

COR™STAIN 2553 FC

DESCRIPTION

COR™STAIN 2553 FC is a flux-cored, super duplex stainless steel wire formulated for open arc welding in the flat position. The arc action is a smooth, globular transfer, and the slag is easily removed. The resulting weld deposit couples high strength with excellent corrosion resistance. To obtain the proper amounts of ferrite and austenite in the weld deposit, follow the preheat, Interpass and heat input information listed in the procedure section below.

APPLICATIONS

2553 FC is used for joining 25% chrome duplex stainless steels to themselves, or dissimilar combinations. Typical uses include marine, chemical, and petroleum applications requiring high strength and resistance to pitting and stress corrosion.

PROCEDURE

Preheat to 212°F minimum and 390°F maximum Interpass temperature. Maintain heat input in the range of 30,000-100,000 Joules/in. Low welding heat inputs should be avoided because not enough austenite will form. If an anneal is needed, heat quickly to 1900-2000°F and then cool rapidly.

WELDING PARAMETERS

	Size	Volts	Amps	Stickout	Shielding Gas
FC-O	.045"	24-28	100-140	1"	None *
FC-O	1/16"	24-28	160-200	1.25"	None *
FC-O	3/32"	26-30	240-280	1.5"	None *

* Do not use a shielding gas. A shielding gas will result in a low nitrogen content.

MECHANICAL PROPERTIES

Hardness: 25 Rc as welded
 35+ Rc work hardened
 Tensile Strength: 110,000 psi minimum
 Elongation: 15% minimum

CLASSIFICATION

AWS A5.22, class E2553T0-3