



## Who Are We?

Fusion Systems Group (FSG) specializes in the design, build, and programming of turn-key, custom automation solutions. If you are looking to increase the quality and efficiency of product assembly, testing, or inspection processes, FSG has the answers. We have been developing custom automation equipment to assemble a wide range of products since 1965.

Each system is designed to incorporate automation on repetitive and/or critical operations. Whether fully or semi-automated, FSG machines are built to be robust, minimizing the costs of use, maintenance, and training. You can rely on us to deliver your automation system on time, and to your expectations.

## Types of Automation

FSG designs incorporate the appropriate combination of mechanics, pneumatics, feeders, servos, and controls to meet specific tolerances, part rates, and flexibility requirements. Changeovers can be minimized to handle several product types on one piece of equipment. Tooling is designed in harmony with auto load/unload devices such as pick and place units and/or more versatile robotics.

If the application warrants, linear conveyor machines are used. Continuous or indexing motion, these systems utilize stop gates and sensors to provide sequencing of your product through the work stations. Both rotary and linear concepts can be built stand-alone or fully integrated with upstream or downstream automation.

## Innovative Engineering Approach

Only after a thorough analysis of your project requirements will FSG recommend a suitable machine concept. Then based on your input, the machine details will be finalized. Our engineers have applied automation techniques in a variety of industries. We utilize SolidWorks® solid modeling software which allows us to clearly communicate our machine concepts. Gantt charts are used to track progress and keep you updated on project status. Before machine assembly begins, the system is fully engineered. Machine documentation is maintained throughout design, build, test, and installation.

## Other Capabilities

FSG engineers commonly use Allen Bradley software platforms, however General Electric, Mitsubishi, Siemens, and others can be specified. We will honor any preference to keep the new machine compatible with existing plant machinery. When practical, we can also integrate vision inspection into the machine design. Common vision functions include part presence, defects, orientation, and color identification.

Safety features are built into our machines, and can include light curtains, safety mats, two-hand safeties, zero-force start buttons, laser scanners, RF guarding systems, safety controllers, mechanical interlocks, and collision sensing.

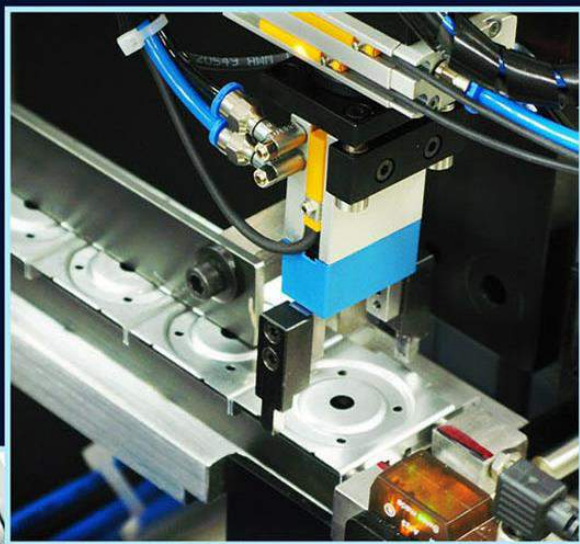
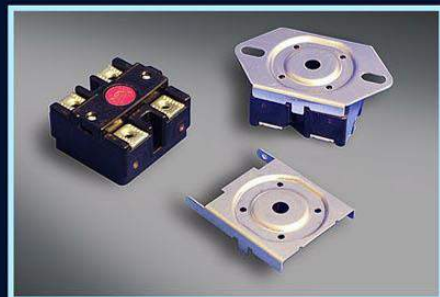


## Industries Served:

Medical Devices	Automotive
Pharmaceutical	Appliance
Dental	Consumer Products
Electronics	Alternative Energy
Aerospace	Packaging



*Machine assembles three piece case, disc & baseplate at 1,400 parts per hour*



**Assembly Machines**

**Material Handling Machines**

**Packaging Machines**

**Drilling & Tapping Machines**

**Piercing & Bending Machines**

**Metal Forming Machines**

**Welding Machines**

**Test & Inspection Machines**

**Robotic Machines**

**Dispensing Machines**

**Control Systems**

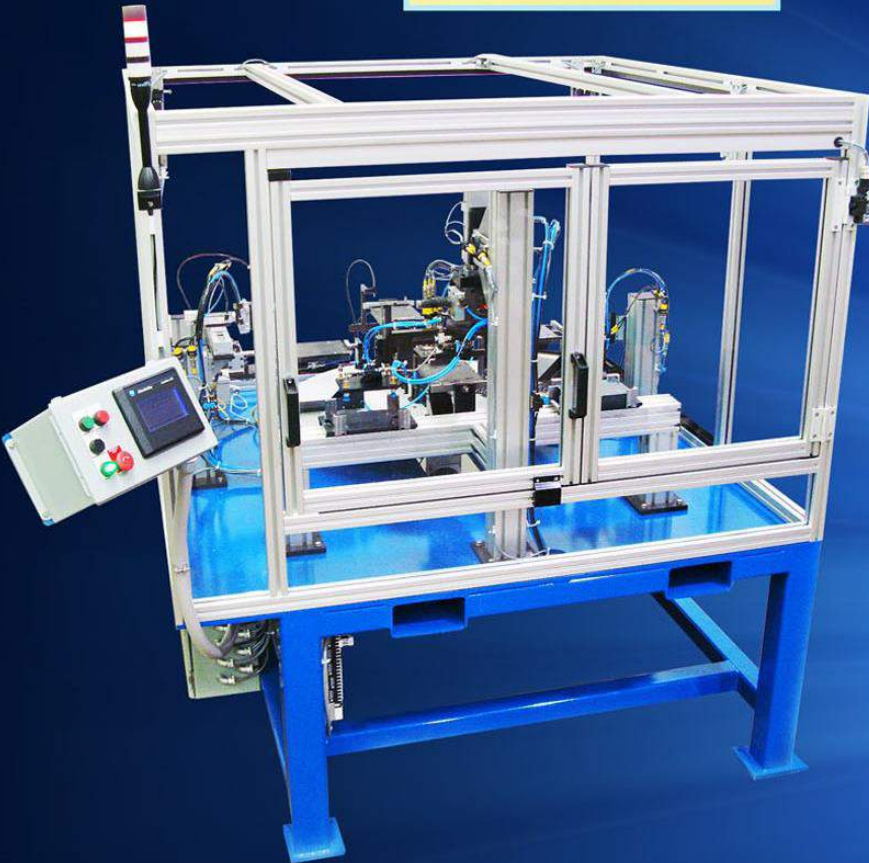
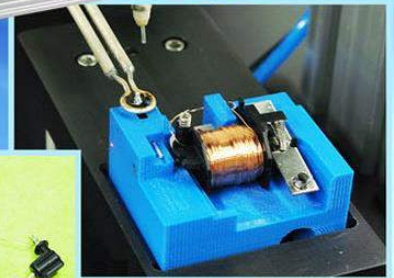
**Fixtures and Gages**



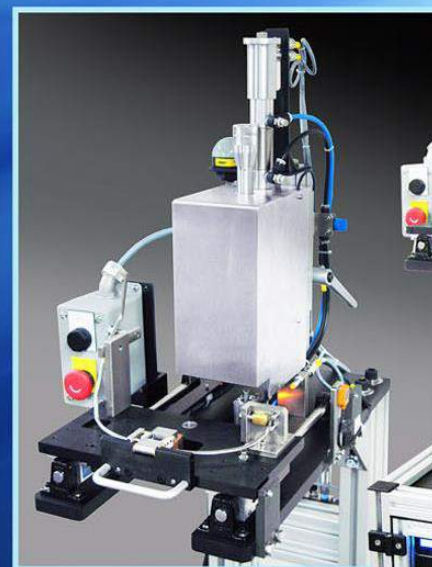
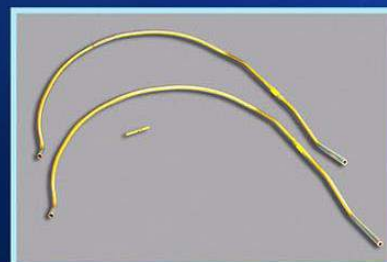
*Dispensing Machine applies  
& cures sealant adhesive to  
LCD displays at 400 per hour*

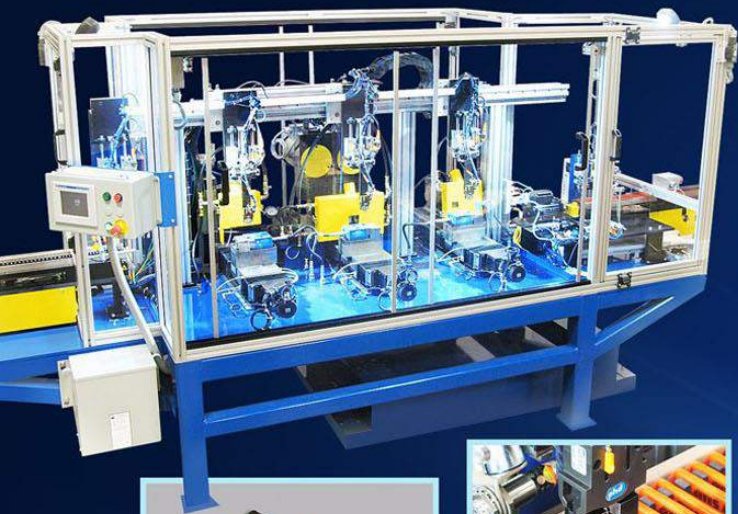


*Soldering Cell  
joins copper  
magnet wire to  
interconnect  
terminal at  
360 per hour*



*Tack Welding Machine  
joins two-piece heat  
transfer tube assembly  
at 400 per hour*





*Assembly System joins a foam gasket to styrofoam cover at 1,200 per hour*

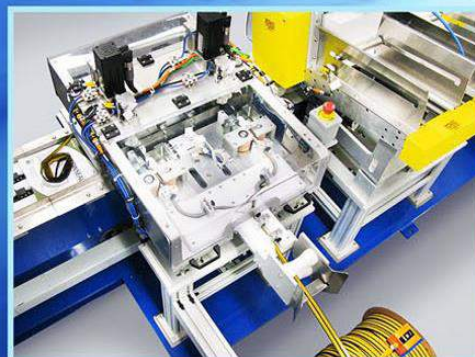


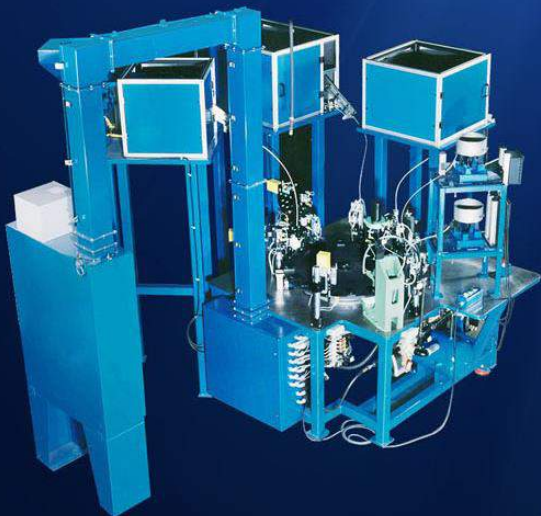
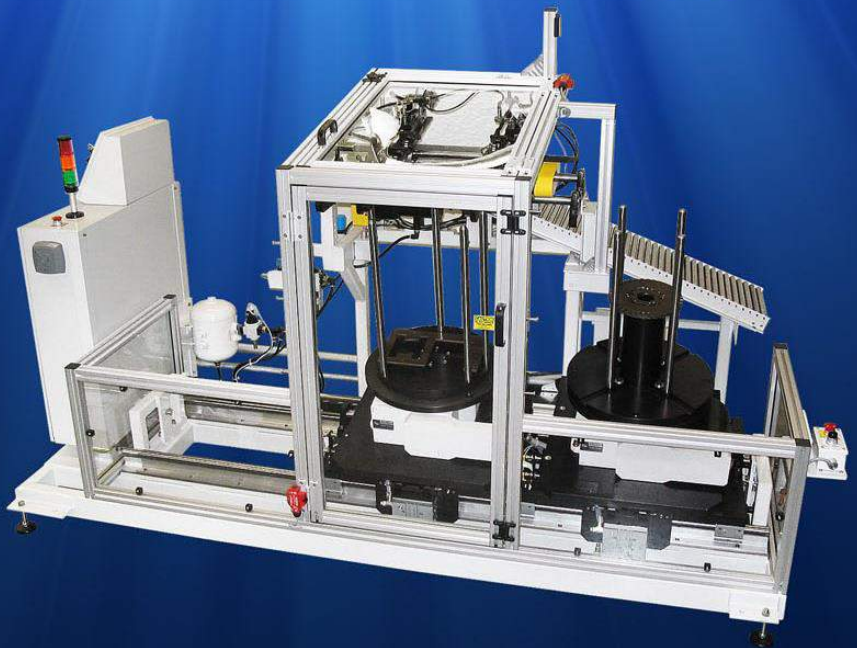
*Grinding Machine finishes edges of Speedy Sharp® carbide sharpener & assembles handle at 240 per hour*



*Assembly & Inspection Machine inserts rings into piston head grooves at 500 per hour*

*Uncoiling & Cutting Machine prepares adhesive gasketing material, instructions, & labels for packaging at 136 feet per minute*





Fusion Systems Group draws upon over 50 years of assembly expertise to build turnkey automation systems that provide years of cost-efficient production.

From concept to installation, we accept total responsibility for all aspects of your system.

Visit our web site, review the machine examples and discover our diverse capabilities. We welcome the opportunity to solve your manufacturing process problems. Contact us today for a quotation on your next machine or automation project.



Fusion Systems Group 4658 E. 355th Street Willoughby, OH 44094  
 Phone: 800.626.9501 440.946.3300 Fax: 440.942.9083  
 Email: [info@fusionsystemsgroup.com](mailto:info@fusionsystemsgroup.com) Web: [www.fusionsystemsgroup.com](http://www.fusionsystemsgroup.com)