

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 MF-201 METAL CORED WIRE

Dated: March 31, 1995

Revised: July 8, 2013

INTRODUCTION

Eureka MF-201 Metal Cored Wire is a cobalt based filler metal. The wire has a smooth spray transfer arc with nearly no slag to contend with. 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 MF-201 Metal Cored Wire is a Cobalt based modified 21 type hard facing alloy. It offers combined resistance to impact, heat, abrasion, corrosion, scaling and thermal shock. It has far greater resistance to shock and heat checking than typical Cobalt base alloys normally have. **Eureka MF-201** weld deposits have excellent corrosion resistance in oxidizing atmospheres and chlorine type solutions. It also has resistance to scaling up to 1800 F. It has good hot hardness well at extreme temperatures. The weld deposits of **Eureka MF-201 Metal Cored Wire**, which is the toughest of Cobalt-base alloys, will average approximately 30 – 35 HRC as applied, and will work-harden up to 55 HRC. The deposits are also highly resistant to heat checking.

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

RECOMMENDED APPLICATIONS

Eureka MF-201 Metal Cored Wire is used in press forging dies, hot trimming dies, punching and shearing dies, extrusion dies and dummy blocks. Eureka MF-201 offers a combined resistance to impact, heat, abrasion, corrosion, scaling and thermal shock. Eureka MF-201 weld deposits are the toughest of the cobalt base alloys and will retain its hardness well at elevated temperatures. Overlaying hot press forging dies with **Eureka MF-201 Metal Cored Wire** can double or triple die life over conventional die block steels.

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

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 will produce low 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	Ni	Nb
.15	.30	1.0	28.0	5.5	4.5	.60

PHYSICAL AND OR MECHANICAL PROPERTIES

Welded Hardness

30-35 HRC

Work Hardens to

55 HRC