

# SW-308HBF

Type : Rutiles

## Conformances

AWS A5.22/ ASME SFA5.22 E308HT1-1/-4

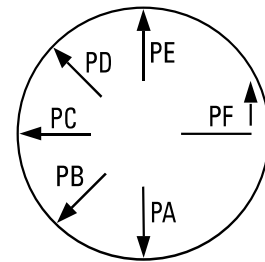
## Applications

- Welding of 18%Cr-8%Ni stainless steels for high temperature service

## Features

- Designed for welding with 100% CO<sub>2</sub> or Ar+15~25%CO<sub>2</sub> shielding gas
- Excellent all position weldability
- Smooth and stable arc with a fast freezing slag

## Welding Position



## Current

DC +

## Shielding Gas

100% CO<sub>2</sub> / Ar+20~25% CO<sub>2</sub>

## Diameter / Packaging

Diameter mm (in)	Spool			Pac		
	5kg (11lbs)	12.5kg (27.6lbs)	15kg (33lbs)	250kg (551lbs)	300kg (661lbs)	350kg (771lbs)
0.9 (0.035)	✓	✓	✓			
1.2 (0.045)	✓	✓	✓			
1.6 (1/16)		✓	✓			

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

	C	Si	Mn	P	S	Cr	Ni	Nb
100% CO <sub>2</sub>	0.053	0.68	1.09	0.014	0.009	18.5	10.2	0.02
80% Ar + 20% CO <sub>2</sub>	0.050	0.63	1.00	0.019	0.008	19.1	10.2	0.02

### Typical Mechanical Properties of All-Weld Metal

	TS MPa(lbs/in <sup>2</sup> )	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft-lbs)
100% CO <sub>2</sub>	580 (84,100)	41.0	-60 (-76)	52 (38.3)
80% Ar + 20% CO <sub>2</sub>	585 (54,825)	42.0	-60 (-76)	53 (39.1)

### 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)	6.5 (256)	140	23~26	2.6 (5.7)
		9.2 (362)	180	27~30	3.7 (8.2)
		12.5 (492)	210	28~31	4.8 (10.6)
80% Ar + 20% CO <sub>2</sub>	20 (4/5)	6.2 (244)	140	23~26	2.7 (6.0)
		9.0 (354)	180	27~30	3.7 (8.2)
		12.0 (472)	210	27~30	4.9 (10.8)
<b>1.6mm (1/16 in) DC+</b>					
100% CO <sub>2</sub>	25 (1)	3.8 (150)	180	24~27	3.2 (7.1)
		6.5 (256)	250	25~28	4.5 (9.9)
		9.0 (354)	290	26~29	5.6 (12.3)
80% Ar + 20% CO <sub>2</sub>	25 (1)	3.7 (146)	180	24~27	3.3 (7.3)
		6.4 (252)	250	25~28	4.8 (10.6)
		8.9 (350)	290	26~29	5.9 (13.0)

SMAW

SAW

GMAW

GTAW

FCAW

Non-FERROUS

APPENDIX