

# **S-600B.B**

COVERED ARC WELDING ELECTRODE FOR HARDFACING



## ❖ Specification

*JIS Z3251*

DF2B-600-B

## ❖ Applications

For intermetallic heavy abrasion and soil abrasion.  
Hardfacing of lower rollers and bucket edges.

## ❖ Characteristics on Usage

S-600B.B is an electrode depositing all-weld metal of typical martensite structure. It is suitable for soil abrasion. The weld softens with the heat.

## ❖ Note on Usage

Preheat at 150°C(302°F) and more than that in general.

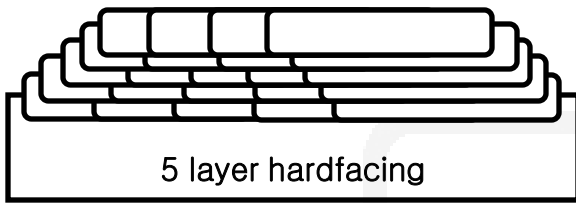
In case of multi-layer build-up welding or welding base metal of hardening property, underlay with low hydrogen type carbon steel electrodes. Dry the electrodes at 350~400°C(662~752°F) for 60 minutes before use.



## Mechanical Properties & Chemical Composition of All Weld Metal

### ❖ Welding Conditions

Method by JIS Spec.



5 layer hardfacing

<b>Diameter(mm)</b>	: 4.0 x 400
<b>Amp./ Volt.</b>	: 180 / 22~24
<b>Pre-Heat(°C)</b>	: ≥150
<b>Interpass Temp.(°C)</b>	: 150±20
<b>Polarity</b>	: DC(+)

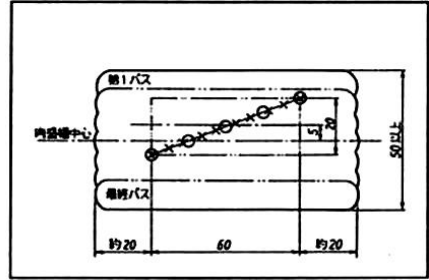
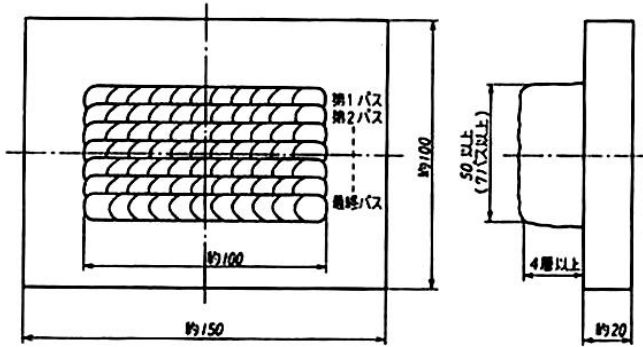
### ❖ Chemical Analysis of All weld metal(wt%)

Consumable	Chemical Composition (%)							
	C	Si	Mn	P	S	Cr	Mo	Others
<b>S-600B.B</b>	0.393	1.16	1.41	0.017	0.011	2.86	1.32	-
<b>JIS Z3251 DF2B-600-B</b>	0.30~ 1.00	≤1.5	≤3.0	≤0.03	≤0.03	≤5.0	≤1.5	≤1.0



## Mechanical Properties & Chemical Composition of All Weld Metal

### ❖ Hardness test of All weld metal(HRc)



×印：ビッカース硬さ又はロックウェル硬さ測定位置（等間隔に10点測定）  
○印：ブリネル硬さ測定位置（等間隔に5点測定）

### [Method of Hardness Test for Deposited Metal(JIS Z3114 -1990 )]

Consumable	Hardness(HRc)										Avg.
S-600B.B (4.0mm x 400)	57	58	58	57	57	59	56	57	58	58	57.5
JIS Z3251 DF2B-600-B	HRc 52~60										



## Size Available and recommended Current & Approval

### ❖ Size Available and recommended Current

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<b>Diameter (mm)</b>	<b>2.6</b>	<b>3.2</b>	<b>4.0</b>	<b>5.0</b>	<b>6.0</b>
<b>Length (mm)</b>	350	350	400	400	450
<b>Flat position(Amp.)</b>	55~90	90~140	140~190	190~240	220~300

### ❖ Approval

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<b>Packing</b>	
<b>Packet</b>	5kg (11 lbs)
<b>Carton</b>	5kg (11 lbs)X4 : 20kg(44 lbs)