S-700B.B

COVERED ARC WELDING ELECTRODE
FOR HARDFACING OF SOIL ABRASION

HYUNDAI WELDING CO., LTD.

❖ **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℃(302°F) or more than that in general.

2. Postheat about 600℃(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℃(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. ℃(℉)	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