# 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 850 FLUX CORED WIRE

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

### **INTRODUCTION**

**Eureka 850 Flux Cored Wire** is a high alloy filler metal. The wire has a smooth spray transfer arc with a thin slag system that is easily removable. The wire is formulated to develop high quality weld deposits that are porous and crack free. The wire is designed for multi-pass welding which greatly increases productivity.

### **METALLURGICAL CHARACTERISTICS**

Eureka 850 Flux Cored Wire is extremely wear resistant Chromium, Cobalt and Molybdenum hot working alloy. This alloy displays excellent retention of hardness at elevated temperatures yielding excellent abrasion resistance. It also displays moderate impact resistances. As welded hardness is 40-45 HRC and age hardens up to 57-62 HRC.

## **RECOMMENDED APPLICATIONS**

**Eureka 850 Flux Cored Wire** 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.

# 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

#### **WELDING PARAMETERS**

TYPE	SIZE	AMPERAGE	VOLTS
Metal Cored Wire	.045" 1.2 mm	125 – 225	16 – 28
Metal Cored Wire	1/16" 1.6mm	180 – 400	25 – 33
Flux Cored Wire	1/16" 1.6mm	180 – 400	25 – 33
Flux Cored Wire	3/32" 2.4mm	350 – 600	27 – 35
Flux Cored Wire	1/8" 3.2mm	500 – 900	30 – 38

Use DC Current with a Stick Out of 1/4"-1 1/4" (6mm-32mm)

#### RECOMMENDED SHIELDING GASES

75% Argon, 25% Co2 90% Argon, 10% Co2 92% Argon, 8% Co2

100% CO2 may produce lower quality arc conditions

#### **GAS FLOW RATE**

.045" 1.2 mm 20-50 CFH 1/16" 1.6mm 30-60 CFH 3/32" 2.4mm 80-120 CFH 1/8" 3.2mm 80-120 CFH

### TYPICAL CHEMISTRY

C Mn Si Cr Mo Co
.10 .60 .60 4.0 9.0 16.5

# Eureka Welding Alloys

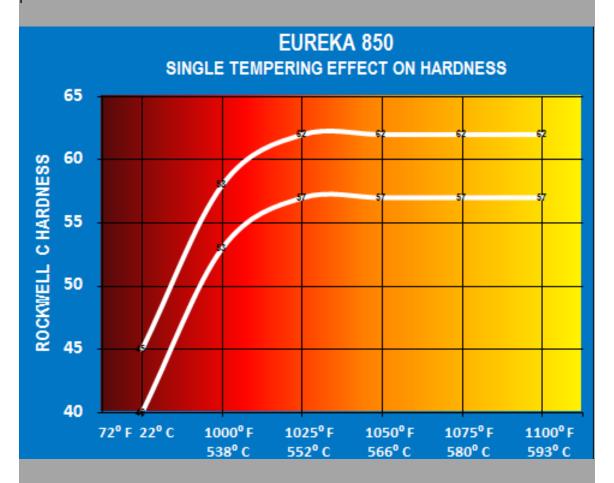
2000 E. Avis Drive Madison Heights, MI 48071

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

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

#### **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.



**Page 3 of 3** The data herein is to be used as a guide. Your results may differ due to the many variables in the utilization of this product.