SC-81Ni2M

Type : Rutile

Conformances

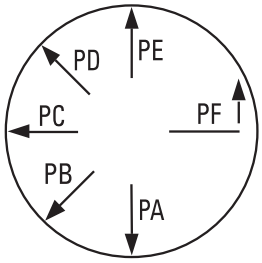
AWS A5.36/ ASME SFA5.36 E81T1-M21A8-Ni2
(AWS A5.29/ ASME SFA5.29 E81T1-Ni2M)
JIS Z3313 T55 6 T1-1 M A-N5 H5
EN ISO 17632-A-T 46 6 2Ni P M21 2 H5
LR 4Y47S H5

DNV·GL VY46MS(H5)
BV SA5Y46 HHH
CWB CSA W48 E551T1-M21A6-Ni2
(E81T1-M21A6-Ni2)

Applications

- Offshore structure
- Shipbuilding

Welding Position



Features

- Good impact value at low temperature
- Good CTOD value

Current

DC +

Shielding Gas

Ar + 20~25% CO_2

Diameter / Packaging

Diameter	Spool			Pac		
mm (in)	12.5kg (28lbs)	15kg (33lbs)	20kg (44lbs)	100kg (221lbs)	200kg (441lbs)	250kg (551lbs)
1.2 (0.045)	√					
1.4 (0.052)	√					

Typical Chemical Composition of All-Weld Metal (%)

C	Si	Mn	P	S	Ni
0.05	0.24	1.15	0.010	0.010	2.25

Typical Mechanical Properties of All-Weld Metal

YS MPa(lbs/in²)	TS MPa(lbs/in²)	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft·lbs)
580 (84,200)	620 (90,000)	24.8	-50 (-58) -60 (-76)	110 (81) 90 (66)

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+						
80% Ar + 20% CO_2	25 (1)	All Position				86~88
		4.4 (175)	110~140	23~28	1.6 (3.5)	
		5.1 (200)	120~150	24~29	1.8 (4.0)	
		6.4 (250)	130~160	25~30	2.3 (5.0)	
		7.6 (300)	160~190	25~30	2.7 (6.0)	
		8.9 (350)	170~200	26~31	3.2 (7.0)	
		9.5 (375)	190~220	26~31	3.4 (7.5)	
		10.8 (425)	210~240	27~32	3.8 (8.5)	
		Flat & Horizontal				
		12.1 (475)	230~260	28~33	4.9 (10.8)	
		12.7 (500)	240~270	29~34	5.2 (11.4)	