

TM-70C

AWS A5.20 E70T-1C
EN ISO 17632-A-T 46 2 R C1 3 H10
JIS Z 3313 T 49J 0T 15-0 C A-U

Characteristics and Applications:

TM-70C is a high deposition rate flux cored wire suitable for high speed fillet welding application in flat and horizontal position. The wire has excellent porosity resistibility for use in welding over zinc-primer surface and mill scale in high speed fillet welding. The wire generates low spatter and produces thinner slag with good slag detachability. In addition it produces deep effective throat on fillet weld and it has good arc stability and welder appeal.

TM-70C is widely used in shipbuilding, bridge construction and structural fabrication.

Notes on usage:

1. Must properly pre-heating 50~150°C(120~300°F) and use inter-pass temperature in order to release hydrogen which may cause cracking in weld metal when you weld on medium and heavy plates.
2. Use DC(+) polarity and 100% CO₂ shielding gas.
3. Maintain the temperature of inter-pass under 150°C with multiple-pass welding.
4. Keep the product dry while it is stored or delivered.

Typical chemical composition of weld metal (wt%):

	C	Mn	Si	P	S
AWS	≤ 0.12	≤ 1.75	≤ 0.90	≤ 0.03	≤ 0.03
EN ISO	-	≤ 2.0	-	-	-
Typical value	0.05	1.40	0.45	0.011	0.008

Typical mechanical properties of weld metal:

	Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	Charpy V-Notch J(ft-lbf)	
				-20°C (0°F)	-30°C (-20°F)
AWS	≥ 390(58)	490-670(70-95)	≥ 22	≥ 27(20)	-
EN ISO	≥ 460(67)	530-680(77-97)	≥ 20	≥ 47(35)	-
Typical value	581(84)	617(90)	28	70(52)	60(44)

Welding position:



Sizes and recommended parameter range (DC<+>):

Stick out: 15-25 (mm), flow rate: 20-25 (l/min)

Diameter (mm)	1.2	1.4	1.6
Position			
F · H · HF	160A-300A / 24V-36V	200A-350A / 26V~34V	270A-400A / 28V-40V

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