

COR™STAIN 410 FC

DESCRIPTION

COR™STAIN 410 FC is a typical AISI 410 martensitic stainless steel alloy in a flux-cored tubular wire with excellent operating characteristics.

APPLICATIONS

Typical uses include: welding base metals of a similar composition, and overlays on mild and low alloy steels for mild corrosion and abrasion resistance.

PROCEDURE

Preheat to 400-600°F, the higher end will be better. Slow cool after welding to below 212°F or to room temperature. Temper at 1400°F for one hour per inch of greatest thickness. Slow cool to 600°F at a rate not to exceed 100°F/Hr then air cool to room temperature. A second temper following the same procedure, as the first may be beneficial to transform retained austenite to tempered martensite, this will give maximum ductility.

WELDING PARAMETERS

Type	Size	Volts	Amps	Shielding Gas	Stickout
MC-G	.045"	18-21	140-200	75%Ar-25%CO ₂	0.5"
FC-G	.045"	18-21	140-200	75%Ar-25%CO ₂	0.5"
FC-G	1/16"	24-27	250-300	75%Ar-25%CO ₂	0.75"
FC-O	1/16"	24-27	180-250	none	1.5"
FC-O	3/32"	29-31	300-375	none	1.5"
FC-S	1/8"	28-31	350-500	*	1.0"
FC-S	5/32"	28-31	350-500	*	1.0"

* Submerged arc wires are available in 1/16"-5/32"; Suggested fluxes: Lincoln ST-100, 880M, or 880.

TYPICAL MECHANICAL PROPERTIES AFTER 1400°F TEMPER

Tensile: 75,000 psi minimum
Elongation: 20% minimum

CLASSIFICATION

AWS A5.22, Class E410TX-X