FCW 77-B

Basic flux cored wire
For high strength steels

Classification

AWS A5.36 : E110T5-M21A8-K4-H4 ISO 18276-A : T 69 6 Mn2NiCrMo B M21 3 H5

Description & Applications

Basic flux cored wire, Nickel, Chromium and Molybdenum alloyed for welding low alloyed and high strength steels with Ar + CO2 shielding gas. Exceptional mechanical properties at low temperatures (-60°C). Good weldability in flat position, excellent bead appearance, and low spatters losses.

Main applications: Cranes, vessel and apparatus construction

Base material:

High strength steels

EN- Designation	S620Q, S620QL, S690Q, S690QL, S620QL1-S690QL1, alform plate 620 M, 700 M, aldur 620 Q, 620 QL, 620 QL1, aldur 700 Q, 700 QL, 700 QL1
ASTM	A 514 Gr. F, H, Q ; A 709 Gr. 100 Type B, E, F, H, Q ; A 709 Gr. HPS 100W

Typical Chemical Composition (%)

	C	Si	Mn	Cr	Ni	Mo	Cu	Nb	V	P	S
Min	0.03		1.40	0.30	1.80	0.30					
Max	0.10	0.80	2.00	0.06	2.60	0.60	0.3	0.05	0.03	0.020	0.020
Type	0.06	0.40	1.4	0.4	2.20	0.40	0.10	0.01	0.005	0.015	0.015

Typical All Weld Metal Mechanical Properties

	R_e (MPa)	R_m (MPa)	A_5 (%)	KV (J)	
Min	690	770	17	-60°C	47
Max		900			
Type	760	850	20	-60°C	80

Welding Current & Instructions

Welding mode	Wire Ø (mm)	Welding parameters			Shielding Gas
		Current (A)	Voltage (V)	Stick-out (mm)	
FCAW = +	1.0 1.2 1.4 1.6	160 - 270 190 - 320 200 - 350 210 - 380	21 - 34 22 - 35 23 - 36 23 - 37	10 - 25	ISO 14175 : M21 (Ar/CO_2) 12-15 l/min

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