

Eureka Welding Alloys

2000 E. Avis Drive

Madison Heights, MI 48071

Phone: 248-588-0001 Fax: 248-585-7711 Toll Free: 800-962-8560

E-mail: info@eurekaweldingalloys.com Website: www.eurekaweldingalloys.com

TECHNICAL DATA FOR EUREKA 650 ELECTRODE

Dated: March 31, 1995

Revised: July 8, 2013

INTRODUCTION

Eureka 650 Electrode is a smooth running basic coated stick electrode that is a very high alloy filler metal. The electrodes are designed for superior weldability having no spatter, a stable arc, good wet out, and easy slag removal.

METALLURGICAL CHARACTERISTICS

Eureka 650 Electrodes are a modified martensitic stainless steel that has an as welded hardness of 50-55 HRC. This alloy has good hot hardness and is resistant to heat checking. The high chromium content promotes good resistance to oxidation at elevated temperatures.

RECOMMENDED APPLICATIONS

Eureka 650 Electrodes is used for the welding of medium to shallow hammer dies and most any type of press dies. It is often used in connecting rods, crankshafts and yokes. It is good for intricate impressions that require high strength and good wear resistance. It is often used as an overlay on top of Eureka 450.

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WELDING PARAMETERS

SIZE	AMPERAGE RANGE
3/32" 2.4mm	70 – 120
1/8" 3.2mm	100 – 140
5/32" 4.0mm	140 – 170
3/16" 4.8mm	170 – 225
1/4" 6.35mm	225 – 300
5/16" 7.94mm	300 – 375
3/8" 9.5mm	350 – 425

TYPICAL CHEMISTRY

C	Mn	Si	Cr	Mo	Ni	W	V
.30	.80	.40	9.0	2.0	2.0	.40	.30

PHYSICAL AND OR MECHANICAL PROPERTIES

TENSILE STRENGTH 213,000 psi

YIELD STRENGTH 176,000 psi

CHARPY "V" NOTCH 13 Ft/lbs.

AS WELDED HARDNESS

50-55 HRC

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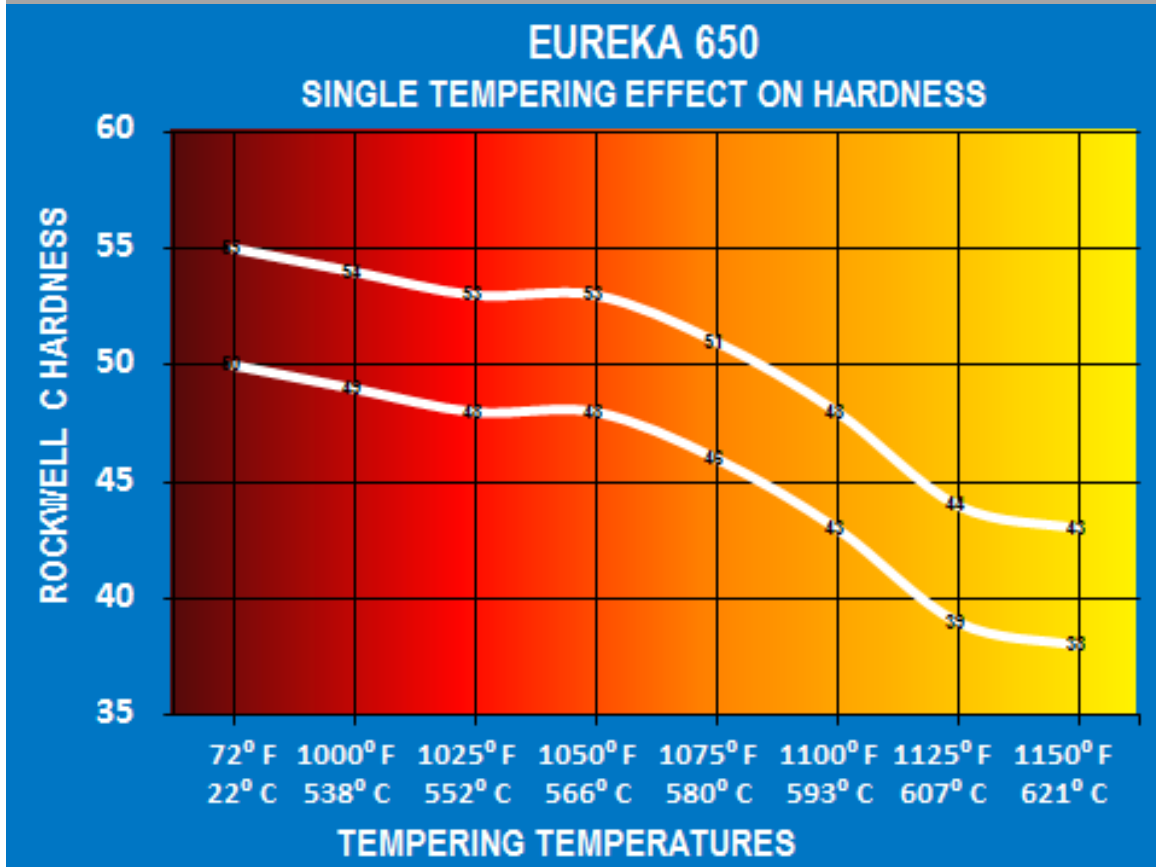
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TEMPERING DATA

The tempering data is to be used as a guide. Your results may differ due to the many variables in the utilization of this product.



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