

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 74 FLUX CORED WIRE

Dated: March 31, 1995

Revised: July 8, 2013

INTRODUCTION

Eureka 74 Flux Cored Wire is a S-7 shock resisting tool steel alloy. 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 74 Flux Cored Wire is a AISI type S-7 shock resisting tool steel alloy. The as welded hardness of the deposits will typically be 55–60 HRC which can be tempered to lower hardness when necessary. This alloy works well in cutting or shearing environments at room temperature due to its unique ability of having high strength and being tough.

RECOMMENDED APPLICATIONS

Eureka 74 Flux Cored Wire are recommended for welding A.I.S.I. S-7 tool steel, however, because its weld deposits can be tempered to various hardness values, it can also be used to repair other shock-resisting grades plus many types of water-hardening tool steel. Eureka 74 work exceptionally well on metal stamping blank trim and pierce dies where edge chipping causes burr on parts. Eureka 74 is an ideal electrode

for building cutting edges on composite cold and hot trim sections and punches.

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 V

.50 .50 .60 3.3 1.5 .25

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

PHYSICAL AND OR MECHANICAL

AS WELDED HARDNESS

55-60 HRC

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.

SINGLE TEMPER CURVE EUREKA 74

