

## Coated Electrode for Stainless Steels

### Classification

EN 1600 : E 25 20 R 12      Werkstoff-Nr : 1.4842  
 AWS A5.4 : E310-16

### General Information

AS P-310 R is a rutile coated fully austenitic electrode. It gives a fully austenitic filler metal of the Cr-Ni type. Weld beads are highly resistant to oxidation at operating temperatures up to 1150°C.

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

C	Si	Mn	Cr	Ni
0.10	0.60	1.70	26	21

### Mechanical Properties, Typical, All Weld Metal

Yield Strength : 480 N/mm<sup>2</sup>  
 Tensile Strength : 600 N/mm<sup>2</sup>  
 Elongation (L=5d) : 35 %  
 Impact (ISO-V) : 60 J (+20°C)

### Approvals

GOST, SEPRO, TSE

### Applications and Materials to be Welded

It is an ideal electrode for welding heat resistant stainless steels of the AISI 309 and AISI 310 type. It is used for welding unalloyed steels to stainless steels and to air hardening steels like armour plates. AS P-310 R can be used in the welding of chimneys, boilers and heating plates and also for industrial furnaces operating at high temperatures (that are frequently made from ferritic steels of Cr-Si-Al type).

During the welding of high carbon steels to stainless steels, it gives a weld bead that has a better machinability as compared to beads of electrodes with 18 % Cr and 8 % Ni.

	EN 10088-1/-2	EN 10213-4	W. Nr.
<b>Heat Resistant Cr and Cr-Ni Steels</b>	X10 CrAl 7	–	1.4713
	X10 CrAl 24	–	1.4762
	–	G-X40 CrSi 17	1.4740
	–	G-X25 CrNiSi 18 9	1.4825
	–	G-X40 CrNiSi 22 9	1.4826
	X15 CrNiSi 20 12	–	1.4828
	–	G-X25 CrNiSi 20 14	1.4832
	X15 CrNiSi 25 20	–	1.4841
	X12 CrNi 25 21	–	1.4845
	–	G-X40 CrNiSi 25 20	1.4848

### Welding Parameters / Packing and Diameter Informations / Welding Positions

Current Type and Polarity : AC min 70 V ; DC (+)

Diameter [ mm ]	Length [ mm ]	Current [ A ]	Electrode Weight [ g/100 pcs ]	Box Weight [ kg ]	Export Box Quantity [ pcs/box ]	Box Weight [ kg ]
2.00	250	45 - 60	1036	1.7 / 155	1.5	1.5
2.50	250	60 - 80	1650	1.6 / 100	1.5	1.5
3.25	300	80 - 120	3280	2.0 / 60	2.0	2.0
4.00	350	100 - 140	5740	2.3 / 40	2.5	2.5
5.00	350	130 - 160	8810	2.2 / 25	2.5	2.5

