

SF-71MC

Type : Rutile



Conformances

AWS A5.36/ ASME SFA5.36 E71T1-C1A2-CS2

E71T1-M21A2-CS2

(AWS A5.20/ ASME SFA5.20 E71T-1C/-1M/-9C/-9M/-12C/-12M)

EN ISO 17632-A-T 46 3 P M21 1

EN ISO 17632-A-T 46 2 P C1 1

ABS 3YSA H10

LR 3YS H10

BV SA3YM HH

DNV-GL IIIYMS H10

TÜV EN ISO 17632-A-T 46 2 P C1 1 H10

T 46 3 P M 1 H10

DB EN ISO 17632-A-T 46 2 P C1 1 H10

T 46 3 P M 2 1 1 H10

CWB CSA W48 E491T-1(M)

/-9(M)/-12(M)-H8

CE

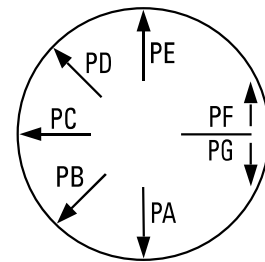
Applications

- Shipbuilding
- Structural fabrication
- General fabrication
- Pipe line
- Offshore structure

Features

- Low spatter and excellent performance
- Good arc performance and fast freezing slag
- Use 100% CO₂ gas or Ar-CO₂ mixture(Dual gas)
- Better performance in V-up position

Welding Position



Current

DC +

Shielding Gas

100% CO₂

Ar + 20~25% CO₂

Diameter / Packaging

Diameter	Spool			Pac		
	5kg (11lbs)	15kg (33lbs)	20kg (44lbs)	100kg (221lbs)	200kg (441lbs)	250kg (551lbs)
1.2 (0.045)	✓	✓	✓	✓	✓	✓
1.4 (0.052)	✓	✓	✓	✓	✓	✓
1.6 (1/16)	✓	✓	✓	✓	✓	✓

Typical Chemical Composition of All-Weld Metal (%)

	C	Si	Mn	P	P
100% CO ₂	0.04	0.40	1.20	0.010	0.012

Typical Mechanical Properties of All-Weld Metal

	YS MPa(lbs/in ²)	TS MPa(lbs/in ²)	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft.lbs)
100% CO ₂	510 (74,000)	550 (79,900)	28.0	-30 (-22)	75 (55)
80% Ar + 20% CO ₂	540 (78,400)	605 (87,700)	28.0	-30 (-22)	90 (66)

Typical Welding Parameters

Diameter, Polarity Shielding Gas	CTWD mm (in)	Wire Feed Speed m/min (in/min)	Amp. (A)	Volt. (V)	Deposition Rate kg/hr (lb/hr)	Efficiency (%)
1.2mm (0.045 in) DC+						
100% CO ₂	25 (1)	4.5 (175)	120~160	17~22	1.5 (3.3)	86~88
		6.4 (250)	135~175	18~24	2.2 (4.8)	
		7.6 (300)	150~180	19~25	2.5 (5.5)	
		8.9 (350)	175~205	22~27	3.0 (6.6)	
		10.2 (400)	185~220	24~29	3.5 (7.6)	
		11.5 (450)	220~260	25~30	3.8 (8.4)	
		12.8 (500)	250~290	26~31	4.4 (9.6)	
		15.3 (600)	280~320	27~32	5.3 (11.6)	
80% Ar + 20% CO ₂	25 (1)	4.5 (175)	120~160	18~23	1.5 (3.3)	86~88
		6.4 (250)	135~175	19~25	2.2 (4.8)	
		7.6 (300)	150~180	20~26	2.5 (5.5)	
		8.9 (350)	175~205	23~28	3.0 (6.6)	
		10.2 (400)	185~220	25~30	3.5 (7.6)	
		11.5 (450)	220~260	26~31	3.9 (8.6)	
		12.8 (500)	250~290	27~32	4.3 (9.5)	
		15.3 (600)	280~320	28~33	5.2 (11.4)	

SMAW

SAW

GMAW

GTAW

FCAW

Non-FERROUS

APPENDIX