

COR™ STAIN 630 FC

DESCRIPTION

COR™ STAIN 630 FC is a flux-cored, 17-4 precipitation hardening stainless steel wire. 630 FC is a martensitic type alloy, which combines high strength and hardness with excellent corrosion resistance. This alloy can be hardened by a single low-temperature heat treatment.

APPLICATIONS

630 is typically used to join 17-4PH, 15-5PH, and 17-7PH stainless steels. Specific uses include pump parts, shafts, flexible bellows, marine, and aerospace applications.

PROCEDURE

A preheat is not required. Minimize heat input. Multipass weldments may require an anneal for uniform hardness. Age harden at 900°F for 1 hour and air cool.

WELDING PARAMETERS

Size	Type	Volts	Amps	Stickout	Shielding Gas
.045"	FC-G	23-27	140-180	1/2"	CO ₂ or 75Ar%-25%CO ₂
1/16"	FC-G	24-28	200-250	1/2"	CO ₂ or 75Ar%-25%CO ₂

MECHANICAL PROPERTIES

Hardness: 31 Rc as welded
 41 Rc age hardened at 900°F

CLASSIFICATION

17-4 Precipitation Hardening Stainless Steel