

S-NCI

COVERED ARC WELDING ELECTRODE
FOR REPAIRING CAST IRON AND
JOINING OF VARIOUS CAST IRON PRODUCTS



❖ Specification

<i>AWS A5.15</i>	ENI-CI
<i>JIS Z3252</i>	DFC NI
<i>EN ISO 1071</i>	ENiG4

❖ Applications

S-NCI can be used for repairing cast iron and joining of various kinds of cast iron products such as cylinder covers, motor beds, casings and gears. Repairing of meehanite, alloy and malleable cast iron.

❖ Characteristics on Usage

S-NCI is a graphite type coated electrode, depositing nickel weld metal. Hardening of heat affected zone is small and machining of the welds is comparatively easy. Therefore it is suitable parts as well as common cast iron.

❖ Note on Usage

1. Chip off base metal completely at the repairing part.
2. There is a possibility that cracks spread or make holes at both ends of repairing part.
3. Keep the weld metal length less than 50mm(2inch) to disperse welding heat. Adopt back stepping stone or symmetry method by turns.
4. The preheat temperatures vary in accordance with the size, kind and shape of the base metal. 150°C(302°F) is appropriate in general.



Mechanical Properties & Chemical Compositions of all-Weld Metal

❖ Typical Chemical Composition of All-weld Metal(wt%)

C	Si	Mn	P	S	Ni	Fe
1.38	0.79	0.36	0.004	0.003	98.3	0.58

❖ Typical Mechanical Properties of All-Weld Metal

Preheat & Interpass Temp. °C(°F)	Hardness (HRB)
–	77.6

❖ Available sizes and Recommended Current

Diameter, mm(in)		2.6 (3/32)	3.2 (1/8)	4.0 (5/32)
Length, mm(in)		300(12)	350(14)	350(14)
Recommended current range (AC or DC+)	Flat (1G-PA)	50~80	80~130	110~160

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