

## Coated Electrode for Stainless Steels

### Classification

EN ISO 3581-A : E 23 12 2 LR 32

AWS A5.4 : E309MoL-17

### General Description

AS P-309Mo-17 is an extra low C and high Cr-Ni-Mo alloyed austenitic type electrode. It is especially developed for welding stainless steel to mild steel and as root runs and buffer layers before hardfacing. It is also suitable for repair welding in dissimilar joints and steels difficult to weld. Delta-ferrite content is app. 20 % and the weld metal has a high resistance to cracking. Weld beads are highly resistant to oxidation at high operating temperatures. It gives high corrosion resistant deposit. 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 can be used in all positions except vertical down and on AC and DC (+) polarity. 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
0.03	1.00	0.80	23	12.5	2.7

### Mechanical Properties, Typical, All Weld Metal

Yield Strength : 575 N/mm<sup>2</sup>  
 Tensile Strength : 720 N/mm<sup>2</sup>  
 Elongation (L=5d) : 30 %  
 Impact (ISO-V) : 60 J (+20°C)

### Applications and Materials to be Welded

Specially developed for welding stainless steel to mild steel and root runs in cladding. It is also suitable for repair welding in dissimilar joints and steels difficult to weld. Maximum plate thickness in butt welds is about 12 mm. Build-up welding on mild or low alloyed steels.

	EN 10088-1/-2	EN 10213-4	W. Nr.
<b>First Layer in CrNiMo Claddings</b>	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
	X4 CrNiMo 17 12 2	-	1.4401
	X4 CrNiMo 17 13 3	-	1.4436
	X6 CrNiMoTi 17 12 2	-	1.4571
	X10 CrNiMoTi 17 13 3	-	1.4573
	X6 CrNiMoNb 17 12 2	-	1.4580
		G-X5 CrNiMo 19 11	-

### 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	250	60 - 85	1755	1.5 / 90	1.5
3.25	300	90 - 125	3355	2.1 / 63	2.0
4.00	350	125 - 160	5550	2.6 / 45	2.5
5.00	350	150 - 190	8660	2.5 / 29	2.5



1G/PA



2F/PB



2G/PC



4G/PE



3G/PF