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COR™FORGE F59 FC

DESCRIPTION

COR™FORGE F59 FC is a flux-cored, H-13 hot work alloy designed to provide wear resistant deposits.

APPLICATIONS

F59 is typically used to repair and rebuild tools and dies subject to heat checking such as aluminum, zinc, and magnesium die-casting dies, and also AISI H-13 tool steel, press forging dies, and inserts.

PROCEDURE

A minimum preheat/interpass temperature of 850°F is recommended for hot work dies. Peen between passes while removing slag for optimum performance. Post heat at 850°F for 3 hours after welding, and then allow the deposit to cool below 200°F. Temper to desired hardness according to the temper chart for 1 hour/inch thickness. For a full heat treatment, refer to the AISI H-13 procedure.

WELDING PARAMETERS

Type	Size	Volts	Amps	Shielding Gas/Flux
FC-G	.045"	18-20	150-200	75%Ar-25%CO ₂
FC-G	1/16"	23-25	200-300	75%Ar-25%CO ₂
FC-G	3/32"	29-31	450-650	75%Ar-25%CO ₂

Submerged arc wires are available in 1/16"-3/16"; Use a neutral flux.

MECHANICAL PROPERTIES

52-57 Rc as welded

CLASSIFICATION

AISI H-13