

# ARCTEC® 6 MC COBALT

Conforms to AWS A5.21 ERCCoCr-A



## GENERAL CHARACTERISTICS:

ARCTEC® 6 MC Cobalt is a cobalt-base metal cored welding wire containing chromium and tungsten. This alloy is the softer of the cobalt alloys and therefore provides a tough hardfacing material that is resistant to heat, corrosion and oxidation. The coefficient of friction is low and the deposit acquires a high polish in service. Elevated temperature hardness is an outstanding property of cobalt-base alloys. Many surfacing alloys are softened permanently by heating to elevated temperatures, but the cobalt-base alloys are an exception. While they do exhibit lower hardness when hot, they return to approximately their original hardness upon cooling and can be considered immune to tempering.

## APPLICATIONS:

ARCTEC® 6 Cobalt Alloy is recommended for applications requiring good resistance to heat, moderate impact, corrosion and oxidation. This alloy is extensively used for surfacing engine valves, valve seats, pump shafts, valve trim in steam engines and on parts subject to corrosion and erosion. Also suitable for overlaying hot-work punches, dies and similar parts.

## WELDING PROCEDURE:

Clean weld area free from dirt, oil, grease, rust and other contaminants. Preheat according to recommendations for base material used.

## MECHANICAL PROPERTIES:

As Welded: Typical Hardness Values  
42 – 46 RC

## OPERATING PARAMETERS:

Diameter	Volts	Amps	Stickout	Shielding Gas
1.2 mm (.045")	18 – 30	150 – 250	12 mm (1/2")	CO <sub>2</sub> or Ar-CO <sub>2</sub> Mixture

POLARITY: DC Reverse

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Subject to change without notice

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