

# SC-55 Cored

Type : Rutile

## Conformances

AWS A5.36/ ASME SFA5.36 E81T1-C1A0-G  
 (AWS A5.29/ ASME SFA5.29 E81T1-GC)  
 JIS Z3313 T55 2 T1-1 C A-U H10  
 ABS AWS A5.36 E81T1-C1A0-G H10

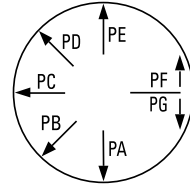
## Applications

- Structural fabrication
- Storage tank
- Bridge construction
- Steel industry

## Features

- Designed for welding with 100% CO<sub>2</sub> shielding gas
- Good crack resistance
- Smooth and stable arc with a fast freezing slag
- All position welding

## Welding Position



## Current

DC +

## Shielding Gas

100% CO<sub>2</sub>

## Diameter / Packaging

Diameter mm (in)	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
0.06	0.45	1.40	0.012	0.006

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)
560 (81,200)	610 (88,500)	28.5	-20 (-4)	80 (59)

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)	

SWAW

SAW

GMAW

GTAW

FCAW

Non-FERROUS

APPENDIX