

# A RECOGNIZED LEADER IN ROBOTIC SYSTEMS INTEGRATION



## **WHO WE ARE**

Genesis Systems, an IPG Photonics Company, is a recognized leader in robotic systems integration. In business since 1983, Genesis specializes in factory automation to enhance client productivity and profitability through the development and deployment of custom and turnkey industrial robotic systems. An RIA Certified Integrator, as well as AS9100D and ISO 9001:2015 certified, Genesis has robotic solutions in 42 states and 17 countries around the world.

### **WHAT WE DO**

Genesis uses rigorous analysis, detailed design and manufacturing review, and the latest automation technology to ensure your project is a success from installation to ongoing optimization. We take on the tough challenges. Our robotics experts find productive solutions to your unique application requirements to finetune the ROI of your integration and maximize productivity over the life of your robotic systems.

### **GENESIS SOLUTIONS:**

- Robotic Welding
- Laser Solutions:
   Welding, Inspection (Metrology),
   Ablation, Marking, Additive, Cutting
- Non-Destructive Inspection
- Robot Vision Systems
- Robotic Material Handling
- Automated Cutting
- Robotic Material Removal
- Automated Dispensing
- Robotic Tooling
- · Custom & Pre-Engineered Workcells

#### **GENESIS SERVICES:**

- Connected Solutions
- Virtual Solutions Center
- Automated Solutions Center
- 24/7 Customer Service & Support
- Training



## **INNOVATION COMES FROM EXPERIENCE**

## **GENESIS OUTSHINES THE COMPETITION WITH:**



**4900**+ Robotic System

Installations



Robots Integrated



42/17
Workcells in 42 States and 17 Countries



30+
Patents Related to
Robotic Automation



321,000+
Sq. Feet of Manufacturing
Space Globally



240+ Employees

## **GENESIS BUSINESS UNITS**



### **AVIATION, SPACE & DEFENSE**

For safe, compliant, high quality products, Genesis' custom and turn-key solutions deliver enhanced efficiencies and productivity in Aviation, Space and Defense operations, even in the most complicated and large-scale applications.



#### **TRANSPORTATION**

To meet constant demand for faster, more efficient production, Genesis integrates solutions that deliver highly productive, repeatable, reliable, and precise automation systems.



#### **GENERAL INDUSTRY**

Eliminate production bottlenecks, increase production accuracy, and improve product quality: Genesis' innovative robotic solutions work to realize productivity and efficiency goals.

## **ROBOTIC INTEGRATION EXPERTISE INCLUDES:**

- Automated Dispensing
- Automated Resistance Welding
- Connected Solutions
- Large Scale Manipulators
- Laser Processing
- Machine Tending

- Material Handling
- Material Removal
- Metrology
- Mobile Platforms
- Non-Destructive Inspection
- Robotic Tooling
- Robot Vision Systems

- Robotic Welding
- Virtual Proof of Concept, Design and Process
- Virtual Reality (VR)
   Simulation
- Virtual Simulation Analysis
- Weld Distortion Analysis

## **ROBOTIC APPLICATIONS**

Innovation is the key to our customer's ability to remain competitive and profitable. Leveraging our more than 35 years of robotic integration experience, Genesis solves the most complex production challenges with the latest automation technology.



**Robotic Welding** 



Laser Welding, Processing and Metrology



Non-Destructive Inspection



**Robot Vision Systems** 



**Material Handling** 



**Automated Cutting** 



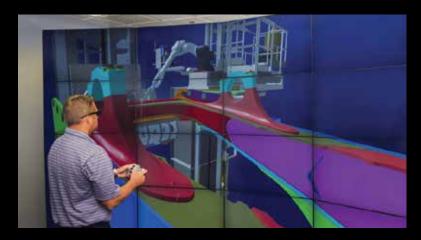
**Material Removal** 



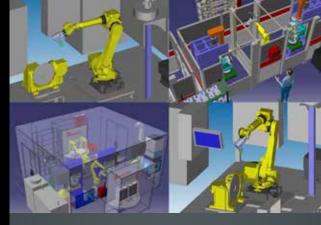
**Automated Dispensing** 

## **VIRTUAL SOLUTIONS CENTER**

### **Proof of Concept, Design and Process**



Genesis Virtual Solutions Center plays an important role in the success of your robotic automation project.



- 3D Simulation
- 3D Printing production and prototyping
- 3D Immersive Environment
- Offline programming and simulation
- Reach studies
- DFM/DFA
- Workcell and work flow layout
- Weld Distortion Analysis
- Variation Simulation Analysis



## **AUTOMATED SOLUTIONS CENTER**

# Offering a dynamic 360° view of Genesis robotic solutions.

Genesis Automated Solutions Center is an environment where past experiences, present solutions, and future technologies merge. From live demonstrations to full blown engineering studies, the latest technology is developed and leveraged in a hands-on approach. Our only goal is to bring you the best technical solution available on the market.

- Proof of Process
- Live Demonstrations
- Engineering Studies
- Process Development & Enhancement
- Product Evaluations
- Non-Destructive Inspection
- Laser Solutions including Laser Seam Stepper, Remote Laser Welding and Metrology
- Gas Metal Arc Welding
- Pedestal Spot Welding
- 3D Printing prototype and production part components
- Connected Solutions
- Automation Peripherals including TBi Products
- Machine Vision

# GENESIS PRE-ENGINEERED ROBOTIC WORKCELLS

LEVERAGE PROVEN PERFORMANCE FOR QUICKER ROI.

Leveraging years of application experience, Genesis pre-engineered robotic workcells for welding and inspection have already proven their ability to increase productivity and ROI.

QUICK IMPLEMENTATION • HIGH PERFORMANCE • **PROCESS FLEXIBILITY** Genesis

GENESIS PRE-ENGINEERED SYSTEMS OFFER PROVEN DESIGN, SINGLE SOURCE RESPONSIBILITY AND 24-HOUR SUPPORT IN A COST-EFFECTIVE SOLUTION.

## **ROBOTIC TOOLING**

WHAT SETS US APART IS OUR DEPTH OF EXPERIENCE DELIVERING TURNKEY ROBOTIC AUTOMATION SOLUTIONS FOR THOUSANDS OF APPLICATIONS.



Genesis understands the interactions between the product, process, and production environment, and what it takes to help our customers consistently produce high quality automated assemblies. By combining Computer Aided Engineering technologies such as variation simulation analysis, weld distortion analysis and other Dimensional Engineering techniques, Genesis offers manufacturers a unique approach to accurate, reliable dimensionally capable fixtures.

### **TOOLING EXPERTISE:**

- Tooling Including:
  - Prototype build fixtures
  - Manual operated fixtures
  - Fully automatic fixtures
- In-house tool design and manufacturing
- Dimensional control for optimization of product and Process
- Tooling design optimization with Solidworks 3D CAD and Pro E part modeling software to improve:
  - Operator ergonomics
  - Dimensional capability
- Parts, fixtures & weld path validation with Delmia and WeldPro simulation software to ensure:
  - Load/Unload, robot reach and torch access
- In-house inspection and verification for parts & tools,
   Romer Arm, Laser trackers and CMMs

## **CONNECTED SOLUTIONS**

INDUSTRY 4.0 SOLUTIONS FOR MORE TIMELY, INTELLIGENT DECISIONS THAT ENHANCE MANUFACTURING AND GROW YOUR BUSINESS.



Easy to use web interface and mobile device technology to monitor real time status anywhere, anytime.



24/7 monitoring with access to a live Genesis tech support person ensures timely notification and troubleshooting.



Get timely information to the right people with automated, configurable machine-to-human and human-to-human communication.



Flexible, highly configurable process control and traceability manufacturing execution software platform.

# ROBOTIC INTEGRATION SOLUTIONS THAT GO BEYOND INSTALLATION

**ROBOT AND SYSTEM SUPPORT** 

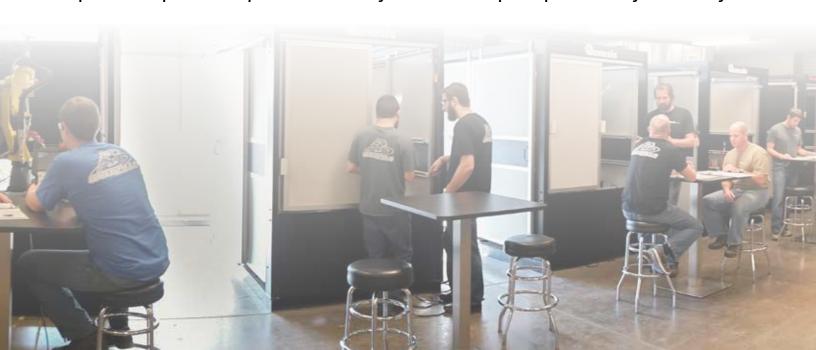
Genesis offers robot and system support services to help you maintain peak productivity and find long-term profitability.

- **24/7 CUSTOMER SERVICE & SUPPORT**
- **SYSTEM DOCUMENTATION**
- AUTOMATION PERIPHERALS
- REINTEGRATION SERVICES



## **ROBOT OPERATOR TRAINING SERVICES**

For first-time robot users or seasoned operators, Genesis offers comprehensive training services to empower robot operators to do more for their employers. Genesis training keeps robot operators up to date so they can achieve peak productivity on a daily basis.



## **GENESIS IS YOUR SINGLE SOURCE PROVIDER**

## TRANSFORM YOUR OPERATIONS WITH INNOVATIVE ROBOTIC INTEGRATION SOLUTIONS FROM GENESIS.

## Genesis Corporate Headquarters & Launch Center

8900 N. Harrison Street Davenport, IA 52806

#### **Genesis Versa Factory**

7310 Vine Street Court Davenport, IA 52806

#### **Genesis Kimmel Facility**

4818 Kimmel Drive Davenport, IA 52802

#### **Genesis AMP Works**

284 E. 90th Street River Cities Business Park, Building 2 Davenport, IA 52806

## Genesis Sales & Engineering – Rochester Hills

1972 Star Batt Drive Rochester Hills, MI 48309

#### **Genesis Systems Mexico**

Tomas Alba Edison Num.7 Zona Industrial Valle de Oro San Juan del Rio, Qro 76803 Mexico

#### **Genesis Systems Japan**

1-38, Hikisawa Kagiya-cho Kasugai, Aichi 480-0304 Japan









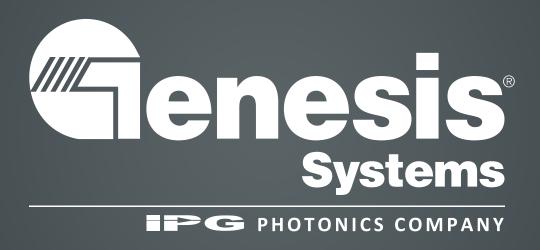






AS9100D ISO 9001:2015 CERTIFIED

- CAGE CODE 381R1
- **DUNS** # 15-114-7931
- **✓ ITAR COMPLIANT**



# A RECOGNIZED LEADER IN ROBOTIC SYSTEMS INTEGRATION

After more than 35 years, Genesis remains at the forefront of robotic integration for manufacturing automation, going above and beyond to provide solutions that help our customers win the productivity race.

Let us show you how.

(563) 445-5600

www.genesis-systems.com

8900 N. Harrison Street • Davenport, IA 52806 TEL: (563) 445-5600 • www.genesis-systems.com

