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: <u>info@eurekaweldingalloys.com</u> Website: <u>www.eurekaweldingalloys.com</u>

#### **TECHNICAL DATA FOR EUREKA "C" TIG RODS**

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

# **INTRODUCTION**

**Eureka "C" TIG Rods** are drawn, straightened, cut to length, and then cleaned and packaged to obtain microscopically clean weld deposits. These rods are designed for the most critical applications where weld metal cleanliness is most important.

# **METALLURGICAL CHARACTERISTICS**

**Eureka "C" TIG Rods** has good resistance to pitting, stresscorrosion 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 "C" TIG Rods** 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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### **RECOMMENDED SHIELDING GASES**

100% Argon

# **GAS FLOW RATE**

20-40 CFH

### **TYPICAL CHEMISTRY**

С	Mn	Si	Cr	Мо	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**