

# **S-450B.B**

COVERED ARC WELDING ELECTRODE  
FOR HARDFACING OF INTERMETALLIC ABRASION  
& SOIL ABRASION



## ❖ Specification

JIS Z3251

DF2A-450-B

## ❖ Applications

For intermetallic abrasion and light soil abrasion.

Hardfacing of idlers, rollers, bulldozer blades, sprockets, caterpillar links, Crushers, dipper teeth and conveyors.

## ❖ Characteristics on Usage

The deposited metal of S-450B.B has the mixed metal structure of austenite and martensite and it has a high grade of hardness and machining is a little bit difficult.

## ❖ Note on Usage

1. Preheat at 150°C(302°F) or more than that in general.
2. In case of multi-layer build-up welding, underlay with low hydrogen type carbon steel electrodes.
3. Pay attention to blow hole at the arc starting.
4. Dry the electrodes at 350~400°C(662~752°F) for 60 minutes before use.



# S-450B.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)	0.30	1.06	0.56	0.017	0.010	1.64	0.63

### ❖ Typical Mechanical Properties of All-Weld Metal

Preheat & Interpass Temp. °C(°F)	Hea Treatment.	Hardness (HB)
150(302)	-	420
300(572)	-	380
-	650°C(1202°F) 6hr.F.C	410
-	625°C(1157°F) 6hr.F.C	330

### ❖ 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
	Vertical Up	50 ~80	80 ~130	110 ~170		

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