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COR™FORGE F54 FC

DESCRIPTION

COR™FORGE F54 FC is a flux-cored, machinable hot work alloy designed for forging and press die applications. The welding characteristics allow flood welding and continuous multiple passes.

APPLICATIONS

F54 FC is typically used to repair and rebuild press forging die impressions, upsetter insert dies, and any AISI hot work tool steels requiring machinable welds.

PROCEDURE

A minimum preheat/interpass temperature of 800°F is recommended for hot work dies. Peen between passes while removing slag for optimum performance. Post heat at 800°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. Preheat and post heat according to the base material for all other applications.

WELDING PARAMETERS

Type	Size	Volts	Amps	Shielding Gas/Flux
FC-G	.045"	18-20	150-200	75Ar-25CO ₂
FC-G	1/16"	23-25	200-300	75Ar-25CO ₂
FC-G	3/32"	29-31	350-550	75Ar-25CO ₂
FC-G	1/8	29-31	400-600	75Ar-25CO ₂

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

MECHANICAL PROPERTIES AFTER 1050°F TEMPER FOR 10 HOURS

Hardness: 38-42 Rc

CLASSIFICATION

5% Chrome Hot Work Tool Steel