

Eureka Welding Alloys

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TECHNICAL DATA FOR EUREKA CHD ELECTRODE

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INTRODUCTION

Eureka CHD Electrode is a smooth running rutile coated stick electrode with a nickel based alloy C chemistry. The electrodes are designed for superior weldability having no spatter, a stable arc, good wet out, and easy slag removal.

METALLURGICAL CHARACTERISTICS

Eureka CHD Electrode has good resistance to pitting, stress-corrosion cracking, and oxidizing in atmospheres up to 1,900° F. It also provides superior corrosion resistance to many types of chlorides and salts. It is a hard surfacing and a heat resisting alloy that corresponds to AWS ERNiCrMo-4. This alloy resists extreme thermal shock and work hardens up to 40 HRC.

RECOMMENDED APPLICATIONS

Eureka CHD Electrodes are used for welding C 276 to itself and to various grades of stainless steels. It is used for joining or repairing many nickel based alloys. It is also used to hard face tools and dies requiring a resistance to heat, abrasion, impact, erosion, corrosion or any combination of these conditions. They have been exceptionally successful when used for facing forging dies. Other applications are entry roll guides, tongs, twist roll guides, hot trim dies and dummy blocks. This alloy is untied as an underlay alloy for waspalloy or udimet (Eureka CWD) overlays in the open die forging industry.

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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	Ni
.01	.50	.50	15.5	16.0	3.7	Bal

PHYSICAL AND OR MECHANICAL PROPERTIES

TENSILE STRENGTH 110,000 psi

ELONGATION 30%

WORK HARDENS UP TO 40 HRC