

KX-706M

For 490MPa high tensile steel (METAL Cored - Non-slag type)

Classifications

EN ISO 17632-A:2015	: T 46 2 M M21 3 H5
EN ISO 17632-B:2015	: T 49 3 T15-0 M21A H5
JIS Z 3313-2009	: T 49 3 T15-0 MA H5
AWS A5.18-2005	: E70C-6M
AWS A5.36-2016	: E70T15-M21A2-CS1-H4
KS D 7104-2012	: YFW-A502M

Approvals – M21 (Ar 80% + CO₂ 20%)

ABS	: 3YSA H10
BV	: 3SA,3YSA
DNV	: III YMS
LR	: 3YS No

Description

- Metal cored wire designed for welding of 490 MPa high tensile steel with outstanding mechanical properties
- Typical applications include machineries, shipbuilding, offshore structures, bridges and general fabrications
- It has better CVN toughness at low temperatures when compared to the KX-70CM
- It features good penetration, high resistance to porosity, good wetting behavior as well as low hydrogen content
- KX-706M is intended for semi-automatic, automatic, single- and multi pass welding

Welding positions



Polarity & shielding gas

- DCEP (DC+)
- Mix: Ar + 20% CO₂ (15 – 25 l/min)

Typical chemical composition of all-weld metal (%)

Shielding Gas	C	Si	Mn	P	S
Mix	0.04	0.60	1.5	0.014	0.010

Typical mechanical properties of all-weld metal

	Yield Strength	Tensile Strength	Elongation	Impact Value (J)		Remarks
	(MPa)	(MPa)	(%)	-20 °C	-30 °C	
AWS A5.18	Min. 400	Min. 480	Min. 22		≥ 27	
EN ISO 17632-B	Min. 390	490-670	Min. 18		≥ 27	
Example	480	540	29	70	55	Mix

Notes on usage and welding condition

- Self shielded FCW generates more fumes than titania type FCW
Ventilation system to be used in small and confined spaces
- To prevent crack at low temperatures, preheat and maintain Interpass temperatures at 100-200 °C

Package

Diameter (mm)	1.2, 1.4, 1.6
Spool (kg)	5, 12.5, 15, 20
Coil (kg)	100 - 300

Operating data

Diameter	(mm)	1.2	1.4	1.6
Amperage (A)	F (PA/1G)	160-340	200-380	240-420
Voltage (V)		24-32	25-33	26-35