

COR™STAIN 91A FC

DESCRIPTION

COR™STAIN 91A FC is a flux-cored, modified 420 martensitic stainless steel alloy. This alloy is designed to yield improved machinability over a standard 420, and is available in submerged arc, and self-shielded wires.

APPLICATIONS

91A FC is widely used for cladding steel mill rolls and components, and low alloy steels requiring corrosion and oxidation resistance. Other uses include overlays for plastic and die cast dies.

PROCEDURE

This alloy is often welded with minimal preheat due to the size and nature of the base. Preheat and post heat treatments are recommended. Refer to the AISI 420 procedure for a full heat treatment.

WELDING PARAMETERS

Type	Size	Volts	Amps	Stickout
FC-O	1/16"	23-25	175-225	1 1/4"
FC-O	3/32"	25-27	300-400	1 1/2"
FC-O	1/8"	26-29	350-600	1 1/2"

CO₂ shielding gas is optional; use 5/8" stickout.

Submerged arc wires are available in 1/16"-5/32"; use a neutral flux.

MECHANICAL PROPERTIES

Hardness: 42-46 Rc

CLASSIFICATION

Modified AISI 420 Stainless Steel