AUTOMATED GUIDED VEHICLES
RAYMOND COURIER™
RAYMOND
BUILT TO PERFORM. DESIGNED TO WORK TOGETHER.

For 95+ years, The Raymond Corporation has built a reputation based on top-notch quality, reliability, and exceptional customer service.

We design and build the best lift trucks in the business. We provide technologies, systems, and solutions that bring day-to-day warehouse and distribution operations to a new level of performance. And we support customers with a network of skilled service centers and technicians unmatched in the industry.

From our eco-efficient trucks and telematics to our warehouse optimization and flexible financing, Raymond’s big-picture approach and precisely targeted solutions are designed to adapt and grow with your business.

Our innovations in energy savings, space utilization, ergonomics, manufacturing quality, and fleet optimization—combined with our best-in-class products and services—work together to increase efficiency and lower costs throughout your material handling operations.

Raymond® stands ready to help you run better and manage smarter—end to end.
AUTOMATING A SOLUTION FOR TODAY’S LABOR CHALLENGES

From skilled to reliable, permanent or seasonal, labor is becoming increasingly hard to find and difficult to afford. Automation is becoming an inevitable and invaluable option for warehousing, manufacturing, and distribution operations. Machine power is augmenting manpower in an effort to keep goods moving, keep workers happy, and keep costs down.

Automated Guided Vehicles (AGVs) like the Raymond Courier truck offer a cost-effective solution for today’s labor challenges by efficiently and reliably performing a variety of repetitive transportation and pallet handling tasks.

FOR MORE ENGAGED & PRODUCTIVE EMPLOYEES

By freeing operators from repetitive, low-value tasks, Raymond Courier trucks can create a more rewarding work environment, raising engagement and lowering turnover.

+ Share responsibilities between man and machine to enhance productivity and overcome specific business challenges.
+ Transform skill sets by focusing on advanced knowledge tasks.
+ Empower employees by allowing them to manage the equipment now performing the manual tasks they once did.
+ Reduce the ergonomic impact of repetitive, physically demanding tasks.

While labor costs continue to rise, automation is becoming increasingly simple, accessible, and affordable.

RAYMOND AUTOMATED GUIDED VEHICLES

Optimize your allocation of resources with a series of Raymond Courier™ trucks that offer a range of automated capabilities and efficiencies.

COURIER 3220 AUTOMATED TOW TRACTOR
COURIER 3020 AUTOMATED TOW TRACTOR with optional Li-Ion Lithium-Ion Arch
COURIER 3010 AUTOMATED PALLET TRUCK
COURIER 3030 AUTOMATED STACKER
COURIER 3220 AUTOMATED TOW TRACTOR
RAYMOND AUTOMATED GUIDED VEHICLES

COLLABORATIVE AUTOMATION

For more engaged & productive employees

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With labor accounting for 74% of a lift truck’s operating costs, automated solutions like the Raymond Courier trucks offer dramatic cost savings opportunities, fast payback, and a low total cost of ownership.

TECHNOLOGY COSTS
LABOR COSTS

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TECHNOLOGY COSTS
LABOR COSTS
RAYMOND COURIER—FLEXIBILITY, SIMPLICITY, AND A FAST RETURN ON INVESTMENT

No matter where you are in the process of adopting automation, Raymond Courier trucks offer an easy-to-implement, vision guided solution requiring no changes to your facility or interruption to your workflow.

Operational from day one and easily programmed and reprogrammed internally for exceptional flexibility and scalability, Raymond Courier trucks deliver fast payback and low total cost of ownership.

LOWER TOTAL COST OF OWNERSHIP—HOW IT ALL ADDS UP

+ easy implementation with no infrastructure change or business interruption
+ quick commissioning time with ease of setup, the truck can be operational from day 1
+ superior flexibility and productivity with manual or automated operation, and one employee able to manage multiple trucks
+ simple to use with an intuitive operator interface that allows for quick, easy route teaching and truck dispatching
+ ongoing scalability with routes that can be quickly transferred between trucks for quick redeployment to different facilities, locations, shifts or applications
+ reduces labor costs and employee turnover by automating repetitive applications and freeing up workers to focus on more value-added tasks
+ maximizes resources and productivity with one operator simultaneously managing multiple trucks
+ enjoys complete flexibility and scalability with users able to easily change routes and reprogram trucks to meet your changing needs
+ minimizes maintenance and maximizes time on the floor with the most durable and reliable truck platform on the market

LOWER TOTAL COST OF OWNERSHIP—HOW IT ALL ADDS UP

LEARN THE ROPES. REAP THE REWARDS.

Raymond makes it easy to integrate Raymond Courier trucks into your operation, offering you the long-term tools to work efficiently, productively, and collaboratively with labor.

Raymond + delivers your trucks & provides ongoing service and support + programs your routes + trains operators how to program and reprogram your trucks

2 YEARS RETURN ON INVESTMENT (ROI)

LEARN THE ROPES. REAP THE REWARDS.
A CASE FOR THE RAYMOND COURIER

Total Estimated Cost Installed

Labour

Fully Burdened Annual Wage

Number of Shifts

Variables

Absentee Replacement Operator (ARO) %

New Employee Startup Cost

Annual MH Employee Turnover %

Financials

IRR 3 year

NPV 3 year

ROI 3 year

Net Cumulative Savings

Payback

Payback Period

FTEs Redeployed

Cost of not automating this project

Purchasing, Productivity vs. the Cost of Doing Nothing

Sample Application:

Finished goods moving from manufacturing into short- and long-term storage.

By enhancing efficiency and reliability, and allowing you to redeploy personnel to optimize productivity, Raymond Courier trucks offer an immediate impact on your bottom line and a fast payback—in this case, under 18 months.

LOW TOTAL COST OF OWNERSHIP

Pricing shown for the Raymond Courier is all-inclusive. There are no additional fees charged by other manufacturers for services such as:

- Application/installation engineering
- Post-sale support
- Product training
- Product retraining/new routes
- Product demonstrations

Notes:

- Figures shown are representative of one customer’s particular application. Actual numbers, savings, and payback time for your specific location and application may be more or less.

- *Estimates shown are based on the specific application and may vary.

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ENGINEERED TO TAKE A LOAD OFF YOUR MIND

Raymond Courier trucks work collaboratively and in tandem with each other, side by side with your operators, and hand in hand with your conveyors, forklifts, and other equipment. From horizontal load transport to vertical pallet handling, simple cross-docking to more involved workflows, Raymond Courier trucks offer the capabilities to seamlessly and reliably automate a variety of tasks in warehousing, distribution, and manufacturing operations.

IDEAL ENVIRONMENTS & APPLICATIONS

WAREHOUSING/DISTRIBUTION/3PL
- Inbound Receiving to Storage
- Picking to Outbound/Packaging
- Long Haul Transfers to Other
- Storage Locations

Types of Warehouses:
- Consolidation Warehouses / Cross-Dock Distribution
- Centers / Break-Bulk Warehouses / Mixing/Order-Assembly / Distribution Facilities

MANUFACTURING
- Kitting Transfers
- Parts-to-Line
- End-of-Line to Stock or Dock
- Finished Goods
- Inbound Putaway

IDEAL MARKETS
- Distribution
- Food + Beverage
- Aerospace
- Consumer
- Automotive

Simplified illustration of a combined warehouse & manufacturing facility.
CHOOSING THE PERFECT PLATFORM

Designed to operate on their own and handle a variety of functions, Raymond Courier trucks enhance reliability, consistency, and efficiency at all phases of your operation. From inbound to outbound, each model can automate specific applications to address the unique needs of your business.

COURIER 3010 AUTOMATED PALLET TRUCK
Horizontal transport, ideal for transporting pallets over long hauls, for put-away, cross-docking and load staging applications
- Reverse motion and obstruction sensor (optional)
- Auto pallet engagement and drop-off
- Universal tapered forks
- Single and double fork lengths available

COURIER 3020 AUTOMATED TOW TRACTOR
Horizontal transport, ideal for pulling cart or trailer loads in batch picking, parts-to-line and end-of-line (automated conveyor cart) applications
- Automatic hitch and unhitch with dual slots for hitch height adjustment (optional)
- Low Clearance Arch available for restricted-height areas down to 63" (optional)

COURIER 3220 AUTOMATED TOW TRACTOR
Horizontal transport, ideal for pulling carts or trailers with heavy loads on flat ground or ramps in batch picking, parts-to-line and end-of-line (automated conveyor cart) applications
- Dual slots for hitch height adjustment (optional)
- Low Clearance Arch as standard design; can operate under low hanging structures

COURIER 3030 AUTOMATED STACKER
Horizontal transport and vertical pallet handling capability; versatile option ideal for pick-up and drop-off, end-of-aisle, end-of-line and conveyor picking applications
- Reverse motion and obstruction sensor (optional)
- Auto pallet engagement
- ITA fork design

<table>
<thead>
<tr>
<th>3010 AUTOMATED PALLET TRUCK</th>
<th>3020 AUTOMATED TOW TRACTOR</th>
<th>3220 AUTOMATED TOW TRACTOR</th>
<th>3030 AUTOMATED STACKER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type</strong></td>
<td>Pallet Truck</td>
<td>Tow Tractor</td>
<td>Tow Tractor Stacker</td>
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<tr>
<td><strong>Ramp Capacity</strong></td>
<td>500 lb @ max 5%</td>
<td>7,500 lb @ max 11%</td>
<td>8% at max load</td>
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<tr>
<td><strong>Overall Length</strong></td>
<td>160.3&quot;</td>
<td>66.1&quot;</td>
<td>75.7&quot;</td>
</tr>
<tr>
<td><strong>Turning Radius</strong></td>
<td>123.4&quot;</td>
<td>60.1&quot;</td>
<td>69.8&quot;</td>
</tr>
</tbody>
</table>

All Models: 24V Battery
Floor to Top of Vision Guidance Unit: 90.2" (Models 3010, 3020, 3030)
Floor to Top of Operator Interface Unit: 60.1" (Models 3220 and 3020 Low Clearance Arch option)
While automating may be intimidating, Raymond can simplify your adoption and implementation with an array of professional teams and tailored technologies, including:

+ Experienced consulting services, application engineers, and automation systems experts
+ Integrated system solutions including automated guided vehicles, storage and retrieval systems, and semi-automated operator navigation systems
+ The industry’s most comprehensive telematics offering data and insights to measure where you stand

**Optimization Before Automation**

The era of automation is here, ready to keep your business productive and competitive. But organizations need to rethink before they retool. Automation takes preparation.

Prior to the introduction of any sort of automated system, your warehouse and processes should first be analyzed and optimized by evaluating different aspects of your operation, including:

**Labor Utilization and Operator Productivity:**
- Is your labor force not meeting escalating demands primarily due to limited capacity?
- Or, is your labor force’s capacity being diminished by performing non-value added or redundant tasks?

**Size and Type of Your Lift Truck Fleet:**
- Is the velocity of your warehouse being impacted by using the incorrect type of powered industrial equipment to move product?
- Are your fleet maintenance costs inflated by prematurely servicing under-utilized “spare” “just-in-case” vehicles?

**Traffic Patterns and Bottlenecks in Your Workflow:**
- Are your current work and traffic flows very dynamic or even random which can cause congestion or inefficient routes?

Get More Out of Your Workspace, Workflow, and Workforce

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CONTROL YOUR TRUCKS—AND YOUR BUSINESS

Any automated system is only as good as the software behind it. And Raymond Courier trucks offer three platforms designed to do everything from controlling your trucks to helping you manage your operation and make more informed decisions:

VISION GUIDED TECHNOLOGY—FOR RELIABLE, PREDICTABLE NAVIGATION
Raymond Courier trucks can operate on their own in virtually any warehouse environment thanks to a powerful, flexible, reliable vision guided system. Engineered by Seegrid, a pioneer and market leader in 3D vision navigation, and based on evidence grid technology, the system uses a series of truck-mounted cameras and sensors to provide a 360° view of your environment. Rich, contextual information allows the trucks to work by recognizing locations, identifying obstructions, and controlling behaviors.

SUPERVISOR SOFTWARE—FOR CONTROL OF YOUR TRUCKS
Supervisor Software lets you monitor your Raymond Courier trucks from any web-enabled computer or mobile device—anywhere, anytime—with real-time status updates.

iWAREHOUSE® TELEMATICS

SUPERVISOR SOFTWARE—FOR CONTROL OF YOUR TRUCKS

FLEET STATUS
Provides real-time updates on truck locations and status for easy tracking and monitoring.

INTERSECTION MANAGER
Controls traffic by granting or withholding access requests from individual trucks for optimum flow throughout your operation.

SWITCHBOARD
Allows easy programming with PLC integration, customizable commands, rules, and notifications to tailor the system to your needs.

SUBWAY PLATFORM
Displays an estimated time of arrival at pick-up and drop-off points for more timely and efficient operator/truck interactions.

VISION VS. LASER

VISION GUIDED TECHNOLOGY

GRAPHICAL REPRESENTATION
For those customers who have lift truck technicians on-site, Raymond offers Customer Technician Courses. Training is available at Raymond headquarters, at your facility or your local Raymond authorized Solutions and Support Center.

**iTRACK®**
The iTRACK Asset and Cost Management System helps to reduce your overall cost of ownership. It provides accurate, actionable maintenance data and reports—from individual assets, to a fleet at a single location, or across your entire enterprise. iTRACK is your anytime, anywhere web-based asset management system.

**iWAREHOUSE®**
iWAREHOUSE delivers the industry's most comprehensive and scalable fleet telematics solution. From battery monitoring and impact management to vehicle and operator utilization, electronic checklists, labor management and professional services—iWAREHOUSE gives you all the tools and insights you need to run more efficiently, reliably and profitably.

**financing**
For an outstanding and flexible Raymond equipment solution, your Raymond Solutions and Support Center deliver what your business needs—the equipment you need to grow, at fixed costs. Raymond offers low ownership interest rates and variety of affordable and flexible lease options.

**warranty coverage**
Raymond Asset Protection™ is Raymond's industry-leading extended warranty program that starts the moment the new truck arrives at your facility. Additional coverage options are available, meet the latest that fits your fleet so you can maximize performance while limiting or avoiding, unneeded service costs.

**parts**
Raymond Parts™ is the industry's most comprehensive one-stop shop for world-class lift truck parts. Raymond is committed to meeting your parts and supplies needs, regardless of the make or model of the truck. We sell only the highest quality parts that are of known OEM quality standards.

**pre-owned lift trucks**
Raymond RENEWED™ offers certified, pre-owned electric lift trucks that undergone rigorous,殿堂级的对冲基金。Reconditioned with genuine OEM parts from top to bottom. Every truck is delivered with full warranty coverage.

**rentals**
A Raymond rental is the smart and economical solution to meet your interim material handling needs—whether you are looking for seasonal rental, unplanned peaks in activity, temporary needs or new equipment testing. Or, if you just want to establish the value of the equipment before purchasing or leasing.

**training**
Raymond's Safety on the Move® training program offers the opportunity for hands-on, on-site training sessions so you can improve your operation and retain your certification. Raymond is committed to meeting your training needs, with options that fit your budget and schedule.
RUN BETTER. MANAGE SMARTER.

At Raymond, our aim is to deliver the utmost quality and to work for continuous improvement every day, in every aspect of our business. We are proud of what we build. We are proud of the level of service we provide to keep our customers’ business up and running. We take pride in our commitment to our customers through our end-to-end approach in helping them find smarter, more efficient, and more effective solutions.

We value the trust that Raymond has earned through decades of proven performance and hands-on innovation. Since the patenting of the first hand-pallet truck to the invention of the reach truck to our pioneering work in narrow aisle operations and beyond, Raymond has led the way in providing customers with the tools and expertise to improve their business.

IF YOU’RE LOOKING FOR A PARTNER WITH THE TOOLS AND EXPERIENCE TO HELP YOU RUN BETTER AND MANAGE SMARTER, LET’S TALK.