

TM-70

JIS Z 3313 YFW-A50DM
AWS A5.18 E70C-3M/ 6M
EN758 T 42 0 M M 3

Characteristics and Applications:

TM-70 is a metallic flux cored wire designed to be used with Ar/CO₂ for mild steel and 490N/mm² high tensile steel, its deposition rate is 10-30% higher than a solid wire. Multi-layer welding can be performed without removing slag. It is suitable for the multi-layer welding of thick plate welding in such applications as: steel structure, bridges, shipbuilding, vehicles, storage tanks, etc.

Notes on Usage:

1. Use DC(+) polarity.
2. When larger diameters (1.6mm or higher) are used, higher power supply of welder is recommended.
3. Trailer Shield is required to ensure the weld pool completely shielded by 75~80%Ar-25~20% CO₂ gas until solidification is complete and no porosity problem.
4. Inter-pass temperature should be under 150°C while in multiple-pass welding.
5. Keep dry while in storage and delivery.

Typical chemical composition of weld metal (wt%)

C	Mn	Si	P	S
0.04	1.50	0.63	0.012	0.010

Typical mechanical properties of weld metal

YS (MPa)	TS (MPa)	EL %	CVN J	
			-20°C	-30°C
545	595	28	57	45

Welding position



Sizes and recommended current range (DC <+>)

Diameter (mm)	φ 1.2mm	φ 1.6mm
Parameters		
Voltage(Volt)	28-36	28-36
Current(Amp)	200-320	250-400
Stick out(mm)	15-25	15-25
Flow rate(l/min)	15-25	20-25

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