

Assembly Services

Machine Solutions Inc. (MSI) was founded over a decade ago to service the expanding production machinery and automation needs of medical device manufacturers. MSI established its Build To Print Assembly Division with contract assembly capabilities and facilities located in Phoenix, AZ to better support the outsourcing requirements of both medical and non-medical companies.

Benefits of outsourcing assembly projects to MSI:

- Meet aggressive lead times.
- Limit the need to staff for fluctuations in demand.
- Experienced assemblers, fabricators & machinists.
- Fully tested with appropriate QA documentation.
- Machine shop on site.

Successful build to print and contract assembly relationships require good communication and an effective process. To that end MSI follows a proven process:

- Initial requirements review, including completeness of
 - Drawings
 - Specifications (process and product)
 - Assembly instructions
 - Acceptance tests
 - Vendor contacts (and approval to contact)
 - Customer technical contact
 - Samples, hardware, software, etc. (if available)
- Proposal review
- First article status updates & review
- Build plan updates and review
- Factory acceptance Testing
- Regular status updates

Other Services

In addition to contract assembly services, MSI offers other services related to contract assembly and machine design. Mechanical, electrical and software/controls engineering teams located in Flagstaff, AZ support assembly and manufacturing engineering in Phoenix, AZ.

Other services include:

ASSEMBLY UPDATES

- Obsolete components
- Reliability issues
- Automated handling
- Human-machine interface (HMI)
- Additional process feedback/control
- Networking and data storage

CUSTOM MACHINE DESIGN

- Mechanical and electrical sub-assemblies
- Controls and feedback systems
- HMIs
- Networking and data storage

CUSTOM MACHINE BUILD

- Customer or MSI designed
- Single unit and low volume
- Factory acceptance testing and install
- Post-installation technical support

DOCUMENTATION UPDATES

- Assembly instructions
- Technical support guidance
- Installation instructions and support

SYSTEMS INTEGRATION

- Integration of mechanical & electrical sub-assemblies
- Controls setup
- HMI development
- Factory acceptance testing and install
- Post-installation technical support

