



FCW 2509MO

*High productivity super duplex
Flux cored wire*

Classification

AWS A5.22 : E2594T0-4

ISO 17633-A : T 25 9 4 Cu N L R M21 3

Description & Applications

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

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 (%)

	C	Si	Mn	Cr	Ni	Mo	Cu	W	P	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
Type	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				
Type	830	950	22	-29°C 30

Welding Current & Instructions

Welding mode	Wire Ø (mm)	Welding parameters			Shielding Gas
		Current (A)	Voltage (V)	Stick out (mm)	
FCAW = +	1.2	130 - 250	24 - 35	12 - 20	ISO 14175 : M21 (Ar/CO ₂) 10 - 20 l/min
	1.6	150 - 300	24 - 35	12 - 25	

FT En-CN20-190731

Liability: This document is intended to assist the user in choosing the product. It is up to the user to verify that the chosen product is suitable for applications for which it is intended. The company FSH Welding Group reserves the right to alter specifications without prior notice of its products. The descriptions, illustrations and specifications are for reference only and cannot be held liable for FSH Welding Group. **Fumes:** Consult information on MSDS, available upon request.

www.fsh-welding.com - info@fsh-welding.fr