

# 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

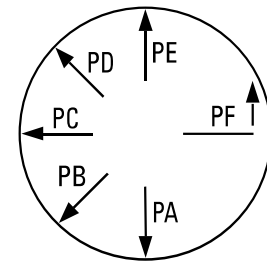
## Applications

- 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% CO<sub>2</sub>

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

## Diameter / Packaging

Diameter	Spool			Pac		
	5kg (11lbs)	12.5kg (27.6lbs)	15kg (33lbs)	250kg (551lbs)	300kg (661lbs)	350kg (771lbs)
mm (in)						
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 <sub>2</sub>	0.04	0.65	0.45	0.02	0.01	11.5	4.3	0.45
80% Ar + 20% CO <sub>2</sub>	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 <sup>2</sup> )	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft·lbs)	Hardness (HRc)	PWHT
100% CO <sub>2</sub>	890 (129,050)	17	0 (32)	40 (30)	As weld : 37 PWHT : 26	600°C, 1hr, AC
80% Ar + 20% CO <sub>2</sub>	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)
<b>1.2mm (0.045 in) DC+</b>					
100% CO <sub>2</sub>	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 <sub>2</sub>	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)
<b>1.6mm (1/16 in) DC+</b>					
100% CO <sub>2</sub>	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 <sub>2</sub>	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)

SMWV

SAW

GMWV

GTAW

FCWV

Non-FERROUS

APPENDIX