



# Selectarc Inox 2509MoR

Rutile Coated Electrode  
For Super-Duplex Stainless Steels

## Classification

AWS A5.4 : E2594-16

ISO 3581-A : E 25 9 4 N L R 3 2

## Description & Applications

Rutile coated electrode with an austenitic-ferritic microstructure ( duplex ~ 40% ferrite ). The weld metal can be applied for operation temperatures up to 250°C and is resistant against pitting as well as crevice and stress corrosion in chloride containing medias.

### Main applications:

- But welding and cladding of steels or castings with austenitic-ferritic structure, with the same or similar composition, which are used for pumps, vessels , piping systems, etc. attacked by chloride containing solutions.
- Welding of impellers and other components which require high strength combined with corrosion attack. Pitting index: > 40.

### Base materials

UNS	Alloy	EN 10088	Material N°	CLI
S31803		X2CrNiMoN22-5-3	1.4462	URANUS 45
S32304	35N	X2CrNi23-4	1.4362	URANUS 35N
S32550	52N	G-X2CrNiMoCuN26 6 3	1.4517	URANUS 52N
	52N+	X2CrNiMoCuN25-6-3	1.4507	URANUS 52N+
S32750	2507	X2CrNiMoN25-7-4	1.4410	
S32760	100	X2CrNiMoCuWN25-7-4	1.4501	URANUS 70N
S32900	329	X3CrNiMoN27-5-2	1.4460	

## Typical Weld Metal Composition ( % )

C	Si	Mn	Cr	Ni	Mo	Cu	N	P	S	Fe	FN (WRC)
<0.03	0.75	0.7	24.8	9.3	4.0	0.1	0.25	<0.030	<0.020	Rem.	40

## All Weld Metal Mechanical Properties

R <sub>p0,2</sub> ( MPa )	R <sub>m</sub> ( MPa )	A <sub>5</sub> ( % )	KV ( J )
690	890	25	+20°C > 50 -40°C > 35

## Welding Current & Instructions

Electrode	ØxL ( mm )	2,5 x 300	3,2 x 350	4,0 x 350
Current	( A )	55 - 85	70 - 110	110 - 150

Drying 2-3 hours at 250-300°C. Guide electrodes with a slight declination and weld with a short arc. Interpass temperature: < 150°C.

FT En-170823



= +	~ (>70V)
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