo 17 13 3	–	1.4436
	–	G-X5 CrNiMo 19 11	1.4408

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]
2.50	350	80 - 120	3190	1.9 / 60	2.5
3.25	350	100 - 140	5520	1.9 / 35	2.5
4.00	350	110 - 180	8500	2.1 / 25	2.5
5.00	350	200 - 240	12500	1.9 / 15	2.5



1G/PA



2F/PB



2G/PC