

COR™FORGE F25 ELECTRODE

DESCRIPTION

COR™FORGE F25 is a chrome-nickel-moly, iron base electrode with a wide array of applications in the forging industry. The superior welding characteristics allow continuous flood welding, and multiple pass welds are possible with excellent slag removal. F25 is also an excellent plant maintenance electrode, providing fabricating welds up to 130,000psi tensile strength.

APPLICATIONS

Forging applications include repair and buildup of hammer dies, die shanks, columns, rams, and sow blocks. Additional uses include fabrication and repair of steel structures and parts such as shafts, keyways, insert holders, and tie plates. F25 works extremely well for joining hardenable steels such as 4130. The undiluted weld deposits are fully machinable. F25 can also be used extensively as an underlay prior to surfacing.

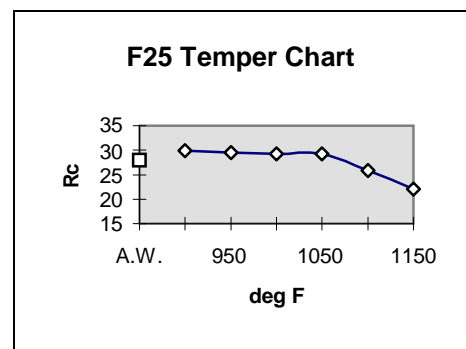
PROCEDURE

A minimum preheat/interpass temperature of 800°F is recommended for forging dies. Post heat at 800°F for 3 hours after welding, and then allow the deposit to cool below 200°F. Temper at 1050°F for 1 hour/inch thickness. Preheat and post heat according to the base material for all other applications.

MECHANICAL PROPERTIES

after 1050°F temper, 10 hours

Hardness: 25-30 Rc
Tensile: 132,000 psi
Yield: 117,000 psi
Elongation: 17%
R.A.: 60%



WELDING PARAMETERS

Size	3/32"	1/8"	5/32"	3/16"	1/4"	5/16"	3/8"	14mm	17mm	20mm
Amps	70	90	130	160	220	300	350	600	800	1000
	-100	-130	-180	-200	-270	-450	-500	-900	-1100	-2000

*note - nominal cross-references for mm sizes 14mm-1/2", 17mm-5/8", 20mm-3/4"

CLASSIFICATION

Chrome-Nickel-Moly Iron Base Alloy