

GRITINOX 2209

IDENTIFICATION

GRINOX 2209 E 2209-17

CLASSIFICATION

AWS/SFA 5.4: E2209-17,

DIN 8556-86 E2293LR26 EN 1600-97 E2293NLR12

DESCRIPTION

A rutile coated electrode which deposits a 23% Cr/ 9 % Ni / 3 % Mo / 0.15 % N austenitic-ferritic duplex stainless steel weld metal having a ferrite content of about FN45. The electrode is designed for welding similar composition duplex stainless steels which offer an excellent combination of high strength and very good resistance to chloride induced pitting and stress corrosion cracking. A heat input range of 0.5-2.5 KJ/ mm is recommended to maintain a favourable phase balance. The electrode deposits X-ray quality welds.

WELD METAL ANALYSIS (RANGE) %

C	Mn	Si	Cr	Ni	N	Cu	Mo	S	P
0.04 max	0.5 - 2.0	1.0 max	21.5 - 23.5	8.5 - 10.5	0.10 - 0.20	0.50 max	2.50 - 3.50	0.025 max	0.03 max

MECHANICAL PROPERTIES (RANGE)

UTS (MPa)	EL (%) (L=4D)	CVN Impact Value	
700 - 800	20 - 25	Temp	Joules
		20°C	50 - 80

TYPICAL APPLICATIONS

- Off-shore platform pipe work, pipelines transporting chloride bearing products or sour gas and process vessels for chlorine environments.
- ASTM A 182 Gr. F 51
- USN S 31803
- DIN 1.4462
- Chemical and petrochemical process industries.

MICROSTRUCTURE : As welded condition contain about 30-50 FN (depends upon dilution, heat input etc)

PITTING RESISTANCE EQUIVALENT : PRE more than 34

ASME IX QUALIFICATION : QW-432 F-NUMBER 5QW-442 A-NUMBER 8

REDRYING : 300°C / 2 hrs, max 5 cycles, 10 hrs total

WELDING POSITION :



PACKING PARAMETERS

Size (mm)	Length (mm)	Amps AC / DC (+)	Packing / Box (kg)	Packing / Box (Pcs)
2.5	350	60 - 90	2 x 5 = 10	94 x 5 = 470
3.15 / 3.20	350	80 - 120	2 x 5 = 10	60 x 5 = 300
4	350	130 - 170	2 x 5 = 10	38 x 5 = 190
5	350	160 - 200	2 x 5 = 10	24 x 5 = 120