

# Eureka Welding Alloys

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## TECHNICAL DATA FOR EUREKA 45 TIG RODS

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## INTRODUCTION

**Eureka 45 TIG Rods** are drawn, straightened, cut to length, and then cleaned and packaged to obtain microscopically clean weld deposits. These rods are designed for the most critical applications where weld metal cleanliness is most important.

## METALLURGICAL CHARACTERISTICS

**Eureka 45 TIG Rods** are a tough Chromium, Molybdenum, Tungsten grade of tool steel 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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## **RECOMMENDED SHIELDING GASES**

**100% Argon**

## **GAS FLOW RATE**

**20-40 CFH**

## **TYPICAL CHEMISTRY**

C	Mn	Si	Cr	Mo
.10	.60	.50	5.0	.5

## **PHYSICAL AND OR MECHANICAL PROPERTIES**

### **AS WELDED HARDNESS**

**33-38 HRC**