

S-700B.B

COVERED ARC WELDING ELECTRODE
FOR HARDFACING OF SOIL ABRASION



❖ Specification

JIS Z3251

DF3C-600-B

❖ Applications

For soil abrasion. Hardfacing of cutting knives and casings

❖ Characteristics on Usage

S-700B.B is an electrode depositing weld metal of martensite which is harder than that of S-600B.B. This electrode, all weld metal of very hard martensite structure containing small quantity of austenite structure. Machining is impossible "as welded". It is mostly suitable for soil abrasion.

❖ Note on Usage

1. Preheat at 150°C(302°F) or more than that in general.
2. Postheat about 600°C(1112°F), if possible.
3. In case of multi-layer build-up welding or welding base metal of hardening property, underlay with low hydrogen type carbon steel electrodes.
4. Dry the electrodes at 350~400°C(662~752°F) for 60 minutes before use.



S-700B.B

Mechanical Properties & Chemical Compositions of all-Weld Metal

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

size Mm(in)	Chemical Composition (%)						
	C	Si	Mn	P	S	Cr	Mo
4.0 X 400 (5/32 X 16)	0.56	1.26	1.67	0.029	0.010	4.06	1.84

❖ Typical Mechanical Properties of All-Weld Metal

Preheat & Interpass Temp. °C(°F)	Hardness (HRc)
-	54.7

❖ Available sizes and Recommended Current

Diameter, mm(in)		2.6 (3/32)	3.2 (1/8)	4.0 (5/32)	5.0 (3/16)	6.0 (15/64)
Length, mm(in)		350(14)	350(14)	400(16)	400(16)	450(18)
Recommended current range (AC or DC+)	Flat (1G-PA)	55 ~90	90 ~140	140 ~190	190 ~240	220 ~300

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