



FCW 410NiMo M

Classification

ISO 17633-A : T 13 4 M M 12 1
 AWS A5.22 : ~EC410NiMO

Material N° : 1.4351

Description & Applications

Metal cored gas shielded wire for joining, rebuilding and cladding stainless martensitic and martensitic-ferritic rolled, forged and cast steels. 13Cr-4Ni soft martensitic, slag free deposit. Very good impact toughness characteristics in its category

This wire is used for the fabrication and rebuilding of turbines in the hydropower industry. The deposit is martensitic. It combines good toughness with excellent resistance to cavitation and to stress corrosion cracking.

A post-weld heat treatment at 580°C – 620°C is advised to obtain a tempered martensite that combines ductility, corrosion resistance and cavitation resistance.

Typical Chemical Composition (%)

C	Si	Mn	Cr	Ni	Mo	P	S	Fe
0.02	0.70	0.90	12.5	4.7	0.55	0.012	0.008	Rem.

Typical All Weld Metal Mechanical Properties

After PWHT 8Hours at 580°C

R _{p0.2} (MPa)	R _m (MPa)	A ₅ (%)	KV (J)	
770	900	18	+20°C	70
			-20°C	60

Welding Current & Instructions

Welding mode	Wire Ø (mm)	Welding parameters			Shielding Gas
		Pulsed arc (A)	(V)	Stick Out	
Pulse	1.2	245	20 - 25	12 – 25 mm	EN 439 : M1 Ar + 2%CO ₂ 10-20 l/min

Ind.13

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