

S-4301.I

TYPE : ilmenite

AWS A5.1 / ASME SFA5.1 E6019
JIS Z3211 E4319
EN ISO 2560-A - E35 2 RA 1 2

SMW

Applications

S-4301. I is an ilmenite type electrode for carbon steels.

Welding of such parts, where the highest reliability is required, such as strength members of ship hulls, high pressure vessels and buildings.

Characteristics on Usage

S-4301. I is designed for general purpose.

As crack resistibility, pitting resistibility and X-ray performance are excellent among ilmenite type electrodes, it also can be used for welding structural steels of heavy section 25mm(1inch) in thickness.

Notes on Usage

① Pay attention not to exceed the range of proper currents in case of welding structures which require weld metal of high X-ray soundness.

Welding Position

Current



1G 2F 3G 4G
(PA) (PB) (PF) (PE)

AC or DC ±

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 ²)	TS MPa(lbs/in ²)	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)

Approval

I Packing

KR, ABS, LR, BV, DNV, GL, NK

Packet 5 kg (11 lbs)
Carton 5 kg (11 lbs) × 4 : 20kg(44 lbs)

Sizes Available and Recommended Currents (Amp.)

Size 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)	400 (16) 450 (18)	400 (16)	400 (16) 450 (18)	450 (18)
F	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	-