

SF-71

Type : Rutile

SF-71



Conformances

AWS A5.20/ ASME SFA5.20 E71T-1C
 JIS Z3313 T49J 0T1-1 C A-U H10
 EN ISO 17632-A-T 420 P C 1
 KR 2SMG,2YSMG(C)H10
 ABS 2SA, 2YSAH10,2Y400SA
 LR 2S,2YSH10
 BV SA2M,SA2YM HH, A2M,A2YM HH
 DNV IYMS H15

GL 2YH10S
 NK KSW52Y40G(C)H10
 TÜV EN ISO 17632-A-T 420 P C 1
 CWB CSA W48 E491T-1-H8
 CE
 CCS 2YSM H10
 CCRS 2HS, 2Y H5

Applications

- Shipbuilding
- General fabrication
- Structural fabrication
- Pressure vessels

Features

- Designed for welding with 100% CO₂ shielding gas
- Good performance and low spatter
- Smooth and stable arc with a fast freezing slag

Welding Position



1G 2F 3G 4G
 (PA) (PB) (PF-PG) (PE)

Current

DC +

Shielding Gas

100% CO₂

Diameter / Packaging

Diameter mm (in)	Spool				Pac		
	5kg (11lbs)	12.5kg (28lbs)	15kg (33lbs)	20kg (44lbs)	100kg (221lbs)	200kg (441lbs)	250kg (551lbs)
1.0 (0.040)	✓		✓	✓	✓	✓	✓
1.2 (0.045)	✓		✓	✓	✓	✓	✓
1.4 (0.052)	✓	✓	✓	✓	✓	✓	✓
1.6 (1/16)	✓		✓	✓	✓	✓	✓

Typical Chemical Composition of All-Weld Metal (%)

C	Si	Mn	P	S
0.04	0.49	1.29	0.010	0.009

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)
548 (79,600)	582 (84,500)	28.0	0 (32) -20 (-4)	86 (64) 45 (33)

Typical Operating Procedures

Diameter, Polarity Shielding Gas	CTWD mm (in)	Wire Feed Speed m/min (in/min)	Voltage (volts)	Approx. Current (amps)	Deposition Rate kg/hr (lb/hr)	Efficiency (%)
1.2mm (0.045 in) DC+						
100% CO ₂	25 (1)	4.5 (175)	18-23	120-160	1.5 (3.3)	86-88
		6.4 (250)	19-25	135-175	2.2 (4.8)	
		7.6 (300)	20-26	150-180	2.5 (5.5)	
		8.9 (350)	23-28	175-205	3.0 (6.6)	
		10.2 (400)	25-30	185-220	3.5 (7.6)	
		11.5 (450)	26-31	220-260	3.8 (8.4)	
		12.8 (500)	27-32	250-290	4.4 (9.6)	
15.3 (600)	28-33	280-320	5.3 (11.6)			
1.4mm (0.052 in) DC+						
100% CO ₂	25 (1)	3.8 (150)	20-25	130-170	1.9 (4.1)	85-88
		5.1 (200)	21-26	160-200	2.5 (5.5)	
		6.4 (250)	22-28	180-230	3.0 (6.6)	
		7.6 (300)	23-29	220-260	4.2 (9.2)	
		10.2 (400)	27-32	270-320	5.5 (12.1)	
		12.8 (500)	28-34	300-350	6.0 (13.2)	
1.6mm (1/16 in) DC+						
100% CO ₂	25 (1)	3.2 (125)	22-25	170-210	2.0 (4.4)	84-87
		3.8 (150)	23-26	180-220	2.5 (5.5)	
		5.1 (200)	25-29	220-260	3.2 (7.0)	
		6.4 (250)	26-32	270-320	4.0 (8.8)	
		7.6 (300)	28-34	300-350	5.0 (11.0)	
		10.2 (400)	34-38	350-400	6.4 (14.0)	