

# S-4301.I

Type : Ilmenite

## Conformances

AWS A5.1/ ASME SFA5.1 E6019  
 JIS Z3211 E4319  
 EN ISO 2560-A-E35 2 RA 1 2  
 KR 3  
 ABS 3  
 LR 3  
 BV 3  
 DNV-GL 3  
 NK KMW3

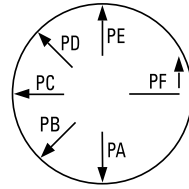
## Applications

- General fabrication
- Shipbuilding
- Suitable for High impact value required parts

## Features

- Suitable for butt and fillet welding of thin and medium-thick plates (up to 20mm)
- Good crack resistance, pitting resistance
- Good X-ray performance

## Welding Position



## Current

AC or DC ±

## Redrying Conditions

70~100°C (158~212°F) X 0.5~1hr

## Diameter / Packaging

Diameter mm (in)	Length mm (in)	Standard	
		packet 5kg(11lbs)	carton 20kg(44lbs)
2.6 (3/32)	350 (14)		✓
3.2 (1/8)	350 (14)		✓
4.0 (5/32)	400 (16)		✓
	450 (18)		✓
4.5 (11/64)	400 (16)		✓
	450 (18)		✓
5.0 (3/16)	400 (16)		✓
	450 (18)		✓
6.0 (15/64)	450 (18)		✓

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

C	Si	Mn	P	S
0.05	0.10	0.37	0.021	0.014

## Typical Mechanical Properties of All-Weld Metal

YS MPa(lbs/in <sup>2</sup> )	TS MPa(lbs/in <sup>2</sup> )	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft.-lbs)
382 (55,500)	437 (63,500)	31.2	0 (32) -20 (-4)	88 (65) 56 (42)

## Typical Welding Parameters / Amp.(A)

Diameter mm (in)	2.6 (3/32)	3.2 (1/8)	4.0 (5/32)	4.5 (11/64)	5.0 (3/16)	6.0 (15/64)
Length mm (in)	350 (14)	350 (14)	400 (16) 450 (18)	400 (16)	400 (16) 450 (18)	450 (18)
F & HF	50~85	80~130	120~180	145~200	170~250	240~310
V-up, OH	45~70	60~110	110~150	120~180	130~200	-