



ELECTRONICS

AS9100 & ISO 9001 REGISTERED

UEC's Automation team is a proven solution provider specializing in the design, fabrication, and integration of automated manufacturing, assembly and test systems, reinforced by dedicated and responsive on-site factory technical services.

## CORE COMPETENCIES

### AUTOMATION & TEST



## CAPABILITIES

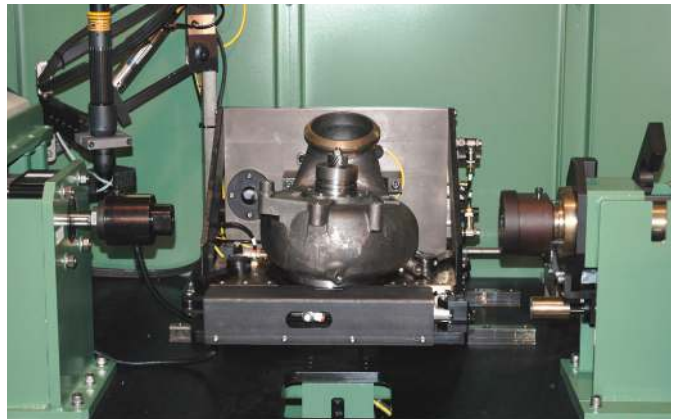
UEC maximizes our customers' success by improving productivity and quality through the implementation of innovative automated solutions.

#### Mechanical:

- Comprehensive System Design
- SolidWorks and AutoCAD Drafting
- FEA and Thermal Simulation
- Custom Fixture Design
- Tool and Die Design
- Hydraulic and Pneumatic System Design
- Servo System Design
- Poke-Yoke System Design
- Machine Assembly
- Machine Installation
- Painting

#### Electrical:

- Control System Design
- Continuous Process Control Systems
- Allen-Bradley, Siemens, Omron PLC Programming
- LabView Programming
- Visual Basic Programming
- Human Machine Interface Programming
- Motion Control and Servo System Design
- Machine Vision Inspection Design
- AC/DC Drive Systems
- Electrical Panel Design
- Electrical Panel Assembly



# CAPABILITIES CONTINUED

## Automated Inspection and Test

- End of Line Functional Test
- In-process Verification
- Vision Inspection
- Mechanical Failsafes
- Vibration Testing
- Leak Testing
- Signature Analysis Inspection Systems
- Automatic Gauging

## Robotics

- Rotary and Linear Positioning
- 6 Axis Robots
- Automated Part Feeding
- Automated Robotic Assembly
- Pick and Place Applications
- Automated Gauging

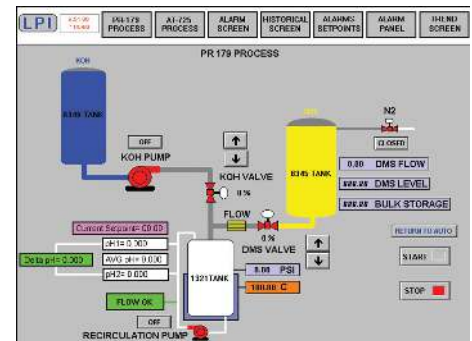
## Material Handling

- Line Conveyors
- RFID Pallet Tracking
- Return Elevators
- Bar Code Reading
- Work In Progress (WIP) Tracking
- Gantry Systems



## On-Site Technical Service

- Responsive On-Site Electrical and Mechanical Troubleshooting
- Machine Calibration
- On-Site Machine Maintenance
- Repair and Upgrades



## Custom Machines, Tooling and Fixtures

- Graphical Man-Machine Interfaces
- PLC/PC Controls
- Cognex, Keyence, and Banner Vision Inspection
- Servo Driven Ball Screw and Belt Actuators
- Hydraulic and Pneumatic Actuators
- Hydraulic and Pneumatic Controls
- Torque Tools
- 2D Data Matrix and Bar Code Scanners
- Safety Light Curtains and Guarding
- Conveyor Systems
- Welded and Aluminum Extrusion Frames
- Laser and Contact Linear Measurement
- Direct Part Marking

