

Supercored 71H

Type : Rutile



Conformances

AWS A5.36/ ASME SFA5.36 E71T1-C1A4-CS1
 (AWS A5.20/ ASME SFA5.20 E71T-1C/-9C/-9C-J)
 JIS Z3313 T49 4 T1-1 C A H5
 EN ISO 17632-A-T 42 4 P C 1 1 H5
 KR 4YSMG(C) H10, 3SMG(C) H10 / 3YSMG(C) H10
 ABS 4YSA H10, 3YSA H10
 LR 4YS H10
 BV SA4YM HH, SA3YM HH
 DNV-GL IVYSM H5, IIIYMS H5

NK KSW54G(C) H10
 KSW53G(C) H10
 TÜV EN ISO 17632-A - T 42 4 P C 1
 CWB CSA W48 E491T-9J-H8
 CE
 DB DIN EN ISO 17632-A-T424 P C 11
 CCS 3YSM H10, 4YSM H10
 RINA 3YS H10
 RS 4Y40SM H5, 3Y40SM H5
 NAKS

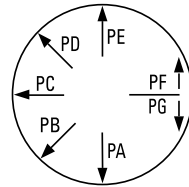
Applications

- Shipbuilding
- Offshore Structure
- Structural fabrication
- Pressure vessels

Features

- Low temperature service steel
- Designed for welding with 100% CO₂ shielding gas
- Smooth and stable arc with a fast freezing slag

Welding Position



Current

DC +

Shielding Gas

100% 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	Ni
0.03	0.46	1.36	0.008	0.011	0.40

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)
550 (79,900)	570 (82,800)	27.0	-30 (-22) -40 (-40)	90 (66) 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 (%)
1.2mm (0.045 in) DC+						
100% CO ₂	25 (1)	All Position				85-88
		4.3 (175)	100-130	20-25	1.6 (3.5)	
		5.6 (220)	120-150	21-26	2.0 (4.5)	
		7.0 (275)	130-160	22-27	2.5 (5.5)	
		8.3 (325)	160-190	23-28	2.9 (6.5)	
		8.9 (350)	170-200	24-29	3.2 (7.0)	
		10.2 (400)	200-230	25-30	3.6 (8.0)	
		Flat & Horizontal				
		11.4 (450)	210-240	26-31	4.1 (9.1)	
		12.1 (475)	230-260	27-32	4.3 (9.5)	
13.3 (525)	250-280	28-33	4.7 (10.4)			
1.4mm (0.052 in) DC+						
100% CO ₂	25 (1)	All Position				86-88
		3.8 (150)	130-160	22-27	1.8 (3.9)	
		5.1 (200)	140-170	23-28	2.4 (5.2)	
		6.4 (250)	160-190	24-29	2.9 (6.5)	
		7.6 (300)	180-210	26-31	3.5 (7.8)	
		8.9 (350)	200-230	27-32	4.1 (9.1)	
		9.5 (375)	220-250	28-33	4.4 (9.8)	
		Flat & Horizontal				
		10.8 (425)	240-270	30-35	5.0 (11.1)	
		12.1 (475)	260-290	31-36	5.6 (12.4)	
12.7 (500)	310-340	32-37	5.9 (13.0)			
1.6mm (1/16 in) DC+						
100% CO ₂	25 (1)	All Position				86-88
		3.8 (150)	180-210	21-27	2.5 (5.5)	
		4.4 (175)	220-250	23-28	2.9 (6.4)	
		5.1 (200)	260-290	24-29	3.3 (7.3)	
		5.7 (225)	280-300	25-31	3.7 (8.2)	
		6.4 (250)	300-330	27-34	4.2 (9.2)	
		7.6 (300)	330-360	29-36	5.0 (11.0)	
		Flat & Horizontal				
		8.3 (325)	360-390	31-38	5.4 (11.9)	
		8.9 (350)	390-420	32-39	5.8 (12.8)	
11.4 (450)	420-450	34-39	7.5 (16.5)			