



FCW 77-M

*Metal cored wire
For high strength steels*

Classification

AWS A5.36 : E110T15-M21A8-K4-H4 ISO 18276-A T 69 6 Mn2NiCrMo M M 1 H5

Description & Applications

Metal 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, excellent bead appearance, low spatter losses.

Main applications: Cranes, vessel and apparatus construction

Base material:

High strength steels

EN- Designation	S550Q-S690Q, S550QL-S690QL, P550Q-P690Q, P550QL-P690QL alform 550 M-700 M
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	V	P	S	Fe
0.06	0.50	1.60	0.50	2.50	0.50	0.09	0.005	0.015	0.015	Rem.

Typical All Weld Metal Mechanical Properties

R _e (MPa)	R _m (MPa)	A ₅ (%)	KV (J)
760	820	17	-60°C 70

Welding Current & Instructions

Welding mode	Wire Ø (mm)	Welding parameters			Shielding Gas
		Current (A)	Voltage (V)	Stick-out (mm)	
FCAW = +	1.0	160 - 270	21 - 34	10 - 25	ISO 14175 : M21 (Ar/CO ₂) 12-15 l/min
	1.2	190 - 320	22 - 35		
	1.4	200 - 350	23 - 36		
	1.6	210 - 380	23 - 37		



FT En-CF10-160211

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