

## COR®FORGE F581 FC

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### DESCRIPTION

COR™FORGE F581 FC is a flux-cored, H-12 hot work alloy fortified with additional chrome, molybdenum and tungsten to provide weld deposits with superior hot hardness and wear resistance. This alloy exhibits improved toughness over F580 and improved wear resistance over F58.

### APPLICATIONS

F581 is primarily used to repair and rebuild flash lines on press forging dies, and is also used to overlay shallow impression dies. Use F63 FC as a buildup on deeper impressions.

### 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 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
FC-G	1/16"	24-28	200-300	75%Ar-25%CO <sub>2</sub>
FC-G	3/32"	28-32	350-550	75%Ar-25%CO <sub>2</sub>
FC-G	1/8"	28-32	400-600	75%Ar-25%CO <sub>2</sub>

### MECHANICAL PROPERTIES

900°F temper	54-56 HRC
950	54-56
1000	52-54
1050	50-52
1100	43-45

### CLASSIFICATION

Modified AISI H-12