

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

TECH DATA FOR EUREKALLOY "X" FLUX CORED WIRE

Dated: June 11, 1998

Revised: June 24, 2013

INTRODUCTION

Eurekalloy "X" Flux Cored Wire is a Cobalt base, hard facing filler metal that conforms to AMS 5385. The wire can be welded at low amperages, which reduces penetration and dilution. The weld deposits have good wet out. This gives a flat smooth surface to machine.

METALLURGICAL CHARACTERISTICS

Chemical Composition Range for Eurekalloy "X"

C:	0.20 – 0.30
Mn:	1.00 max.
Si:	1.00 max.
Cr:	25.50 – 29.00
W:	0.50 max.
Fe:	2.00 max.
Ni:	1.75 – 3.25
Co:	Balance

The room temperature hardness of **Eurekalloy "X"** (undiluted weld metal) is typically 29- 34 HRC; this alloy will work harden up to 44 - 48 HRC. This alloy is most noted for resistance to softening at elevated temperatures. Hot hardness values of 22 HRC are maintained at 1200 ° F. This alloy displays good abrasion resistance due to the moderate carbide formation and its work hardening abilities. The metal to metal wear is outstanding due to the low coefficient of friction because its ability to take a high polish. The large addition of Chromium imparts good oxidation and corrosion resistance up to 1800 ° F. The impact resistance and machinability of this alloy is generally considered good.

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

TECH DATA FOR EUREKALLOY "X" FLUX CORED WIRE

RECOMMENDED APPLICATIONS

Commonly used on press forging dies, hot trimming, punching, and shearing dies, extrusion dies, and dummy blocks. Also used in high pressure, high temperature, and corrosive environments.

WELDING PARAMETERS

Type	Size	Amp Range	Volts
Metal Cored Wire	.045"	125 – 225	16 – 28
Metal Cored Wire	1/16"	180 – 400	25 – 33
Flux Cored Wire	1/16"	180 – 400	25 – 33
Flux Cored Wire	3/32"	350 – 600	27 -- 35
Flux Cored Wire	1/8"	500 – 900	30 -- 38

Use DCEP and Electrical Stick Out 1"

Recommended Shielding Gases

**75% Argon, 25% Co2
90% Argon, 10% Co2**

Cubic Foot Per Hour

**.045" 30-60
1/16" 40-70
3/32" 80-120
1/8" 80-120**

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

TECH DATA FOR EUREKALLOY "X" FLUX CORED WIRE