



## HI-ALLOY 460

### HIGH STRENGTH ALLOY FOR CAST IRON

**DESCRIPTION:** Hi-Alloy 460 has a specially formulated core wire and flux coating that combine to provide a smooth stable arc and dense, porosity free, machinable welds on a variety of cast irons including ductile, nodular, and malleable irons. It is also commonly used for joining cast irons to steel and is especially suited for repairing meehanite dies, and castings contaminated by oil, grease, rust, dirt, or chemicals.

**TYPICAL APPLICATIONS:** Repairing cast iron machine bases, engine blocks, castings, pedestals, gear teeth and sprockets, pump housings, molds, sewer pipe, and valves.

**PROCEDURES:** Remove cracked or worn metal with Hi-Alloy Metal Mover or by grinding. On heavy sections, oil or chemical contaminated cast irons, preheat to 500° F. Weld with the lowest amperage setting which provides a short stable arc and good wetting action. On thin sections and when cold welding, the maximum weld bead should not exceed 1 to 1½" to minimize heat input. Peen all welds with the ball end of a ball peen hammer to distribute stresses, allow the finished part to cool slowly in still air.

AVAILABLE SIZES:	3/32	1/8	5/32
AMPERAGE RANGES:	50-80	70-110	100-140
POLARITY:	DC Reverse or AC		
TENSILE STRENGTH:	Up to 70,000 psi		
ELONGATION:	Up to 15%		
HARDNESS:	Rockwell B 88 - 90		