

# **SUPERALOY 1012**

#### **DESCRIPTION:**

Finest alloy developed for high temperature service. Special cobalt base formulation with high Tungsten assures higher hardness and resistance to abrasive wear under high heat and corrosive conditions. With excellent edge retention property and resistance to softening at high temperature. Weld deposit is non-magnetic and not forgeable. Bonds well with weldable steels and stainless steels.

## **Applications:**

Typical applications – For super conditioning of valve seats and knives in carpet and chemical industries, Hot punches, Turbine blade tipping, saw blade tipping, bar mills guide rolls, cutter rolls, conveyer screws, wire drawing blocks, Hot shear blades, Edger rolls, Hot trim dies and swaging mandrels.

## **PROCEDURE:**

Clean weld area. Remove all cracks and fatigued material. To achieve a crack-free overlay, the base material should be preheated to 200 - 300°C, depending on the alloy. Maintain low inter pass temperature and medium arc. Chip slag between passes. Use stringer beads when welding dissimilar metals. Re-drying upto 100°C for one hour is beneficial.

TECHNICAL DATA: SUPERALOY 1012

Size (mm) : 2.5 3.15 4.0 5.0

Recommended Welding

Current (Amps) : 60 - 85 85 - 120 120 - 150 150-190

Hardness : 44 - 50 HRC

Tip Colour : Red

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