

TM-77

AWS A5.18 E70C-6M
EN 758 T 46 4 M M 3 H5

Description :

TM-77 is a gas-shielded metal-cored wire that provides smooth spray arc, low slag volume, low spatter, low fume emission and excellent low temperature impact toughness under -40°C . It welds with a wider penetration profile and higher deposition efficiency than solid wire.

Multi-layer welding can be performed without removing slag. It is suitable for steel structures, storage vessels and multi-layer welding on heavy plate thickness.

Features :

1. High deposition rate
2. Slag-free welds
3. Excellent toughness at low temperatures

Shielding Gas :

Ar-CO₂ mixture. 75%~80%Ar + 25%~20%CO₂.

Polarity :

DCEP (DC+)

Chemical Composition of All-Weld Metal (%) : (80%Ar/20%CO₂)

C	Mn	Si	P	S
0.06	1.45	0.54	0.015	0.005

Mechanical Properties of All-Weld Metal as per EN : (80%Ar/20%CO₂)

YS (MPa)	TS (MPa)	EL. (%)	IV. (J)
580	630	24	-40°C : 65J

Welding Data : (80%Ar/20%CO₂)

Diameter (mm)	Weld Position	Amps	Volts	Wire-Feed Speed (in/min)	Deposition Rate (kg/hr)	Stick Out (mm)
1.2	Horizontal & Flat	200	28	225	2.7	20
		250	30	325	4.0	20
		300	33	420	5.5	20
		350	35	550	7.1	20
1.6		250	29	165	3.3	25
		300	31	225	4.5	25
		350	32	270	5.5	25
		400	34	345	7.3	25
	450	37	450	9.5	25	

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