KM-700

COVERED ELECTRODE

FOR HARDFACING

KISWEL

KM-700

KISWEL

■ Description

- **Covering is low hydrogen type for cutter knives, dredger and mixer.**
- **The deposited weld metal has martensite structure.**
- **In the case of multilayer build-up welding base plates of hardening properties, under-laying with low hydrogen type carbon steel electrode.**
- **Preheat at 150℃ and over in general.**
- **Redry the electrode at 300~400℃ for 1~2hours prior to use.**

■ Classification

- **JIS Z 3251 : DF2B-700-B**
- **AN/NZS 2576 : 1855-A4**

■ Welding Position



■ Application



Sprockets



Cable Sheaves



Crane Wheels



Dredge Parts



Cement Crushers



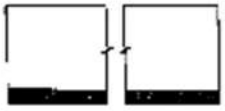
Boom Heels



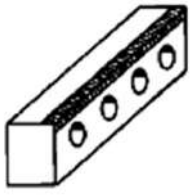
Lift Buckets



Chain Hooks

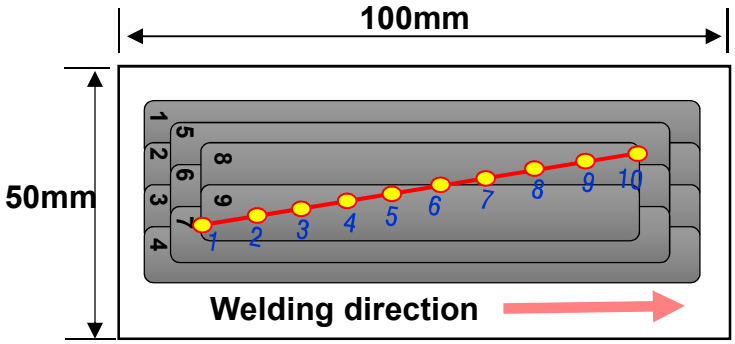


Dozer Blades



Shear Blades

■ All Weld Metal Test Specimen



* Hardness check point : ○
* Test Method : Reference to EN 32525

Base metal	A36
Size	4.0*400mm
Polarity / Current	DC+ / 160~165A
Layer	3 (9Pass)
Inter-pass Temp.	100~150℃

■ Typical Hardness of Weld Metal Deposit

	HV	HRC	HS	Remark
KM-700	690	60	81	A.W
	590	55	73	650℃ (Stress relief)

■ Typical Chemical Composition of Weld Metal (%)

	C	Si	Mn	P	S	Cr	Mo
JIS Spec.	0.30~ 1.00	≤1.5	≤3.0	≤0.03	≤0.03	≤5.0	≤1.5
KM-700	0.45	1.20	1.40	0.02	0.01	3.70	0.03

■ Weldability

		Flat, H-Fillet
Arc	Stability	Good
	Concentration	Good
	Force	Good
Slag	Fluidity	Good
	Removability	Excellent
Spatter	Quantity	Excellent
Fume	Quantity	Excellent
Porosity	Occurrence	Excellent

■ Bead Appearance



H-Fillet, 3.2*350mm, DC+ 120~125A



Flat, 3.2*350mm, DC+ 130~135A



After processing



■ Packaging and Available sizes



Diameter (mm)		3.2	4.0	5.0
Length (mm)		350	400	400
Carton	Inner	5Kg		
	Out	20Kg (5Kg x 4EA)		
Vacuum	Inner	5Kg		
	Out	20Kg (5Kg x 4EA)		

* Identification Imprint : None

* Tip Color : None

■ Recommended Welding Parameter (AC or DC+)

Diameter (mm)	3.2	4.0	5.0
Length (mm)	350	400	400
Flat, Fillet	90~130	140~180	190~240

■ Control Instruction

1. Storage

1) On principle covered electrodes should be in their original packaging until used. If possible the packs of electrodes should be taken out of storage in the sequence in which they were received in warehouse.

2) The covered electrodes must be stored in dry rooms to protect them against damage caused by moisture. The room must be fitted out with pallets or shelves since storage directly on the floor or against the walls is not recommended.

3) Opened packs of electrodes should also be stored in dry and, if necessary, heated rooms so that there is no likelihood of the temperature dropping below the dew point.

JIS Classification	Store Condition (Opened packs of electrode)	
	Ambient Air	Holding Oven
DF2B-350-B	30±10℃ Humidity max. 50%	High 30~140℃ than room temperature

2. Re-drying

1) Where electrodes have become damp it is recommended that re-drying is carried out immediately prior to welding in accordance with the temperature details specified in the following table.

2) Electrodes that have been in direct contact with water, grease or oil should not be used for welding fabrication.

Type of coating	Re-drying temp. (℃)	Re-Drying time (min)
Low hydrogen	300~400	60~120

KISWEL

The Management System of KISWEL LTD, 704, Gongdan-ro, Seongsan-gu, Changwon-si, Gyeongnam 51544, Republic of Korea, 70, Saebyeok-ro 63beon-gil, Sasang-gu, Busan 47018, Republic of Korea has been approved by Lloyd's Register Quality Assurance to : IATF 16949:2016, ISO 14001:2015, applicable to : Manufacture of solid welding wires & rods, flux cored wires, submerged arc welding wires & fluxes, stainless steel welding wires & rods and covered electrodes.
More information : www.kiswel.com

