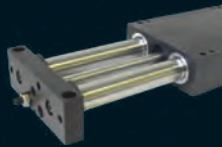
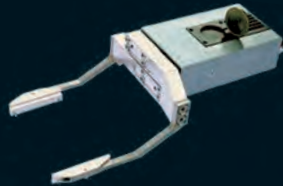
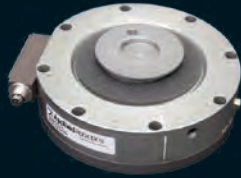


# Applied Robotics™

TOOL CHANGING ■ COLLISION DETECTION  
GRIPPING ■ DOCKING ■ ACCESSORIES



**SOLUTIONS FOR  
MORE/FASTER/BETTER**



**We can help you handle  
just about *anything*.**

***We provide specialized robotic, end of arm tooling  
(EOAT) and connectivity solutions for:***

- **Assembly**
- **Welding**
- **Connectivity**
- **Docking**
- **Dispensing**
- **Precision Machining**
- **Material Handling**
- **Stamping**
- **Packaging**
- **Collaborative Robotics**
- **Machine Tending**
- **Lab Science**
- **Harsh/Hazardous Environments**
- **Sub-sea/Underwater**

**Applied Robotics is an expert** at bringing greater speed, flexibility and efficiency to your automation based process. Our product set is comprised of tool changers, collision sensors, grippers and other mechatronic accessories engineered to bring your automation concept to reality. Material handling, assembly, cutting, dispensing, machining and welding are just some of the many applications supported.

# A company of engineers— who *love* to solve problems.

- Downtime elimination experts
- One stop shopping for automation tooling and accessories
- Valuable guidance based on 30+ years of experience
- Dedicated technical support staff
- Elegant design and rigorous testing
- Clear and informative documentation including 3-D models

## MITIGATE RISK BY TEAMING WITH EXPERIENCED PROFESSIONALS

who work directly with you to evaluate and define your tooling needs. That means understanding your industry and unique requirements. We never stop looking at new and innovative ways to do more, do it faster and do it better. Our extensive field proven product line has the components to tackle almost any robotics wrist down application and our accessory “tool box” offers many complimentary support items needed to complete your automation cell. If an automation project is in your future, you need to know Applied Robotics



## Tool Changing

**DON'T STOP YOUR PRODUCTION LINE** so a machine mechanic can swap tooling; let the robot swap tools on the fly with an Applied Robotics automatic tool changer. Our connection technology is designed to improve and quicken any process requiring frequent connection/disconnection of tooling and support utilities — automatically. When it comes to robotics, maximizing uptime is critical. Rely on the safety and reassurance of a positive locking cam that “wears in” and maintains strength over time.

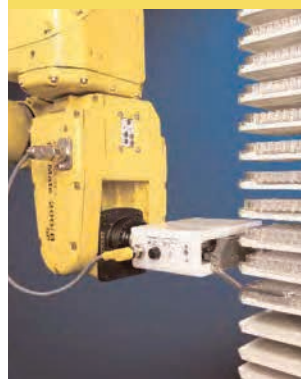
- Ten models to cover payloads up to 1,500kg.
- Incorporates standard ISO 9409-1 bolt patterns
- Couple/uncouple sensing available on all units
- Supports all popular communication protocols
- Flexible mounting options support customized utilities
- Lifetime guarantee on coupling mechanism



## Gripping Applications

**APPLIED ROBOTICS OFFERS A WIDE VARIETY** of pneumatic and electric servo grippers in both standard and heavy duty versions to meet every challenge and budget. From vacuum, O-ring, and needle styles to traditional angular and parallel configurations with long jaw travel and 180° rotation, we have a gripper to fit your needs. Even specialized applications requiring miniature, low profile, sealed, food grade or scalable bag handling, are no problem. Whether it's car doors in an assembly line, test tubes in a clean room, or 100lb bags of cement in a dusty harsh environment, we are your partner in success.

- Pneumatic
- Intelligent Electric Servo with integrated controller
- Vacuum
- Food Grade
- Sealed for harsh environment
- Finger design service available



# A proud parent of the automation revolution since 1983

**WITH OVER 30 YEARS** of experience engineering complex robotic and automation equipment, ARI continues to engineer state of the art solutions allowing our customers to stay at the forefront of their respective industries.



*The world's first automatic tool changer*

Our first product was a custom designed specialty gripper. We also designed the **world's first automatic tool changer** for Hughes Aircraft. These two products became the foundation of the company and set the wheels in motion for Applied Robotics to become the premiere supplier of end-

of-arm tooling (EOAT) to the automation industry. We've developed extensive experience in providing industry and

application specific solutions for the most complicated material handling and process challenges.

Founded by engineers and still engineering-centric, our engineering and technical support staff have over 80 years of collective experience. In addition to world renowned engineering support, our geographic footprint is worldwide. Our distribution network encompasses 22 locations covering 6 continents; the sun never sets on Applied Robotics installed base. From the Motor City to Mumbai, our equipment is working and so is our network of experts. Our partnering philosophy is based on mutual commitment, investment and integrity. The result is a successful implementation and positive outcome for everyone involved – Applied Robotics, our partners and our clients.

***If it flies, floats, drives, dives, or shoots into space chances are we had a hand (or a gripper) in building it.***

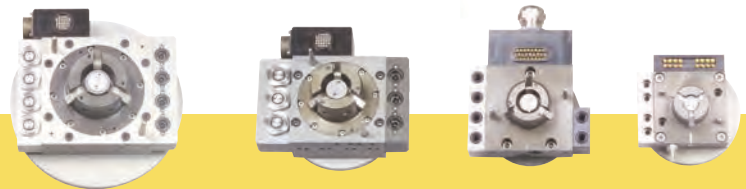


## Collision Detection & Tooling Protection

### **WHO PROTECTS YOUR SIGNIFICANT INVESTMENT IN TOOLING?**

We do! Applied Robotics collision sensors are at work on just about every type of assembly line in the world — proof of their value. Our *QuickSTOP* collision sensors with dynamically variable sensitivity operate on a regulated air supply which provides positive pressure to hold the collision sensor and tooling rigid during normal operation. Upon impact, the *QuickSTOP* will release the air pressure, relax the tool and signal the robot to stop. Another tool protected and another day's productivity saved.

- Dynamically variable trip points
- Permanent repeatability
- Use on linear actuators, robots, pick-and-place machines
- Detects angular, rotational and compressive forces
- Arc weld version with debris screen
- Water jet version with water resistant boot



## Docking & Connection Technology

**APPLIED ROBOTICS'** connection technology is designed to improve any process requiring frequent connection/disconnection of utilities — automatically.

- Unique wear-compensating, fail-safe cam latching mechanism
- Simultaneous coupling of all utilities, such as communications, gas, liquid, electrical, and optical
- Reduce line changeovers from hours to minutes
- Minimize dedicated floor space
- Contacts in electrical block are spring loaded to reduce wear from repeated coupling/uncoupling and are field replaceable



# Extensively tested products

**GUINEA PIGS ARE CUTE**, but let's face it, nobody wants to be one!

With a highly skilled Engineering staff and a 1,500 square foot robotic test cell; nothing leaves our facility without the certainty that it will safely exceed any and all performance requirements mandated by the intended application.

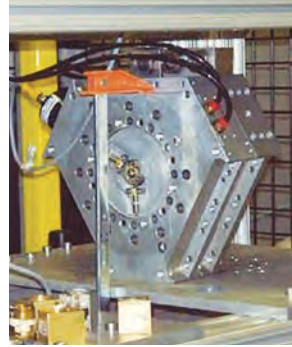
ARI alleviates your concern and replaces it with confidence. It's all about headroom. Each element of our product line has been engineered to exceed published specifications, if we say the part will perform, it will.

We stake our reputation



*Heavy duty bag gripper shown lifting bags of rock salt off of conveyor during simulated product trials.*

on it. When looking at the Applied Robotics catalog, it's obvious we sell automation equipment. Once you do business with us, it becomes clear that we deliver peace of mind. Relax and trust in Applied Robotics and the 30+ year reputation of solving problems and eliminating worry. We've got your back.



*Cycle testing of piston and cam lock mechanism accomplished on a test stand which continuously couples and uncouples mating sides of Applied Robotics Tool Changers for literally millions of cycles.*

The extensive range of testing includes: dimensional verification, load capacity analysis, long term cycle testing, rotational force/moment validation, as well as simulated product trials.

*You might recognize some of our customers*

Abbot Labs  
Kraft  
Beech Nut  
Hershey  
Hewlett Packard  
Ford  
Birds Eye  
BMW  
MIT  
Freightliner  
GE  
Siemens  
Pepsi  
Bose  
Glaxo Smith Kline



## Robotic & Automation Accessories

**APPLIED ROBOTICS** offers a variety of accessories that add value to our products and solutions including utility modules, docking stands and compliancy devices, as well as other automation products commonly needed to assemble a fully functioning automation cell. From power clamps and structural aluminum profiles to safety solutions and custom gripper fingers... welcome to the Applied Robotics accessory "tool box." It's everything you need to develop a complete robotic automation solution.

- Tool Storage Fixtures
- Machine tools
- Vacuum cups
- Cabling
- Gripper fingers
- Rotary Actuators
- Work handling devices
- Linear slides



# Networks and connections that cover the world



Welcome to Applied Robotics where our global reach is facilitated through a network of partners who are as passionate about our products and solutions as we are.

With them we have a world encompassing presence of support and spare parts.

Our presence extends into memberships and leadership positions in many different organizations that are mission critical to our field and those of our customers.



## LEARN MORE

Contact our customer service department at  
**1 (518) 384-1000** or **info@appliedrobotics.com**



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