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COR™FORGE F63 FC

DESCRIPTION

COR™FORGE F63 FC is a flux-cored, 9% chrome hot work alloy designed for hammer and press die forging applications. F63 maintains integrity when subjected to high heat and stresses. The welding characteristics allow flood welding and continuous multiple passes. Weld deposits are fully machinable.

APPLICATIONS

F63 is typically used to repair and rebuild shallow hammer dies with high duty cycles, and press forging die impressions requiring machinable welds.

PROCEDURE

A minimum preheat/interpass temperature of 900°F is recommended for hot work dies. Post heat at 900°F for 3 hours after welding, and then allow the deposit to cool below 200°F. Temper 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
MC-G	.045"	18-20	150-250	75Ar-25CO ₂
FC-G	1/16"	23-25	200-300	75Ar-25CO ₂ or CO ₂
FC-G	3/32"	28-31	350-650	75Ar-25CO ₂ or CO ₂
FC-G	1/8"	28-31	500-800	75Ar-25CO ₂ or CO ₂

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

MECHANICAL PROPERTIES AFTER 1050°F TEMPER, 10 HOURS

Hardness: 38-42 Rc

CLASSIFICATION

9% Chrome Hot Work Tool Steel