

# **RECONDITIONED MACHINES: WORK OVERVIEW**

# Machine Tear-Down and Prep

We completely disassemble the entire Machine. The Welder Frame is sandblasted and prepared for paint. Any unnecessary holes in the frame have been plugged, welded closed, and blended for a finished appearance. The Machine Frame and Components are Painted to the Customer's Specifications.

# Secondary

The Entire Secondary is completely restored to near-new or better-than-new condition with all electrical contact surfaces cleaned or machined for maximum Weld Current Transfer.

### Air System

The Weld Cylinder is dismantled, evaluated for wear, completely rebuilt, and thoroughly tested. Directional Air Valves, Pipes, and Pneumatic Components are replaced with New.

# **Cooling System**

The old Cooling System is completely removed and Replaced with all new Pipes, Fittings, Water- Flow Switches (if necessary) and Manifolds. We performance test every rebuilt Cooling System with a High-Flow Water Chiller to ensure that there are no leaks or blockages in water passage ports.

### **Electrical System**

We begin this process by removing the complete Electrical System. If the Welding Control is to be reused, it undergoes a thorough testing procedure to prove all Timing Functions and Phase Shifting consistency. SEEDORFF ACME Recommended Welding Controls are installed with a 3 Year Manufacturer's Warranty, The Best in the Industry! Primary-to-ground and primary-to-secondary insulation testing of the Welding Transformer is performed on the bench. The water passageways of the Welding Transformer are checked and opened for maximum water-flow. All new wiring is installed and secured in place to ensure that the Welding Machine is fully functional and electrically sound to <u>NEC Guidelines</u>.

### **Mechanical System**

Every Mechanical connection is disassembled. We remove and replace all bearings and wear components. All machine shop requirements are performed in-house by trained Class A Machinists.

### **Machine Reassembly**

Every Machine is reassembled to Factory Specifications. There are no shortcuts performed on any taks. We use only the highest quality components and hardware so that your satisfaction is completely served! Our Technicians are trained in-house and double-checked to ensure the highest level of quality assurance! Backing our Program is a Thirty-Six Month new machine Guarantee on every Machine that goes through this process, the only of its kind in the Industry!



# Machines that Qualify:

Any Make and Type of Spot Welder.

# **Optional:**

- New Welding Control with optional Constant Secondary Current
- New Air Cylinder
- New Welder Arms
- New Electrode Holders Convert your A.C. Welder into Mid-Freq. Inverter D.C. (M.F.D.C.)
- Redesign or Remanufacture your existing Tooling
- Install new Welding Transformer
- Install SEEDORFF Current Collector Heads on your existing Seam Welder
- Add our Linear Bearing System to your existing Multi-Spot Welder

# RECONDITIONED SEAM WELD HEADS: WORK OVERVIEW

### Weld Head Tear-Down and Evaluation

We completely disassemble the entire Weld Head(s). All components are cleaned and evaluated for wear. Housing bores are machined as required. Mounting surfaces are machined flat to a 32 finish. If necessary, all electrical connections are electro-silver plated.

# Seam Welder Shaft

The Shaft O.D. is measured with a micrometer. If possible, the existing shaft is remachined to a 16 finish or replaced. The Shaft/Wheel mating surface is also machined as required.

# Shaft Bearings (sleeve bearing head)

The Bearing I.D.(s) are measured with an inside micrometer to evaluate wear. New Class II Copper Bearings are machined to precisely match the Welder Shaft. For high-pressure applications, Elkonite segments are inlaid into the copper bearing to increase bearing life.

### **Collector Brushes**

Brushes are evaluated and, if necessary, machined to allow for new Coin Silver Inlay. The Inlay is precisely formed to match the O.D. of the Seam Welder Shaft.



# Seals and Gaskets

All U-Cups, O-Rings, and Oil Seals are replaced.

## **Support Bearings**

Shaft Support Bearings are evaluated and replaced if necessary.

#### Insulation

All new Insulating Washers, Bushings, and Sleeves are installed where necessary.

### **Final Inspection**

Upon final assembly, all Seam Weld Heads are inspected for water leaks and oil leaks. An Electrical Resistance Reading is recorded using a Micro-Ohm Meter to ensure that the Rotating Shaft is making proper connection with the Bearings or Brushes.