



# FCW 2209

*High productivity Duplex  
Flux cored wire*

## Classification

AWS A5.22 : E2209T0-1/-4

ISO 17633-A : T 22 9 3 N L R M21(C1) 3

## Description & Applications

Flux cored wire for gas shielded (Ar + CO<sub>2</sub>) arc welding in flat and down hand positions of duplex steels such as Uranus 45N\*, 2205, 2304. Resistant to severe corrosive environments (inter crystalline attack, pitting corrosion, crevice, and stress corrosion). High productivity in flat positions and horizontal fillet weld due to easily removal slag.

\* (Trademarks of CREUSOT LOIRE)

**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	Material N°	CLI
S31803		X2CrNiMoN22-5-3	1.4462	URANUS 45N
S32304	35N	X2CrNi23-4	1.4362	URANUS 35N
S32900	329	X3CrNiMoN27-5-2	1.4460	

## Typical Chemical Composition ( % )

	C	Si	Mn	Cr	Ni	Mo	Cu	P	S	N <sub>2</sub>
Min			0.5	21.0	7.5	2.5				0.08
Max	0.04	1.0	2.0	24.0	10.0	4.0	0.5	0.030	0.025	0.20
Type	0.03	0.80	1.3	23.0	9.0	3.1	0.10	0.020	0.008	0.16

PREN : >35

## All Weld Metal Mechanical Properties

	R <sub>p0.2</sub> ( MPa )	R <sub>m</sub> ( MPa )	A <sub>5</sub> ( % )	KV ( J )
Min	450	690	20	
Max				
Type	630	780	28	-60°C 33

## Welding Current & Instructions

Welding mode	Wire Ø (mm)	Welding parameters			Shielding Gas
		Current (A)	Voltage (V)	Stick out (mm)	
FCAW = +	1.2	100 - 280	23 - 33	10 - 25	ISO 14175 : M21 (Ar/CO <sub>2</sub> ) 12 - 20 l/min
	1.6	150 - 400	23 - 35	10 - 25	

FT En-CN18-190731

**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](http://www.fsh-welding.com) - [info@fsh-welding.fr](mailto:info@fsh-welding.fr)