

FCW 2509MOP

All position super duplex
Flux cored wire

Classification

AWS A5.22 : E2594T1-4 ISO 17633-A : T 25 9 4 Cu N L P M21 1

Description & Applications

Flux cored wire for gas shielded (Ar + CO₂) arc welding in all positions for Super Duplex steels such as Uranus 45N*, 52N, 2205, 2304, 2507. Resistant to severe corrosive environments (inter crystalline attack, pitting corrosion, crevice, and stress corrosion). For all construction with service temperature up to 250°C. Wire with rutile fast freezing to weld in all positions.

Main applications: For pumps, vessels, piping systems etc. attacked by chloride containing solutions. But also for impellers and other components which require high strength combined with corrosion attack.

Base materials:

UNS	Alloy	EN 10088	Mat. 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

Typical Chemical Composition (%)

	С	Si	Mn	Cr	Ni	Мо	Cu	W	Р	S	N_2
Min			0.5	24.0	8.0	2.5	1.0				0.20
Max	0.04	1.0	2.5	27.0	10.5	4.5	1.5	1.0	0.030	0.025	0.30
Туре	0.03	0.50	1.0	25.5	9.0	3.8	1.1	0.01	0.015	0.008	0.24

PREN: >40

All Weld Metal Mechanical Properties

	R _{p0.2} (MPa)	R_{m} (MPa)	A ₅ (%)	KV (J)
Min	550	760	18		
Max					
Туре	710	890	24	-20°C	35

Welding Current & Instructions

Wolding mode	Wire Ø	V	Shiolding Coo			
Welding mode	(mm)	Current (A)	Voltage (V)	Stick out (mm)	Shielding Gas	
FCAW = +	1.2	130 - 250	24 - 35	12 - 20	ISO 14175 : M21 (Ar/CO ₂) 10 - 20 l/min	

