

COR™FORGE F40 ELECTRODE

DESCRIPTION

COR™FORGE F40 is a chrome-nickel-moly, iron base electrode designed for forging die applications. The welding characteristics allow flood welding and continuous multiple passes. The resulting weld has excellent compressive strength and properties superior to a #2 temper die block for hammer die applications.

APPLICATIONS

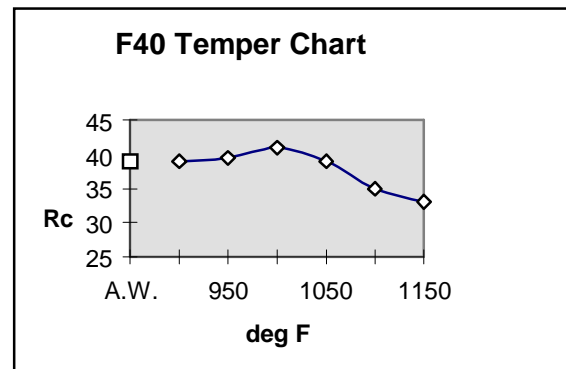
F40 is typically used to repair and rebuild die impressions, and to overlay punches and inserts. It can also be used as an underlay in press die applications. The undiluted weld deposits are fully machinable.

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: 38-43 Rc
Tensile: 180,000 psi
Yield: 160,000 psi
Elongation: 13%
R.A.: 42%



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