

Coated Electrode for Stainless Steels

Classification

EN 1600 : E 18 9 MnMo B 22
AWS A5.4 : E307-15

General Description

AS P-307 is a basic coated electrode. It gives a filler metal of the Cr-Ni-Mo type that is high (4.5 %) in Mn content. Weld beads are highly resistant to impact, wearing and cracking due to heat effects. It gives a fully austenitic, non-magnetic weld metal.

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

C	Si	Mn	Cr	Ni	Mo
0.10	0.40	4.5	20	10	1.00

Mechanical Properties, Typical, All Weld Metal

Yield Strength	: 420 N/mm ²
Tensile Strength	: 690 N/mm ²
Elongation (L=5d)	: 35 %
Impact (ISO-V)	: 80 J (+20°C)
Hardness	: 150 HB (as welded) 250 HB (after cold working)

Approvals

GOST, SEPRO, TSE

Applications and Materials to be Welded

AS P-307 is used for forming a buffer layer for hardfacing and joining of armour steel plates, steel welds that are low hardenable and work-hardening austenitic Mn steels. It can also be used for dissimilar weld joints of C-Mn steels with austenitic and ferritic stainless steels.

There is no need to apply heat treatment to armour steel plates before or after the welding. Interpass temperature during welding should not exceed 120°C.

Welding Parameters / Packing and Diameter Informations / Welding Positions

Current Type and Polarity : DC (+)

Diameter [mm]	Length [mm]	Current [A]	Electrode Weight [g/100 pcs]	Box Weight [kg] Quantity [pcs/box]	Export Box Box Weight [kg]
3.25	300	80 - 110	2950	2.2 / 75	2.0
4.00	350	120 - 150	4040	2.1 / 50	2.5
5.00	350	150 - 190	6960	3.2 / 45	2.5

