

CSI-182

For Nickel and Nickel alloy steel

AWS A5.11 ENiCrFe-3
KS D 7021 DNiCrFe-3
JIS Z3224 DNiCrFe-3

Applications

Welding of INCONEL(INCONEL 600, INCOLOY 800), dissimilar welding of INCONEL and carbon steel, stainless steel, INCONEL and nickel alloy, 9%Ni.

Characteristics

These weld metals have no directly equivalent parent materials, although the composition is related to INCONEL 600. Mn and Nb are added to give high resistance to hot cracking, tolerance to dilution by many combinations of nickel-base and ferrous alloys.

Notes on usage

- (1) Dry the electrodes at 250~280°C for 30~60 minutes before use.
- (2) Use recommended current range. If not it will be much spatter and undercut.
- (3) Keep the arc as short as possible
- (4) Weaving width should be within two and a half times electrode's diameter.

Typical chemical composition of weld metal (%)

C	Mn	Si	P	S	Ni	Cr	Nb	Fe	Ti
0.04	6.4	0.6	0.003	0.008	69	16.2	1.9	4.8	0.2

Typical mechanical properties of weld metal

TS N/mm ² (kgf/mm ²)	EL %	X-ray Test	Bending Test
640(65)	40	Good	Good

Size & recommended current range (DC +)

Dia. (mm)		3.2	4.0
L (mm)		350	350
Amp.	F	85-110	120-150
	V&OH	75-105	110-140