

Covered Electrode for Overlaying on Various Kinds of Press Molds

E A 6 0 0 W

- Standard JIS DF3B-B
- Covering Low Hydrogen
- Tip Color Purple

■ Application

Super hardfacing on the mold. Overlaying on cold and hot shearing edge, dipper tooth, roller, cam, impeller breaker, crush hammer, mixer chamber and so on. Overlaying on the pipe shoot and conveyor which is subject to grinding attrition in high temperature.

■ Feature

1. The deposited metal achieves homogeneous and high hardness because EA600W is using alloying core wire and the content rate of alloying element is high but carbon content is controlled about 0.5%. Also, weld crack is rare because of these characteristics of core.
2. The deposited metal has martensitic structure which contains austenite structure. This deposited metal shows excellent tenacity and shearing strength. Also, high Cr contents achieves excellent heat resistance.
3. The alloying core wire shows low penetration hence the dilution of the first layer is very limited and the bead is homogeneous, blowhole-less, and regular in shape.
4. Vertical and horizontal welding is possible. Hence user can save the number of man-hour for overlaying. The user can make thick bead in vertical position.
5. EA600W is low hydrogen type electrode. This characteristics gives stable arc and clean deposited metal.

■ Welding Procedure

1. The electrode should be re-dried more than 30 minutes at over 300°C before use.
2. In general, the base metal should preheat to more than 150°C. Low alloy steel and special steel require 300~400°C preheating, 500~550°C post heating and slow cooling.
3. For overlaying on alloy steel except carbon steel, underlaying by low hydrogen type covered electrode for mild steel or austenite type stainless steel covered electrode helps to prevent cracks.
4. To obtain prescribed hardness in equal or less than 2 layers, underlaying by MH-1S or MH-2S is recommended.

■ Typical Chemical Composition of the Deposited Metal (%)

C	Si	Mn	P	S	Cr
0.45~0.55	2.5~3.0	0.4~0.5	≤0.04	≤0.03	9.0~10.0

■ Typical Hardness of the Deposited Metal as welded

HV	HRC	HS
590~700	55~60	73~81

■ Appropriate Welding Current (AC or DCEP)

Diameter (mm)	2.6	3.2	4.0	5.0
Length (mm)	300	350	350	400
Current (A)	50~80	70~100	100~130	130~170
Minimum Quantity (Kg)	3.0	5.0	5.0	5.0

Equivalent to wire for MAG welding: EDS-600
 Equivalent to electrode for TIG welding: EDS-600T