Koops automatic assembly cells are designed and built for single or multi-part assemblies. The cells integrate the appropriate automation technologies resulting in consistent, high quality assemblies. Part fixtures and multi-axis tools assure optimum part positioning and processing. Each cell is designed to meet your specific production requirements.

**Benefits**
- Enables Lean Manufacturing
- Zero Defect Quality
- Operator Friendly
- Simple
- Reliable
- Portable and Flexible
- Scalable
- Facilitates Higher Production Volumes
- Processes Components that are Difficult for Humans to Process

**Features & Options**
- Heavy Duty Base Frame
- Precise Mounting Surfaces
- Fixtures
- Robotic and Servo Integration
- Bowl Feeders, Indexers
- Multi-Axis Screw Driver Spindles with Torque Monitors
- Machine Vision Integration
- Full Function Touch Screen Operator Interface
- Programmable Controller to Specific Application
- Process Monitoring and Data Acquisition
- Custom Tooling and Die Sets
- Custom Pallets and Conveyors

**Functions/Applications**
- Part Feeding/Inserting
- Assembling/Joining (Screw Driving, Bonding)
- Process Monitoring
- Function Testing
- Verifying
- Sorting and Indexing
- Marking/Labeling/Barcoding
- Vibration/Sound Monitoring

**Products**
- Steering Column Assembly
- Automotive Interior Headliner Assembly
- Automotive Exterior Panel
- Seat Frame Assembly Equipment
- Electrical Box Assembly

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Koops, Inc.
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ISO 9001:2008 Registered
Koops testing and quality assurance equipment is designed to your specific product requirements. Our customers in the automotive, aerospace, medical and other industries must profitably meet stringent regulative requirements. In-line and end-of-line test systems assure the highest product safety and quality.

### Benefits
- Accomplishes Process Control
- Enables Zero Defect Manufacture
- Eliminates Product Recalls
- Reduces Manufacturer’s Liability
- Delivers a Competitive Advantage

### Functions/Applications
- **Testing of:**
  - Torque
  - Electrical
  - Force
  - Noise
  - Leaks
  - Pressure
  - Fit and Function
  - Color Match
  - Cycle
  - Vibration

### Features & Options
- Vision Systems
- Data Collection
- Barcoding
- Radio Frequency Identification (RFID)
- Guarding
- Safety Interlocks

### Products
- Headliner Assembly and Test System
- Medical Product Contents, Labeling and Packaging Verification
- Aircraft Flight Control Actuator Test System
- Instrument Panel Assembly and Test System
- Package Tray Assembly and Test Line Presses
- Seat Assembly Test
- Automotive Interior Subassemblies
Koops joining systems are designed, built and tailored to your unique requirements to perform consistent, repeatable joining of components made of various materials. From simple to complex, from dedicated to flexible, we design and deliver the ideal cost effective, ergonomic and safe joining solution.

**Benefits**
- Product Reliability
- Quality Control
- Operator Safety
- Flexibility
- Cost Effectiveness
- Energy Efficiency

**Functions/Applications**
- Heatstaking
- Hot Plate Welding
- Sonic Welding
- Gluing
- Orbit-Forming
- MIG/TIG Welding

**Features & Options**
- Custom Fixtures
- Custom End-of-Arm Tooling
- Automatic Part Transfer
- User Friendly Operator Interface
- Temperature Controllers

**Products**
- Orbital Forming System
- Medical Battery Pack Resistance Welding
- Headliner Component Joining
- Trimring Joining
- Automotive Air Duct Gluing
Koops special purpose presses are engineered and built for long life and solid performance. Koops engineers have a proven track record of designing the most cost effective, yet reliable presses. Each press is designed to meet the customer’s specific product, throughput and footprint requirements.

**Benefits**
- Reliability
- Process Control
- Energy Efficiency
- Cost Savings

**Features & Options**
- Engineered Tubular Frames
- Precision Guided Platens
- Motion Control
- Power Units
- Temperature Controllers
- Full-Function Programmable Controller
- Touch-Screen Operator Interfaces
- Custom Tooling
- Heated Tooling
- Quick Tool Change Options
- Safety Guarding and Light Curtains
- Part Load and Unload
- Custom Paint Colors

**Functions/Applications**
- Part Positioning
- Heating
- Forming
- Cutting
- Edge Finishing
- Trimming
- Bonding
- Riveting

**Products**
- Form and Edgefold Press
- Floor Console Punch Press
- Metal Form and Rivet System
- Headliner Trim/Edgeform
Koops designs and builds custom robotic systems that perfectly integrate into the customer’s manufacturing and processing operations. Koops combines its comprehensive manufacturing knowledge with robot technology partners: FANUC, Epson, ABB, Motoman, Yamaha, and Mitsubishi Electric. Koops is an official North American Integrator of FANUC Robotics.

### Benefits
- Increase Quality
- Optimize Productivity
- Increase Throughput
- Increase Flexibility
- Optimize Floor Space
- Eliminate Operator Injuries

### Features & Options
- Custom End-of-Arm Tools
- Robot Bases and Platforms
- Turntables
- Guarding and Gates
- Safety Interlocks
- Vision Systems
- System Integration

### Functions/Applications
- Part Loading and Unloading
- Material Handling
- Assembly
- Inspection
- Sorting
- Dispensing
- Press/Machine Tending
- Part Welding
- De-Burring

### Products
- Robot Turntable Application
- Robot Cloth Handling Application
- Robotic Weld Cell
- Robotic Beam Loader
- Robotic De-Burr System
- Robotic Assembly System
- Robotic Trimring Ultrasonic Weld
- Robotic Glue Dispensing
Koops designs and builds special purpose ovens and heating systems for various manufacturing applications. Our extensive hands-on experience with infrared, convection and conduction methods results in the best energy efficient heat transfer system that solves specific processing challenges.

**Benefits**
- Operator Safety
- Energy Efficiency
- Reliability

**Functions/Applications**
- Part Heating
- Localized Part Heating
- Thermobonding
- Thermoforming
- Tool Preheating
- Part Annealing

**Features & Options**
- System Integration
- Part Conveying Options
- Guarding
- Controller Options
- Safety Interlocks
- Part Temperature Control
- Customer Exterior Finish

**Products**
- Vinyl Preheat Oven
- Part Annealing Oven
- Thermal-Forming
- Infrared Ovens
- Form Tool Heating System
- Adhesive Curing Oven
Koops designs and builds part and material handling systems by indexing and staging materials and components for just-in-time processing. The systems can be configured and arrayed to enhance lean manufacturing and can be outfitted to monitor the process from beginning to end.

Benefits
- Maximized Productivity
- Consistent Product Flow
- Reduced Injuries and Increased Safety
- Reduced Product Cost
- Increased Product Cleanliness and Quality

Functions/Applications
- Pallet Systems
- Product Load/Unload
- Pick and Place
- Turntables
- Rotary Indexers
- Accumulators
- Special Conveyors

Features & Options
- Vision Systems
- Sensing Systems
- Barcoding and Identification Features
- Guarding and Safety Interlocks
- System Integration

Products
- Roll to Blank Feeding System
- Fiber Board Loading and Transfer System
- Glass Handling Accumulators and Conveyor System
- Automotive Bumper Staging System
- Seat Frame Palletized Material Handling and Testing System
- Medical Battery Pack Pick and Place
Koops workstations are designed and built with the operator in mind. Each workstation is able to be customized and configured to eliminate unsafe or wasted motion and to adapt to process and product mix changes. The workstations can be arrayed to enhance lean manufacturing which focuses on the elimination of waste resulting from excessive waiting or delay times and excessive transportation of product components.

**Benefits**
- Koops workstations facilitate all nine of the core elements of lean manufacturing:
  1. Lean Equipment
  2. Elimination of Waste
  3. Flexibility
  4. Visual Factories
  5. Error Proofing
  6. Point of Use Storage
  7. Quick Changeover/Setup
  8. Organization
  9. Just-in-Time Production

**Functions/Applications**
- Assembling
- Screwing
- Clipping
- Punching
- Packaging
- Heatstaking
- Orbital Riveting
- Gluing
- Testing and Quality Assurance
- Repairing

**Features & Options**
- Custom Tooling/Equipment
- Overhead Lighting
- Guarding and Light Curtains
- Powered Lift
- Casters
- Operator Fan
- Operator Interface
- Power Outlets
- Adjustable Work Surfaces
- Part Bins and Staging
- Fork Pockets for Transport