

Eureka Welding Alloys

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TECHNICAL DATA FOR EUREKA 45 SOLID MIG WIRE

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INTRODUCTION

Eureka 45 Solid MIG Wires are drawn, cleaned, spooled and packaged to obtain smooth wire feeding with a stable spatter free arc. These wires are designed for the most critical applications where weld metal cleanliness is most important.

METALLURGICAL CHARACTERISTICS

Eureka 45 Solid MIG Wire is a tough Chromium, Molybdenum, Tungsten and Vanadium tool steel alloy having excellent resistance to abrasion, heat checking and wear, yet still machinable as welded. This alloy can accept water spray while in service without excessive checking. This alloy would be classified as a medium hot working grade of tool steel.

RECOMMENDED APPLICATIONS

Eureka 45 is utilized where press and hammer forging dies are to be reclaimed or partially repaired and conventionally machined. Its properties exceed that of die block material but still remain machinable. It is also used as a tough build-up alloy when a higher alloy is to be deposited on top for increased wear at the flash line.

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WELDING PARAMETERS

SIZE	AMPERAGE	VOLTS
.035" 1.0mm	100 – 225	14 – 28
.045" 1.2mm	125 – 250	16 – 28
1/16" 1.6mm	180 – 400	22 – 33

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

20-60 CFH

TYPICAL CHEMISTRY

C Mn Si Cr Mo

.10 .60 .50 5.0 .50

PHYSICAL AND OR MECHANICAL PROPERTIES

AS WELDED HARDNESS

33-38 HRC