COR-MET, INC.
12500 GRAND RIVER ROAD
BRIGHTON, MI 48116-8326
(810) 227-3251
800-848-2719
FAX: (810) 227-9266
www.cor-met.com

COR™FORGE F35 ELECTRODE

DESCRIPTION

COR™FORGE F35 is a chrome-nickel-moly, iron base electrode designed to repair and reclaim forging dies and related equipment. The welding characteristics allow flood welding and continuous multiple passes. The resulting weld has excellent compressive strength and #2 temper block properties, perfect for hammer die applications. F35 is also an excellent plant maintenance electrode, providing fabricating welds up to 160,000 psi tensile strength.

APPLICATIONS

F35 forging applications include repair and buildup of hammer dies, rams, and sow blocks. This alloy is also an excellent underlay material. The undiluted weld deposits are fully machinable.

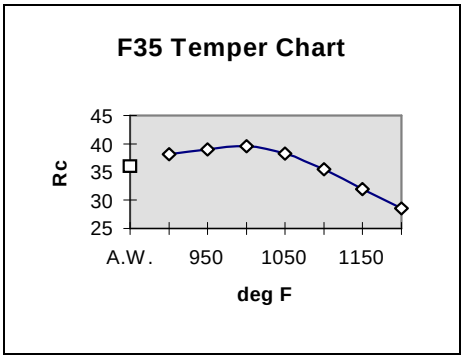
PROCEDURE

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

1050°F TEMPER, 10 HOURS

Hardness:	34-38 Rc
Tensile:	160,000 psi
Yield:	140,000 psi
Elongation:	20%
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 -100	90 -130	130 -180	160 -200	220 -270	300 -450	350 -500	600 -900	800 -1100	1000 -2000

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

CLASSIFICATION

Chrome-Nickel-Moly Iron Base Alloy