

SW-410NiMo Cored

Type : Rutile

Conformances

AWS A5.22/ ASME SFA5.22 E410NiMoT1-1/-4

JIS Z3323 TS410NiMo-FB1

EN ISO 17633-A-T 13 4 P M21/C1 2

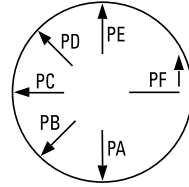
Applications

- Martensite stainless steels (ASTM, CA6NM)
- Hardfacing of continuous casting rolls, valve seat, etc
- Power plant

Features

- Good performance in all positions

Welding Position



Current

DC +

Shielding Gas

100% CO₂

Ar + 20~25% CO₂

Diameter / Packaging

Diameter	Spool			Pac		
	5kg (11lbs)	12.5kg (27.6lbs)	15kg (33lbs)	250kg (551lbs)	300kg (661lbs)	350kg (771lbs)
1.2 (0.045)		✓	✓			
1.6 (1/16)		✓	✓			

Typical Chemical Composition of All-Weld Metal (%)

	C	Si	Mn	P	S	Cr	Ni	Mo
100% CO ₂	0.04	0.65	0.45	0.02	0.01	11.5	4.3	0.45
80% Ar + 20% CO ₂	0.04	0.70	0.50	0.02	0.01	11.5	4.5	0.50

Typical Mechanical Properties of All-Weld Metal

	TS MPa(lbs/in ²)	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft.-lbs)	Hardness (HRc)	PWHT
100% CO ₂	890 (129,050)	17	0 (32)	40 (30)	As weld : 37 PWHT : 26	600°C, 1hr, AC
80% Ar + 20% CO ₂	900 (130,500)	17	0 (32)	40 (30)	As weld : 37 PWHT : 27	600°C, 1hr, AC

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)
1.2mm (0.045 in) DC+					
100% CO ₂	20 (4/5)	6.2 (244)	140	23-26	2.5 (5.5)
		9.0 (354)	180	27-30	3.6 (7.9)
		12.5 (492)	210	28-31	4.7 (10.4)
80% Ar + 20% CO ₂	20 (4/5)	6.2 (244)	140	23-26	2.6 (5.7)
		9.0 (354)	180	27-30	3.5 (7.7)
		12.0 (472)	210	27-30	4.8 (10.6)
1.6mm (1/16 in) DC+					
100% CO ₂	25 (1)	3.6 (142)	180	24-27	2.9 (6.4)
		6.5 (256)	250	25-28	4.6 (10.1)
		8.8 (346)	290	26-29	5.6 (12.3)
80% Ar + 20% CO ₂	25 (1)	3.7 (146)	180	24-27	3.0 (6.6)
		6.6 (260)	250	25-28	4.6 (10.1)
		8.9 (350)	290	26-29	5.8 (12.8)

SWAW

SAW

GMAW

GTAW

FCAW

Non-FERROUS

APPENDIX