

## COR™ALLOY 4340 FC

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### DESCRIPTION

COR™ALLOY 4340 FC is a flux-cored, AISI nickel-chrome-moly steel, and is readily available in MIG, TIG, and sub-arc versions. The mechanical properties of this alloy depend on preheat/interpass temperature, cooling rate, and subsequent heat treatment.

### APPLICATIONS

4340 FC is typically used where a medium hard, impact resistant weld is required. Typical uses include die-cast dies, crankshafts, gears, axles, forgings, castings, and buildup under harder weld deposits.

### PROCEDURE

A minimum preheat/interpass temperature of 600-800°F is recommended for AISI 4340. Allow the welded part to cool as slow as possible. Post heat treat to desired hardness. Refer to the AISI 4340 procedure for a full heat treatment.

### WELDING PARAMETERS

Size	Volts	Amps	Shielding Gas/Flux
MC-G .045"	18-30	150-250	CO <sub>2</sub> or Ar-CO <sub>2</sub> mixtures
MC-G 1/16"	20-22	200-250	CO <sub>2</sub> or Ar-CO <sub>2</sub> mixtures
FC-G 3/32"	26-29	250-350	CO <sub>2</sub> or Ar-CO <sub>2</sub> mixtures
FC-S 1/16"	25-27	150-250	Lincoln 880
FC-S 3/32"	29-31	300-400	Lincoln 880
FC-S 1/8"	29-31	350-450	Lincoln 880

### MECHANICAL PROPERTIES

Hardness: 35-47 as welded  
 Flame hardenable to 58 Rc

### CLASSIFICATION

AISI 4340