

# SW-309L Cored

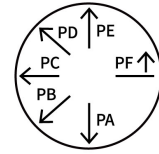
## Classification

**AWS** AWS A5.22/ ASME SFA-5.22 E309LT1-1/-4

**JIS** Z 3323 TS309L-FB1

**EN** ISO 17633-A-T 23 12 L P M21/C1 2

## Welding Positions



## Features

- Good performance in all positions

## Application Areas

- 23.5%Cr-13%Ni stainless steel
- Dissimilar welds between carbon, low alloy steels to stainless steels
- Buffer layer welding for cladding, overlays

## Polarity

DC+

## Shielding Gas

100% CO<sub>2</sub>

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

## Approvals

ABS	BV	CCS	CRS	DNV	KR	LR	NK	RINA	RS	CWB	CE	DB	TUV
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

## Typical Chemical Composition of All-Weld Metal (wt%)

Shielding Gas	C	Si	Mn	P	S	Cu	Ni	Cr	Mo
100% CO <sub>2</sub>	0.03	0.7	1.3	0.021	0.006	0.13	12.9	23.4	0.13
Ar+20~25% CO <sub>2</sub>	0.03	0.8	1.4	0.021	0.006	0.12	12.8	23.5	0.13

## Typical Mechanical Properties of All-Weld Metal

Shielding Gas	Tensile Strength MPa(ksi)	Elongation (%)	Temperature °C (°F)	Impact Toughness J (ft·lbs)
100% CO <sub>2</sub>	540(78)	41	-20(0)	49(36)
			-60(-75)	46(34)
Ar+20~25% CO <sub>2</sub>	555(80)	37	-20(0)	46(34)
			-60(-75)	40(30)

## Diameter / Welding Parameters / Packaging

Wire Diameter mm(in)	Current (A)	Packaging
1.2 (0.045)	160~220	Spool 5kg(11lbs), 12.5(27.6lbs), 15kg(33lbs)
1.6 (1/16)	250~290	