

# SF-71LF

Type : Rutile

## Conformances

AWS A5.36/ ASME SFA5.36 E71T1-C1A0-CS1  
 (AWS A5.20/ ASME SFA5.20 E71T-1C)  
 JIS Z3313 T49J 0 T1-1 C A-U H10  
 ABS 2YSA H10  
 LR 2S, 2YS H10

DNV-GL IYMS H10  
 NK KSW52G(C) H10  
 KAW52MG(C)

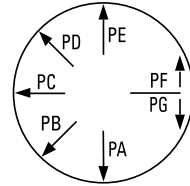
## Applications

- Shipbuilding
- General fabrication
- Structural fabrication
- Pressure vessels

## Features

- Designed for welding with 100% CO<sub>2</sub> shielding gas
- Low fume
- Smooth and stable arc with a fast freezing slag

## Welding Position



## Current

DC +

## Shielding Gas

100% CO<sub>2</sub>

## 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
0.03	0.50	1.35	0.009	0.011

## Typical Mechanical Properties of All-Weld Metal

YS MPa(lbs/in <sup>2</sup> )	TS MPa(lbs/in <sup>2</sup> )	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft.-lbs)
550 (79,900)	590 (85,700)	27.0	0 (32) -20 (-4)	90 (66) 42 (31)

## 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 (%)
<b>1.2mm (0.045 in) DC+</b>						
100% CO <sub>2</sub>	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)			
<b>1.4mm (0.052 in) DC+</b>						
100% CO <sub>2</sub>	25 (1)	3.8 (150)	130~170	20~25	1.9 (4.1)	85~88
		5.1 (200)	160~200	21~26	2.5 (5.5)	
		6.4 (250)	180~230	22~28	3.0 (6.6)	
		7.6 (300)	220~260	23~29	4.2 (9.2)	
		10.2 (400)	270~320	24~30	5.4 (11.9)	
		12.8 (500)	300~350	25~31	6.0 (13.2)	
<b>1.6mm (1/16 in) DC+</b>						
100% CO <sub>2</sub>	25 (1)	3.2 (125)	170~210	22~25	2.0 (4.4)	84~87
		3.8 (150)	180~220	23~26	2.5 (5.5)	
		5.1 (200)	220~260	25~29	3.1 (6.8)	
		6.4 (250)	270~320	26~32	4.0 (8.8)	
		7.6 (300)	300~350	28~34	5.0 (11.0)	
		10.2 (400)	350~400	34~38	6.4 (14.0)	

SMAW

SAW

GMAW

GTAW

FCAW

Non-FERROUS

APPENDIX