# WELDWIRE COMPANY, INC.

## **Technical Information**

### Metal Cored Wire

Alloy: WW70C-6M Conforms to Certification: AWS A5.18

Class: E70C-6M ASME SFA A5.18

Alloy: E70C-6M Weld Process: Mig Welding Process

#### TYPICAL APPLICATION:

**E70C-6M** is designed for welding of 490MPa high tensile steel with only Ar/CO<sub>2</sub> gas mixtures. It is especially suitable for welding and has a high tolerance to primer. Typical applications include machineries, shipbuilding, offshore structures, bridges and general fabrications.

### **CHARACTERISTICS ON USAGE:**

- Wire is a metal type of flux cored wire for flat and horizontal position welding
- Slag quality is almost the same as solid wire and multiple pass welding can be performed without removing slag.
- 20% higher productivity can be achieved when compared to solid wires and it features good penetration, high resistance to porosity, good wetting behavior as well as low hydrogen contents.
- **E70C-6M** is intended for semi-automatic, automatic, single and multiple pass welding.

**Typical Chemical Composition of all-weld metal (%)** 

	С	Si	Mn	Р	S
AWS	≤ 0.12	≤ 0.90	≤ 1.75	≤ 0.03	≤ 0.03
Typical Values (M21)	0.04	0.80	1.50	0.014	0.013

**All Weld Metal Mechanical properties (Typical)** 

	YS (Mpa)	UTS (Mpa)	EL %	CHARPY "V" NOTCH IMPACT AT (-30°C)
AWS	≥ 390	490 - 670	≥ 22	≥ 27
Typical Values (M21)	540	610	27	75

Sizes available and recommended currents (DC wire +)

D	iameter	0.045	0.052	1/16
Current	Flat(PA/1G)	140 – 300	160 – 380	180 – 400
(AMP)	H-Fillet(PB/2F)	160 – 300	180 – 360	220 – 380

**Approvals** 

Shielding Gas	CWB	
M21	E49C-6M-H8	

