

S-13MN.B

COVERED ARC WELDING ELECTRODE
FOR HARDFACING OF 13%MN CAST IRON PRODUCTS

2021.05

HYUNDAI WELDING CO., LTD.



❖ Specification

JIS Z 3251

DFMA-250-B

❖ Applications

For impact scraping abrasion. Crusher hammers, crusher jaws, crusher roll and conveyor buckets.

❖ Characteristics on Usage

Good covering property and removability of the slag. Low spatter loss. Beautiful bead appearance. Very high impact resistance. Good resistance to abrasion. Cutting property is impossible.

❖ Note on Usage

1. Cool the weld metal with water during welding.
2. Austenite type stainless steel electrodes should be used for underlaying on the base metal other than 13%Mn steel.
3. When the base metal of 13%Mn steel is hardened, cut-off the hardened zone before welding.
4. Dry the electrodes at 350~400°C (662~752°F) for 60 minutes before use.



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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	Ni	Mo
4.0 X 400 (5/32 X 16)	0.38	0.06	14.5	0.030	0.003	1.16	1.57

❖ Typical Mechanical Properties of All-Weld Metal

Preheat & Interpass Temp. °C(°F)	Hea Treatment.	Hardness (HB)
R.T	-	220
-	After work hardening	480

❖ Available sizes and Recommended Current

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

This information is provided solely for the purpose of confirming product conformance with applicable standards. The serviceability of a product or structure utilizing this type of information is and must be the sole responsibility of the builder/user. Many variables beyond the control of HYUNDAI WELDING CO., LTD. affect the results obtained in applying this type of information. These variables include, but are not limited to, welding procedure, shielding gas, plate chemistry and temperature, weldment design, fabrication methods and service requirements.