

COR™FACE 52 FC

DESCRIPTION

COR™FACE 52 FC is a flux-cored, 5% hot-work alloy designed to resist abrasion, impact, and high compressive loads. The welded deposit is similar in composition to an AISI H-12 tool steel.

APPLICATIONS

52 FC is typically used to overlay steel mill rolls, forging dies, hot work extrusion tools, mandrels, and hydraulic plungers.

PROCEDURE

A minimum preheat/interpass temperature of 800°F is recommended for forging dies. Post heat at 800°F for 3 hours after welding, then allow the deposit to cool below 200°F. Temper to desired hardness according to the temper chart for 1 hour/inch thickness. Preheat and post heat according to the base material for all other applications. Hardfacing does not require any heat treatment.

WELDING PARAMETERS

Type	Size	Volts	Amps	Shielding Gas/Flux
MC-G	.045"	19-21	170-210	CO ₂ or Ar-CO ₂ mixture
FC-G	1/16"	23-25	200-250	CO ₂ or Ar-CO ₂ mixture
FC-O	3/32"	24-26	250-350	1.5" stickout
FC-S	3/32"	28-30	250-350	Linde 50 or Lincoln 880
FC-S	1/8"	29-31	350-450	Linde 50 or Lincoln 880

MECHANICAL PROPERTIES

Hardness: 52-57 Rc

CLASSIFICATION

Chrome-Tungsten-Moly Iron base alloy