Eureka Welding Alloys

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TECHNICAL DATA FOR EUREKA 1216 ELECTRODE

Dated: March 31, 1995 **Revised:** July 8, 2013

INTRODUCTION

Eureka 1216 Electrode is a smooth running rutile coated stick electrode with an AISI M-2 high speed steel chemistry. The electrodes are designed for superior weldability having no spatter, a stable arc, good wet out, and easy slag removal.

METALLURGICAL CHARACTERISTICS

Eureka 1216 Electrodes are an AISI M-2 molybdenum high speed steel tool alloy that has an as welded hardness 55–60 HRC This alloy has extreme wear resistance and moderate impact resistance. Tempering the weld deposits at 1025 F results in a secondary hardness of 62 HRC and higher.

RECOMMENDED APPLICATIONS

Eureka 1216 Electrodes are recommended for welding AISI M-2 molybdenum high speed steel tools and other high speed tool steel grades. Typical applications encountered are trim steels, piercing punches, broaches, reamers, knifes, drills, taps and shears. Eureka 1216 is utilized in mainly high wear areas and also used on AISI D-2 where a complete heat treat cycle will be used.

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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 W V

.85 .30 .30 4.3 5.0 6.2 2.0

PHYSICAL AND OR MECHANICAL PROPERTIES

AS WELDED HARDNESS

55-60 HRC

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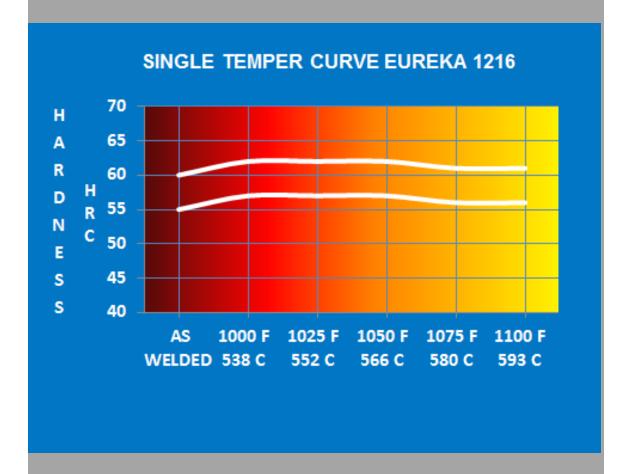
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TEMPERING DATA

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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