

# Supercored 71MAG

Type : Rutile



## Conformances

AWS A5.36/ ASME SFA5.36 E71T1-M21A2-CS1

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

JIS Z3313 T49 3 T1-1 M A-U H10

EN ISO 17632-A-T 42 3 P M21 1

ABS 3SAH10, 3YSA

LR 3S, 3YS H10

BV SA3M, SA3YM HH, A3M, A3YM

DNV-GL IIIYMS H10

TÜV EN ISO 17632-A - T 46 3 P M 1

CE

DB DIN EN ISO 17632-A-T 46 3 P M 21 1

RINA 3YS H10

CWB CSA W48 E491T-9M-H8

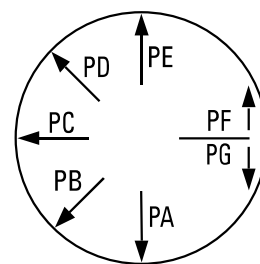
## Applications

- Shipbuilding
- Civil construction
- General fabrication

## Features

- Designed for welding with 75~80% Argon/ balance CO<sub>2</sub> shielding gas
- Good arc performance and bead appearance
- Low spatter

## Welding Position



## Current

DC +

## Shielding Gas

Ar + 20~25% CO<sub>2</sub>

## Diameter / Packaging

Diameter	Spool			Pac		
	5kg (11lbs)	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	0.54	1.25	0.011	0.012

## 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)
580 (84,200)	600 (87,100)	28.0	-30 (-22)	60 (44)

## 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>						
80% Ar + 20% CO <sub>2</sub>	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)			
<b>1.4mm (0.052 in) DC+</b>						
80% Ar + 20% CO <sub>2</sub>	25 (1)	3.8 (150)	130~170	19~24	1.9 (4.1)	86~89
		5.1 (200)	160~200	20~25	2.5 (5.5)	
		6.4 (250)	180~230	21~27	3.0 (6.6)	
		7.6 (300)	220~260	22~28	4.2 (9.2)	
		10.2 (400)	270~320	26~31	5.5 (12.1)	
		12.8 (500)	300~350	27~33	6.0 (13.2)	
<b>1.6mm (1/16 in) DC+</b>						
80% Ar + 20% CO <sub>2</sub>	25 (1)	3.2 (125)	170~210	21~24	2.0 (4.4)	86~89
		3.8 (150)	180~220	22~25	2.5 (5.5)	
		5.1 (200)	220~260	24~28	3.2 (7.0)	
		6.4 (250)	270~320	25~31	4.0 (8.8)	
		7.6 (300)	300~350	27~33	5.0 (11.0)	
		10.2 (400)	350~400	33~37	6.4 (14.0)	

SMAGW

SAW

GMAGW

GTAW

FCAGW

Non-FERROUS

APPENDIX