### SAW WELDING FOR HARD SURFACE WEAR RESISTANCE

#### **DESCRIPTION & APPLICATIONS:**

- •SFH-17S is used for submerged arc welding with hard bread welding wire and SF-80 alkaline welding flux.
- •In addition to resisting metal-to-metal wear, it also has excellent impact resistance, good compressive strength and plastic deformation resistance.
- For multi-layer welding, it can be welded to 20mm without cracks. After welding, mechanical processing or flame cutting can be carried out.
- Used for hard surface repair of backing, crown wheel, rolling wheel, idler wheel and mining wheel.

#### **NOTE ON USAGE:**

- •When the surface curvature of the workpiece is too large, the thickness is too thick or the shape is too complex, the weld bead after welding is easy to produce high internal stress.
- It causes cracking after welding, so preheating at 200 ~ 400°C and interlayer temperature are required. Slow cooling treatment is recommended after welding.
- •When the stress relief annealing temperature exceeds 480°C, the hardness of molten gold will decrease.

# TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%):

С	Mn	Si	Cr	Мо
0.09	3.00	0.5 <i>7</i>	2.70	0.80

### **HARDNESS**:

Layers	1st layer	2 <sup>nd</sup> layer	3 <sup>rd</sup> layer
Hardness (HRC)	29	36	38

# SIZE AND RECOMMENDED CURRENT RANGE: DC(+)

Diameter ( mm )	Voltage (V)	Current (A)	Stickout (mm)
2.8	26-32	220-350	25-30
3.2	28-32	350-450	25-30