

## COR™FORGE F64 FC

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### DESCRIPTION

COR™FORGE F64 FC is a flux-cored, 11% chrome hot work steel alloy designed to outperform 5% chrome grades in applications requiring resistance to heat and abrasion. The welding characteristics allow flood welding and continuous multiple passes. Weld deposits are difficult to machine. Machining by EDM is recommended.

### APPLICATIONS

F64 is typically used on steel mill components, overlays on aluminum die casters, and open forging dies used for titanium and other exotic alloys. It can be used on closed dies to resist heavy abrasion.

### PROCEDURE

Maintain a preheat/interpass temperature of 800-1000°F. Post heat at 1050°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. A second temper at 50°F below the first is recommended. Use an AISI H-12 procedure for a full heat treatment.

### WELDING PARAMETERS

Type	Size	Volts	Amps	Shielding Gas
FC-G	.045"	18-20	150-200	75%Ar-25%CO <sub>2</sub>
FC-G	1/16"	23-25	200-300	75%Ar-25%CO <sub>2</sub>
FC-G	3/32"	29-31	450-650	75%Ar-25%CO <sub>2</sub>
FC-G	1/8"	29-31	500-800	75%Ar-25%CO <sub>2</sub>

Submerged arc wires are available in 3/32" and 1/8"; Use a neutral flux.

### MECHANICAL PROPERTIES

Hardness: 48-53 Rc

### CLASSIFICATION

11% Chrome Hot Work Tool Steel