Collaborative robots are safe to be around, require a much smaller footprint, and are inexpensive enough to provide a rapid return on investment. They are the solution of choice for manufacturers looking to boost productivity and quality in their operations. An industry that once looked to automation for volume production is now seeking flexibility, as labor rates rise, consumer demands constantly change and companies compete in a global market.

**Integrated**
Assembly made easy with integrated vision

**Intelligent**
3D robot position guidance with advanced 2D vision.

**Interactive**
Easy, safe collaboration with intuitive, hands-on teaching.

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**Omron TM Robots**

- Fast and simple programming
- Built-in intelligent vision
- Fast changeover using TM vision and Landmarks
- Plug & Play external Cameras
- Industry 4.0 Ready

**Digital I/O:**
- 16 Dis & 16 Dos at the controller
- 4 Dis & 4 Dos at the tool

**Analog I/O:**
- 2 Analog inputs and 1 output at controller
- 1 Analog input at the tool

**Communication:**
- RS232
- TCP/IP (Master)
- Modbus TCP/RTU (Master & Slave)

**I/O Interface:**
- 3 communication ports
- 1 HDMI port
- 3 LAN ports
- 4 USB 2.0 ports
- 2 USB 3.0 ports

**Integrated Vision:**
- 5M pixels,
- color (AOI) tasks: 5M;
- Others: 1.2M

---

**The TM’s software interface simplifies risk assessment**

1. Check risk parts
2. Robot will adjust and set the speed limit automatically
Plug and Play Accessories

- Force Sensor
- External Vision
- Adaptive ROBOTIQ Grippers
- Vision Land Mark
- Screw Driver Solution
- Robot Stand (TM5)
- Mobile Work Station (TM5)

Extended Robot Range

240 VAC & 20-60- VDC Models

<table>
<thead>
<tr>
<th>Model</th>
<th>TM5</th>
<th>TM12</th>
<th>TM14</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TM5-700</td>
<td>TM5M-700</td>
<td>TM5-900</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>22.1</td>
<td>22.6</td>
<td>33.3</td>
</tr>
<tr>
<td>Max Payload (kg)</td>
<td>6</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Reach (mm)</td>
<td>700</td>
<td>900</td>
<td>1300</td>
</tr>
<tr>
<td>Max Speed (m/s)</td>
<td>1.1</td>
<td>1.4</td>
<td>1.3</td>
</tr>
<tr>
<td>Repeatability (mm)</td>
<td>±0.05</td>
<td>±0.01</td>
<td></td>
</tr>
<tr>
<td>IP (arm)</td>
<td></td>
<td>IP54</td>
<td></td>
</tr>
</tbody>
</table>

Omron TM Robot’s industrial applications

- Assembly
- Dispensing
- Machine Tending
- Palletizing
- Pick and Place
- Screwdriving
- Visual Inspection
COLLABORATIVE MOBILE ROBOTS

Autonomous Intelligent Vehicles

Factory of the future? It is already possible! We show you the solution

Flexible
Customizable payload designs
- Conveyor Tops
- Collaborative Arms
- Carts
- Cabinet Tops
- Forklift Designs
- And much more

Safe
Full Safety Compliant
- Works collaboratively with people
- Avoids Obstacles
- Easy addition to e-stop equipment

Scalable
Up to 100 vehicle fleet
- Job dispatch and management
- Centralized configuration
- Map management
- Traffic flow control
- Centralized point of communication

Easy to deploy
True Natural Feature navigation
- No facility modification
- No need to pre-program path
- Self mapping and on-board PC
- Quick deployment

Robust
24x7 Productivity
- Opportunistic Charging
- Proven world wide install base

LD SERIES

FEATURES:
- Fully Autonomous Intelligent Vehicle (AIV)
- Replaces repetitive human effort & automated guided vehicles
- No facility modification required
- Flexible product transportation
- Works well in dynamic environments
- Navigates through the use of a digital map
- Manages power and self-charging
- Programmable voice and audio prompts

SPECIFICATIONS:
- 60, 90Kg payload
- 105 Kg payload for cart option
- Up to 13 hour run time per charge
- High Speed (upto 1.8m/s)
- Wireless communications
- Telnet protocol compliant
- Charging time 3.5 hours
- 7 year battery life
- 5-30 VDC available for integration

Contact us for a complimentary consult on your material handling requirements
Let us help you mobilize your operations

Flexible solutions for manufacturing

Line loading & unloading with Conveyor top integration

Transport Totes autonomously

Works Safely around people

Autonomous solutions for logistics:
- Traceability
- Warehousing
- Distribution

Intelligent Fleet management

INTEGRATABLE TO THESE OPTIONS

<table>
<thead>
<tr>
<th>CONVEYER TOP</th>
<th>CART / BIN</th>
<th>ROBOT ARM TOP</th>
<th>CABINET TOP / COURIER</th>
</tr>
</thead>
</table>

We offer complimentary Proof of concept testing and ROI calculations
OMRON INDUSTRIAL ROBOTS

FROM DESIGN TO IMPLEMENTATION TO PRODUCT CHANGEOVERS

Save Time and money across the entire process

HIGH SPEED S.C.A.R.A ROBOTS

<table>
<thead>
<tr>
<th>eCobra 600</th>
<th>eCobra 800</th>
<th>eCobra 800 inverted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radial Reach</td>
<td>600mm</td>
<td>800mm</td>
</tr>
<tr>
<td>Max Payload</td>
<td>5.5kg</td>
<td>5.5kg</td>
</tr>
<tr>
<td>Max Cycle Times(s)</td>
<td>0.45</td>
<td>0.54</td>
</tr>
<tr>
<td>Repeatability</td>
<td>±0.017 mm</td>
<td>±0.017 mm</td>
</tr>
<tr>
<td>Controllers</td>
<td>Robot controller built inside the robot(saves floor space)</td>
<td></td>
</tr>
<tr>
<td>Protection</td>
<td>IP20, IP05 option, Cleanroom class 10 option</td>
<td></td>
</tr>
</tbody>
</table>

MID SIZE RANGE S.C.A.R.A ROBOTS

<table>
<thead>
<tr>
<th>Cobra 450</th>
<th>Cobra 500</th>
<th>Cobra 650</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radial Reach</td>
<td>450mm</td>
<td>500mm</td>
</tr>
<tr>
<td>Max Payload</td>
<td>5kg</td>
<td>5kg</td>
</tr>
<tr>
<td>Max Cycle Times(s)</td>
<td>0.64</td>
<td>0.6</td>
</tr>
<tr>
<td>Repeatability</td>
<td>±0.02mm</td>
<td>±0.02mm</td>
</tr>
<tr>
<td>Controllers</td>
<td>Robot controller built inside the robot(saves floor space)</td>
<td></td>
</tr>
<tr>
<td>Protection</td>
<td>IP20</td>
<td></td>
</tr>
</tbody>
</table>

- Controllable with Omron Machine Controller
- Ease of programming-Wizard based
- PC based platform
- Full solution including vision and conveyor tracking through one software
- Scalable System with add on Robots available
- High Speed Pick, place and packaging

come visit our in-house robotic test facility
High Speed compact robots for pick & place, packaging, assembly, machine tending and much more

Free of charge software with easy wizard based programming and powerful simulation

Small footprint and inverted mounted robots available for tight spaces

Mix and match robots and control from one controller

**Optimized to work together**
UNDER A SINGLE POINT OF CONTROL

---

**PARALLEL ROBOTS**

<table>
<thead>
<tr>
<th>HORNET 565</th>
<th>QUATRO 650</th>
<th>QUATRO 800</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RADIAL REACH</strong></td>
<td>565 mm (425 mm-Z-axis)</td>
<td>650 mm (500 mm-Z-axis)</td>
</tr>
<tr>
<td><strong>MAX Payload</strong></td>
<td>8 Kg</td>
<td>15 Kg</td>
</tr>
<tr>
<td><strong>MAX CYCLE TIME(s)</strong></td>
<td>0.32</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>REPEATABILITY</strong></td>
<td>±0.10 mm</td>
<td>±0.02mm</td>
</tr>
<tr>
<td><strong>CONTROLLERS</strong></td>
<td>robot controller built inside the robot (saves floor space)</td>
<td></td>
</tr>
</tbody>
</table>

---

**VIPER650**

- 653mm
- 855mm
- 5kg
- -
- +0.02mm
- +0.03mm
- Small Panel mount controllers
- IP40/IP44: main body, IP65 robot joints, cleanroom class 10 option

**VIPER850**

---

**QUATRO**

- USDA-accepted for meat and poultry processing
- Patented four-arm rotational platform
- Very high speed - 0.30s cycle time

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**Aztec Electrical Supply**

Concord 905.761.7762
Mississauga 905.282.0370
Burlington 905.637.4227
Cambridge 519.650.9797
1-866-843-0033 aztecsupply.com
FLEXIBLE FEEDING:
Adept Anyfeeder

FEATURES:
- Backlight: red, white, Infrared
- Multiple Feed Surfaces
- Rugged conveyor-less design
- Automatic purge to separate & flip

BENEFITS:
- Feeds a multitude of products
- Eliminates multiple feeder systems
- Rapid part changeover
- No fixturing required
- Handles multiple material types

SINGLE PACKAGE SOLUTION:
VISION + ANYFEEDER + CONVEYOR TRACKING

OMRON FULL SOLUTION

Omron S.C.A.D.A. package

SQL Connectivity

Register for a complimentary Robotics training at - robotics@aztecsupply.com
ROBOTIC FORCE SENSING

**FEATURES:**
- Extremely high resilience to mechanical loads
- For extreme loadings
- High flexibility, even at very low temperatures

Sensing Package Applications:
- Quality inspections
- Guided insertion
- Dynamic packaging
- Live production force display
- Production traceability

**FORCE SENSOR**

Robot touches an object to detect force/torque exerted

Similar to the reflex action in our nervous system, the sensor reacts to an outside force

**HIGH FLEX ROBOTIC CABLE**

**FEATURES:**
- Complete solution for any make/model
- Available in 3 sizes: 36, 52, & 70mm
- Installs quickly on either side of the robot
- Universal mounting hardware

**ROBOTIC DRESSOUT**

Enhance your production productivity with us - aztecsupply.com
Handling

The Handling Guide Online (HGO) is an all-in-one configuration and ordering system. This unique online engineering tool supports you in configuring and requesting your standard handling system. HGO cuts your engineering and design time by sizing a perfect system. It then saves you more time by automatically generating 3D CAD models and documentation. The Festo Motion Control Package (FMCP) is a control system that handles coordinated motion for up to 6 axes, providing an integrated robotic solution with kinematics for H, T, 2D & 3D Festo standard gantry systems. Cartesian motion applications can be configured and integrated quickly with function blocks and AOI’s for Rockwell, Siemens, Omron, and Beckhoff. HGO with FMCP offers control, motion, and handling as an integrated package.

FESTO CONTROL PACKAGE

Includes AOI/Function Block

CONFIGURE GANTRIES ONLINE IN MINUTES
GET ASSEMBLED GANTRIES SHIPPED

MECHANICAL GRIPPERS

Enhance your production productivity with us - aztecsupply.com
**Automation Series (Aluminum Frame)**

**AS 40:**
**Belt Conveyor**
- Rigid, single-piece aluminum frame
- Optional V-Guide Belts
- High speed rolling Nosebar Tails
- AC or Brushless DC Motors
- Unique Pivot™ Drive package
- Push-button Tension Release Tail

**Specifications**
- Widths: 2" to 24"
- Lengths: up to 20'
- Loads: up to 120 lbs
- Speeds: up to 400 FPM
- Lengths: up to 26'

**AS 65:**
**Center Drive**
- Drive can be positioned at any point along the length of the conveyor
- Additional lengths up to 26'

**Specifications**
- Widths: 8" to 24"
- Lengths: up to 20'
- Load: up to 120 lbs
- Speeds: up to 200 FPM
- Angles: 30°, 45°, 60°

**AS 40Z:**
**Angled Frame**

**Specifications**
- Widths: 8” to 24”
- Lengths: up to 20’
- Load: up to 120 lbs
- Speeds: up to 200 FPM
- Angles: 30°, 45°, 60°

**HYDROCLEAN:**
**Sanity Conveyors**
- Stainless steel, sanitary design
- Cleaning without tools
- NSF Certified & BISSC Certified with FDA and USDA approved belting

**Fast, Efficient Cleaning**
- Applications including food products, pharmaceutical, medical devices, clean rooms and more

**Specifications**
- Widths: 4” to 24”
- Lengths: 42” to 18’
- Load Capacity: 120 lbs

**125 SERIES**
(Steel Frame)
- Single piece steel frame
- Very low profile (1.89”)
- Bearing maintenance required
- Unique snap-in sealed tail assembly — makes belt replacement quick and easy
- Cleats are available in 5 heights: 5mm, 1/2 in, 1 in, 2 in, 3 in

**Specifications**
- Widths: 2” to 24”
- Lengths (Standard): 18” to 12’
- Lengths (Extended): 13’ to 23’
- Profile: 1.89” high
- Load: up to 450 lbs
- Speed: up to 225 FPM

**300 SERIES:**
**Indexing Conveyor**
- Precision indexing accurate to ±.015”
- Cleats custom-molded
- Convertible cleats for changing applications

**Specifications**
- Widths: up to 18”
- Lengths: up to 24’
- Belt: 10mm pitch teeth
- Speeds: Up to 2,000 FPM

**400 SERIES:**
**Heavy Duty Conveyors**
- Heavy-duty load carrying capacities up to 600 lbs
- High speeds — up to 360 FPM
- V-Guide option for side-loading or reversing applications

**Specifications**
- Widths: 6” to 48”
- Lengths: up to 36’
- Profile: 3” high
- Loads: up to 600lbs
- Speeds: up to 360 FPM

**VALUE ADDED SERVICES:**
- BACKLITING – supports machine vision
- MULTIPLE BANDS – port accessible from bottom
- CUSTOM STANDS & SLIDE TABLES – support for multiple applications
- ELEVATOR CONVEYORS – vertical lift to transfer between conveyors

Configure your conveyor online in no time - qcconveyors.com