

COR™BALT 6 FC

DESCRIPTION

COR™BALT 6 is available as a flux-cored, FC, and as a metal-cored, MC, automatic tubular wire. This cobalt base alloy is designed for abrasion resistance at elevated temperatures. Similar to COR™BALT 1 FC, the high chromium content in this alloy imparts good corrosion and oxidation resistance, but 6 FC has lower carbon and tungsten contents. Hence, 6 FC should be used in applications requiring medium hardness. 6 FC also forms chrome carbides for abrasion resistance, and the tungsten provides strength at elevated temperatures. Welded deposits have a low coefficient of friction and will develop a high polish in service.

APPLICATIONS

Typical wearfacing uses include: valve overlays, thrust washers, press hammer ways, rail mill and rolling guides, skulling hooks, cams, brake drums, and engine parts.

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	Stickout	Shield Gas/Flux
MC-G .035"	16	100	1/2"	CO ₂ or Ar-CO ₂ mixture
MC-G .045"	18-30	150-250	1/2"	CO ₂ or Ar-CO ₂ mixture
MC-G 1/16"	20-30	180-280	1/2"	CO ₂ or Ar-CO ₂ mixture
FC-O 1/16"	24-26	160-200	1 1/4"	not required
FC-O 3/32	24-26	275-325	1 1/2"	not required
FC-S 3/32"	28-30	275-325	1"	Lincoln 880 DCSP
FC-S 1/8"	29-31	375-425	1"	Lincoln 880 DCSP

MECHANICAL PROPERTIES

42-46 Rc as welded

CLASSIFICATION

AWS A5.21, ERCCoCr-A