

## 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 C1 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-T 42 4 P C 1  
CCS 3YSM H10, 4YSM H10  
RINA 3YS H10  
RS 4Y40SM H5, 3Y40SM H5  
NAKS

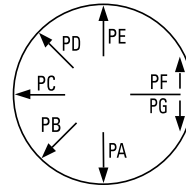
## Applications

- Shipbuilding
- Offshore Structure
- Structural fabrication
- Pressure vessels

## Features

- Low temperature service steel
- Designed for welding with 100% CO<sub>2</sub> shielding gas
- 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			
	mm (in)	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 <sup>2</sup> )	TS MPa(lbs/in <sup>2</sup> )	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 (%)	
<b>1.2mm (0.045 in) DC+</b>							
100% CO <sub>2</sub>	25 (1)	<b>All Position</b>					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)		
		<b>Flat &amp; Horizontal</b>					
		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)				
<b>1.4mm (0.052 in) DC+</b>							
100% CO <sub>2</sub>	25 (1)	<b>All Position</b>					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)		
		<b>Flat &amp; Horizontal</b>					
		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)				
<b>1.6mm (1/16 in) DC+</b>							
100% CO <sub>2</sub>	25 (1)	<b>All Position</b>					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)		
		<b>Flat &amp; Horizontal</b>					
		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)				