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 N2 METAL CORED WIRE Dated: March 31, 1995 Revised: July 8, 2013

## **INTRODUCTION**

**Eureka N2 Metal Cored Wire** is a medium alloy 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 N2 Metal Cored Wire Electrode** is a carefully balanced Molybdenum, Manganese and Nickel alloy that has an as welded hardness of 18-23HRC. This alloy displays high impact resistance and moderate abrasion resistance. The microstructure of ferrite and bainite promotes high crack resistivity.

# **RECOMMENDED APPLICATIONS**

**Eureka N2 Metal Cored Wire** is an excellent choice for welding forging components such as rams, sow blocks, die holders, die shanks, hammers bases and columns. It is also utilized in steel mills and in maintenance shops for welding general machine parts such as steel gears, large arbors and shafts.

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#### **WELDING PARAMETERS**

ТҮРЕ	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**

С	Mn	Si	Мо	Ni
.08	.55	.55	.60	3.0

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### PHYSICAL AND OR MECHANICAL PROPERTIES

## TENSILE STRENGTH 157,000 psi

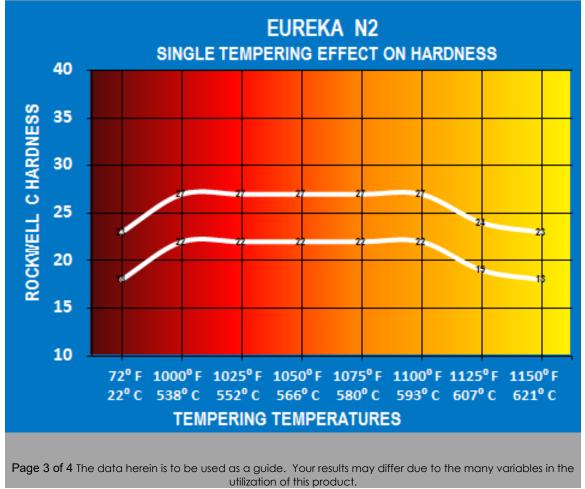
# **ELONGATION 17%**

#### CHARPY "V" NOTCH 42 Ft/lbs.

## AS WELDED HARDNESS

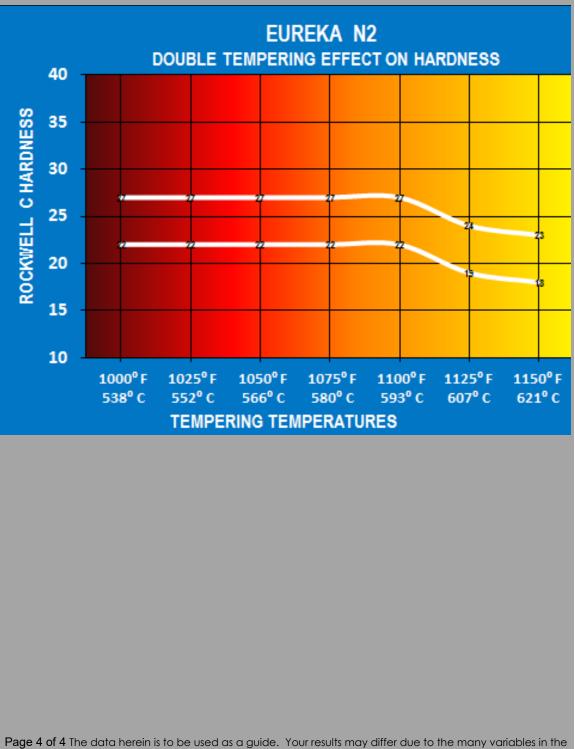
# 18-23 HRC

The hardness values below were obtained in a laboratory setting. These values are to be used as a guide. Your results may differ somewhat due many variables in this process.



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utilization of this product.