

SC-420MC

Type :Rutile



Conformances

AWS A5.20/ ASME SFA5.20 E71T-1C, -9C H4
E71T-1M, -9M H8
EN ISO 17632-A T 46 3 P C1 1 H5
EN ISO 17632-A T 46 3 P M21 1 H5
ABS 3YSA H5
LR 3YS H5
BV SA3YM HH

DNV IIIYMS H5
RINA 3YS H5
TÜV, DB, CE EN ISO 17632-A
T46 3 P C1 1 H5
T46 3 P M21 1 H5
CWB CSA W48 E491T-1(M)
/-9(M)/-12(M)-H8

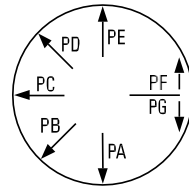
Applications

- 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	S
100% CO ₂	0.04	0.40	1.20	0.010	0.007

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	520 (76,000)	570 (83,000)	28.0	-30 (-22)	52 (38)
80% Ar + 20% CO ₂	575 (83,000)	630 (91,000)	26.0	-30 (-22)	70 (52)

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 (0.045in) 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)	
80% Ar + 20% CO ₂	25 (1)	15.3 (600)	280-320	27-32	5.3 (11.6)	87-89
		4.5 (175)	120-160	18-23	1.5 (3.3)	
		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)	