

Eureka Welding Alloys

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TECHNICAL DATA FOR EUREKA 505 TIG ROD

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INTRODUCTION

Eureka 505 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 505 TIG Rod has a duplex microstructure of delta ferrite in a matrix of austenite. The large quantity of delta ferrite induces a high level of ductility which enables crack free welds in highly constrained sections of virtually all types of iron base chemistries. The weld deposits have very high strength, work harden, and have good corrosion resistance.

RECOMMENDED APPLICATIONS

Eureka 505 TIG Rod are used for joining of all types of steels, tool steels, stainless steels, cast steels and any type of unknown steels. It has excellent strength, high impact resistance and high crack resistance. Eureka Ultra Tech 505 is a great general purpose maintenance alloy. It is often used as an underlay weld deposit.

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RECOMMENDED SHIELDING GASES

100% Argon

GAS FLOW RATE

20-40 CFH

TYPICAL CHEMISTRY

C	Mn	Si	Cr	Ni
.11	1.5	.50	29.0	9.0

PHYSICAL AND OR MECHANICAL PROPERTIES

TENSILE STRENGTH 116,000 psi

YIELD STRENGTH 80,000 psi

ELONGATION 25%

WORK HARDENS UP TO 40 HRC