

COR™FORGE F580 FC

DESCRIPTION

COR™FORGE F580 FC is a flux-cored, H-12 hot work alloy fortified with additional molybdenum and tungsten to provide weld deposits with superior hot hardness and wear resistance.

APPLICATIONS

F580 is primarily used to repair and rebuild flash lines on press forging dies, and is also used to overlay shallow impression dies. This alloy is not suited for thick weldments. Use F63 FC as a buildup on deeper impressions. A 3/8" overlay would be the maximum.

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.

WELDING PARAMETERS

Type	Size	Volts	Amps	Shielding Gas/Flux
MC-G	.045"	18-20	150-200	75%Ar-25%CO ₂
MC-G	1/16"	23-25	200-300	75%Ar-25%CO ₂
FC-G	3/32"	28-32	350-550	75%Ar-25%CO ₂
FC-G	1/8"	28-32	400-600	75%Ar-25%CO ₂

MECHANICAL PROPERTIES

Hardness: 53-58 Rc

CLASSIFICATION

Modified AISI H-12