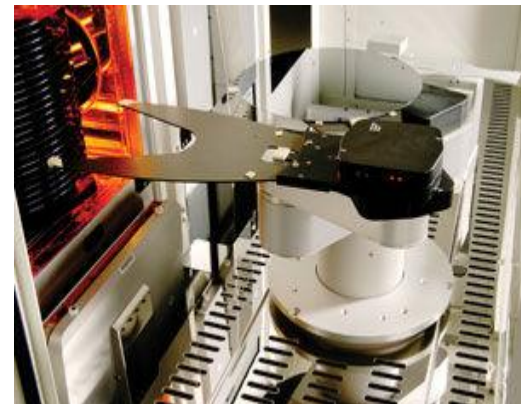


A ONE-STOP SHOP FOR REPAIR, REFURBISHMENT AND REPLACEMENT OF MOTOR CONTROL COMPONENTS USED IN SEMICONDUCTOR MACHINERY

- Modern Semiconductor equipment is heavily automated. At the heart of each process are precision-controlled electric motors, mechanical gearboxes, drive electronics and computers that rotate, position, dispense, place, assemble and test semiconductor components.
- Front-end equipment such as implanters, robots, wafer aligners and so on must rely on motors and controllers. Back-end equipment that dice, slice, test, wirebond assemble, mark and package rely on electromechanical motion. Machines for assembly of PC boards are driven by servos and stepper controls.
- Over the last 15 years Potomac Electric has been helping the users of semiconductor equipment to keep older machines running at lowest possible cost. However, our largest customers are OEMs. They purchase motors, encoders, controllers, gearboxes and ball screws and, just like their customers, need to do repairs and fight obsolescence. We solve the problem in both cases.
- Our Service Group provides support with repair and refurbishment of the equipment. If repair is not possible, we design and manufacture drop-in replacement products.
 - *The Service Group works closely with the Design and Manufacturing Team. Having both divisions under one roof allows Potomac Electric to quickly respond to aftermarket needs by manufacturing servos and controls in small lots. Engineering works closely with the Service Group to develop direct replacements for items that are no longer available or carry high cost. We provide you, our customer, with the best solution to your problem!*
- Our service organization that is set up to quickly design and make parts is unique!





OUR CAPABILITIES

Potomac Electric is an industry leader in aftermarket *repairs* and manufacturing drop-in *replacements* for servo motors, drive electronics, and electromechanical assemblies used in every semiconductor process.

Items we support are:

- **Servo Motors**
- **Stepper Motors and Feedback Devices**
- **Robots**
- **Servo Drive Amplifiers**
- **Motion Controllers**
- **Power Supplies**
- **Gearboxes**

Repairs are only a half of what we do! We make *replacements* for parts that are beyond repair, obsolete, or astronomically expensive. This is how we provide the greatest value and support to both OEMs and end users!

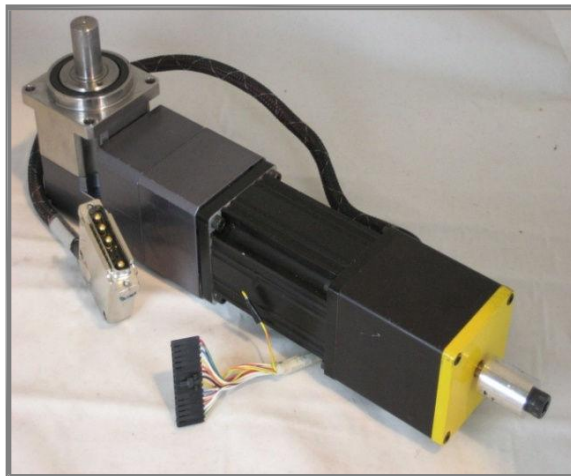
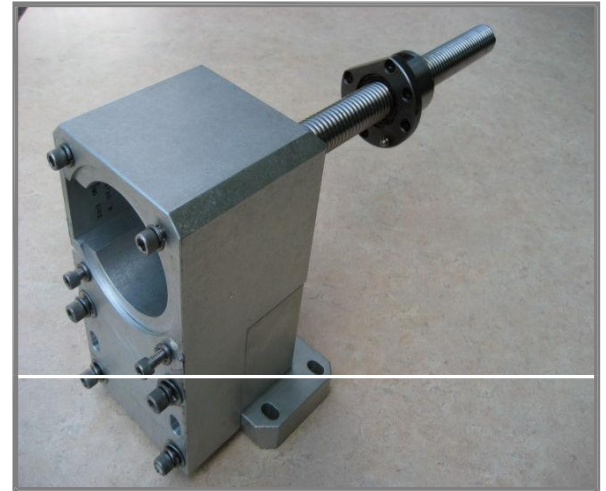


WHAT POTOMAC ELECTRIC CAN DO FOR YOU

- For over 15 years, Potomac Electric has helped OEMs, third party contract service organizations and end users of semiconductor fab plants to keep their equipment running while keeping maintenance costs low.
- Our Engineering expertise, quality and fast turnaround time is what we are known for in the industry. And of course, low cost!
- We support *repairs* and continue to make *replacements* for equipment made by many firms. Here are just few:
 - Applied Materials
 - Axcelis Technologies
 - Brooks Automation
 - Semitool
 - Varian Semiconductor
 - Universal Instruments
- For OEMs and large service organizations, Potomac Electric develops, manufactures new product. We also provide design services to OEMs in developing cost effective, state-of-the-art motion control systems.

EXAMPLES OF OUR WORK

- Here are some examples of the equipment we support. The motor and ballscrew assembly to the right are used on Axcelis implanters.



- The motors to the left are employed by Brooks Automation and PRI Automation.

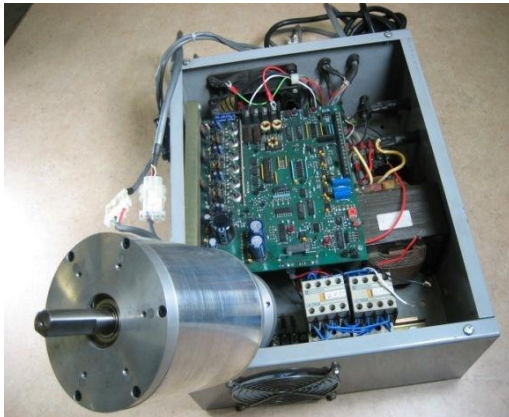
EXAMPLES OF OUR WORK



This motor is the replacement we designed to support a Varian M2i machine.



Servomotor employed on a Varian machine.



Motor and Drive that support Universal Instrument's older machines.

New state-of-the-art Servo Amplifier we designed to replace older Westamp drives used by an implanter.





PLEASE VISIT US AT:

Potomac Electric Corp.
www.potomacelectric.com

CALL US AT:

800-224-4712

OR SEND US AN INQUIRY AT:

<http://www.potomacelectric.com/repairs/inquiries.htm>

LOOKING FORWARD TO HEARING FROM YOU!