

COR™FORGE 2101 FC

DESCRIPTION

COR™FORGE 2101 FC is a flux-cored, cobalt base alloy designed for improved resistance to impact, thermal fatigue, and corrosion at temperatures exceeding 1500°F. 2101 FC is not used for severe abrasion applications, but the weld deposit exhibits superior resistance to heat checking, spalling, chipping, and erosion over COR™BALT 21.

APPLICATIONS

Typical hot work applications include: impressions in forging dies, trimming dies, high temperature valves, punches, shear blades, and extrusion dies. 2101 FC is also used to overlay parts subject to oxidizing and reducing atmospheres at temperatures up to 2100°F.

PROCEDURE

A minimum preheat of 350°F is recommended for mild steels. Preheat all other alloys according to the base material.

WELDING PARAMETERS

Size	Volts	Amps	Shielding Gas
MC-G .045"	17-22	140-200	CO ₂ or Ar-CO ₂ mixtures
MC-G 1/16"	20-22	180-220	CO ₂ or Ar-CO ₂ mixtures

MECHANICAL PROPERTIES

35-38 Rc as welded, 45+ Rc work hardened

CLASSIFICATION

Cr-Mo-Cb Cobalt base alloy