

# SW-410 Cored

Type : Rutile

## Conformances

AWS A5.22/ ASME SFA5.22 E410T1-1/-4

JIS Z3323 TS410-FB1

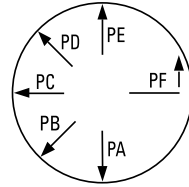
## Applications

- 410, 410S, 405 stainless steels
- Welding of ASTM CA6NM castings

## Features

- Weld metal of martensite stainless steel
- Good hardness and anti-abrasion properties

## 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)
0.8 (0.033)						
0.9 (0.035)						
1.0 (0.040)						
1.2 (0.045)		√	√			
1.4 (0.052)						
1.6 (1/16)		√	√			

**Typical Chemical Composition of All-Weld Metal (%)**

	C	Si	Mn	P	S	Cr	Ni	Mo	Cu
100% CO <sub>2</sub>	0.07	0.5	0.4	0.008	0.01	12.5	0.4	0.01	0.03
80% Ar + 20% CO <sub>2</sub>	0.06	0.5	0.4	0.008	0.008	12.5	0.4	0.01	0.03

**Typical Mechanical Properties of All-Weld Metal**

	TS MPa(lbs/in <sup>2</sup> )	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft-lbs)	Heat Treatment
100% CO <sub>2</sub>	610 (88,500)	23	0 (32)	14 (10)	750°C X 1hr
80% Ar + 20% CO <sub>2</sub>	600 (87,000)	23	0 (32)	13 (9)	

**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 (0.78)	12.7 (500)	260	29-31	1.3 (2.86)
		16 (628)	280	30-32	1.5 (3.30)
		16.5 (648)	300	31-33	1.8 (3.96)
<b>1.6mm (1/16 in) DC+</b>					
80% Ar + 20% CO <sub>2</sub>	20 (0.78)	7.6 (300)	300	31-33	1.7 (3.74)
		8.0 (314)	320	32-34	2.0 (4.40)
		8.9 (350)	340	32-34	2.3 (5.07)

SWAW

SAW

GMAW

GTAW

FCAW

Non-FERROUS

APPENDIX