

**selectarc**  
**Inox 310R**  
 High Temperature  
 Stainless Steel Electrode



**Classification**

AWS A5.4 : E310-16                      EN 1600 : E 25 20 R 32  
 ISO 3581-A : E 25 20 R 32

**Description & Applications**

Rutile-basic electrode with a high temperature resistant austenitic stainless steel deposit. Resistant to corrosion and oxidation up to 1200°C, good resistance against hot cracks, easy slag removal and nice aspect of the weld beads.

Principal applications: construction of steam boilers, chemical installations, gas industry, ovens, thermal equipments.

**Base materials**

Stainless and high temperature steels:

UNS	Alloy	EN	Material N°	UGINE
S31000	310	X15CrNiSi25-20	1.4841	
S31008	310S	X12CrNi25-21	1.4845	UGINOX R 25-20
S31400	314	X15CrNiSi25-20	1.4841	
S30900	309	X15CrNiSi20-12	1.4828	UGINOX R 20-12
		G-X15CrNi25-20	1.4840	
J93503		G-X40CrNiSi25-12	1.4837	
J94204	HK40	G-X40CrNiSi25-20	1.4848	

**Typical Weld Metal Composition ( % )**

C	Si	Mn	Cr	Ni
0.1	0.6	1.5	27	21

**All Weld Metal Mechanical Properties**

R <sub>p0.2</sub> ( MPa )	R <sub>m</sub> ( MPa )	A <sub>5</sub> ( % )	KV ( J )
>400	>550	>30	+20°C >60

**Welding Current & Instructions**

Electrode	ØxL ( mm )	2,0x300	2,5x300	3,2x350	4,0x350	5,0x450
Current	( A )	45	70	100	135	180

Redrying : 2h at 250°C, if necessary. Avoid prolonged stay at 600-850°C (sigma phase formation).  
 Interpass temperature : < 150°C



= +      ~ 70V