

COR™FORGE F110 FC

DESCRIPTION

COR™FORGE F110 FC is flux-cored, nickel base alloy designed for optimum welder appeal, including smooth arc action, fluid puddle, and a full slag which is easily removed. F110 FC is alloyed with chromium, molybdenum, and tungsten for resistance to heat and impact. Weld deposits are also corrosion resistant, work hardenable, and retain their strength up to 1000°F. A low carbon content ensures good ductility and crack resistance when used for fabrication.

APPLICATIONS

F110 FC is used for overlaying Hastelloy®C, hot forge dies, trimmers and punches, hot shear blades, extrusion dies, and blast furnace bleeder valves. It may also be used for tong bits, pump shafts, valve seats, shaft sleeves, and impellers.

PROCEDURE

Preheat according to base material: 350°F for low alloy steels; 600°F minimum for heat treatable steels. Mild steels do not require post-weld heat treatment. Heat treatable steels should be tempered according to the base material. If no guidelines are available, then temper at 1000°F and cool in still air.

WELDING PARAMETERS

| Type | Size | Volts | Amps | Stickout | Shielding Gas/Flux |
|------|-------|-------|---------|----------|------------------------|
| FC-G | .045" | 23-25 | 125-175 | 1/2" | 75Ar-25CO ₂ |
| FC-G | 1/16" | 23-26 | 180-250 | 3/4" | 75Ar-25CO ₂ |
| FC-G | 3/32" | 24-26 | 250-350 | 3/4" | 75Ar-25CO ₂ |
| FC-O | 3/32" | 23-25 | 250-350 | 1 1/2" | Self Shielded |
| FC-S | 3/32' | 29-31 | 250-350 | 1" | Linde 80 |
| FC-S | 1/8" | 29-31 | 350-450 | 1" | Linde 80 |

MECHANICAL PROPERTIES

20-25 Rc as welded
Work hardens to 38+ Rc

CLASSIFICATION

AWS A5.11, class ENiCrMo-5

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