

# **RCI Welding Rods For Cast Iron**

Aufhauser RCI is a high-quality gray iron oxyacetylene welding rod, designed for gas welding of cast iron, general fabrication or building up new or worn surfaces on castings. RCI is excellent for cast iron fabrication, repair of foundry defects, filling in or building up new or worn castings. RCI produces machinable weld deposits that have the same color, composition and granular structure as the base metal (gray iron). The weld, if properly made, can be as strong as the original casting.

## APPLICATIONS

- Widely used on gray iron and ductile iron. (For malleable iron, use Aufhauser Nickel Silver).
- Production of grey and ductile iron weldments (cast iron to itself or to steel).
- Repair of service worn damage on grey or ductile iron.
- Repair of minor casting defects in grey iron.

## **TECHNICAL HINTS**

- Pre-heat of 1100 to 1200 F are generally required.
- Post-heating varies with the size of the casting: slow cooling. complete stress relief (1150 F) or full annealing (1650F)
- Gas Welding produces less hardening in the HAZ than does arc welding.
- Readily machinable.
- Porosity can be minimized by using a slightly reducing flame.
- The RCI rod contains enough Si and C to replace those elements lost through welding process.
- Use Aufhauser Cast iron Flux.

## CHEMICAL COMPOSITION

(AWS A5.15 RCI)

	Carbon	Manganese	Silicon	Phosphorus	Sulfur	Nickel	Molybdenum
Typical	3.25-3.5	.675	2.7-3.0	.5075	.10	Trace	Trace

## PHYSICAL and MECHANICAL PROPERTIES

Tensile Strength:	25,000 psi
Yield:	-
Elongation, min. %:	-
Hardness BHN:	150-210

## SPECIFICATIONS MEET or EXCEED

ANSI/AWS A5.15 RCI

STANDARD SIZES

3/16"x24, 1/4" x 24"