

7000 SERIES REACH-FORK TRUCKS

RAYMOND





BUILT TO PERFORM. DESIGNED TO WORK TOGETHER.

For 90+ 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.

HOW RAYMOND INFLUENCED WAREHOUSING

When Raymond introduced the original Reach-Fork® truck in 1954, it was perhaps the most important innovation in lift truck design. It revolutionized the material handling industry by being able to work in reduced aisle widths, creating narrow aisle storage and significant space savings – thus marking the beginning of the narrow aisle era.

Today, the innovation continues with the Raymond® 7000 Series Reach-Fork truck. While our customers become increasingly overwhelmed by growing space constraints, shrinking budgets and productivity challenges, the 7000 Series Reach-Fork trucks are engineered to increase productivity and efficiency, and optimize the resources our customers have.



PALLET

1939

Lyon Iron Works first revolutionized the material handling industry when it designed and built the wooden double-faced pallet. Combined with the forklift, goods were unloaded in hours - not days - with improved weight distribution and less product damage. Lyon Iron Works later donated the patent to the industry.



NARROW AISLE TRUCK
INVENTED

1951

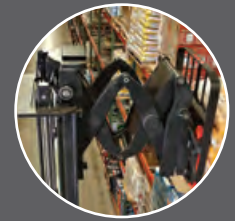
A grocery warehouse consultant came to George Raymond in need of a lift truck that could work in narrow aisles. Chris Gibson, 1st degree engineer, conceived the design on a dinner napkin. The Lyon-Raymond Model 700 SpaceMaker truck was the first electric narrow aisle lift truck. It was able to work in aisles less than 7'. This made the Lyon-Raymond Corporation the undisputed leader in the material handling industry.



FIRST RAYMOND 4-D®
TRUCK — NARROW
AISLE SPACE SAVINGS

1960

Continuing to innovate within the narrow aisle need, Raymond introduced a four-directional truck that could move sideways down an aisle eliminating the need to right angle stack.



DEEP-REACH® TRUCK

1971

The Deep-Reach concept allowed for greater storage density in cold storage and manufacturing, saving 2 aisles out of 5 for increased storage density up to 40%.



STABILITY INNOVATION

1980's



ERGONOMIC INNOVATION

1991



INTRODUCTION OF AC TECHNOLOGY IN ELECTRIC LIFT TRUCKS

2001



iWAREHOUSE® FLEET AND WAREHOUSE OPTIMIZATION SYSTEM

2009



ENERGY EFFICIENCY

2011



SAFETY ON THE MOVE®

Today

Raymond's patented Inertial Dampener, A-Frame Suspension and Steered Idler were introduced. They resulted in increased stability, improved comfort and ride quality; and reduced shock and sway for greater control.

Model 31i EAS² Reach truck introduced. This ergonomically advanced system with the intellidrive[®] control system provides the soundest ergonomically designed narrow aisle lift truck in the industry.

Raymond is the first in North America to successfully introduce the AC-powered Reach-Fork truck, improving productivity by increasing work done per battery charge and significantly reducing maintenance costs.

iWAREHOUSE is designed with an intuitive interface and information display. This suite of electronic diagnostic tools provides critical, real-time lift truck and operator data to fully optimize the warehouse.

Models 7500, 7520, 7700, 7720 incorporate Eco-Performance technology, including high speed lift and regenerative lowering for enhanced productivity, energy.

Safety On The Move, Raymond's comprehensive forklift safety training program, incorporates discussions and demonstrations of safety principles, video-based examples and practical hands-on sessions for an interactive operator training experience.



INNOVATION. DESIGN. PERFORMANCE.

The 7000 Series Reach-Fork design starts with an innovative suspension system that creates superior load stability at greater heights while providing operators with a smooth ride. The ACR System™ delivers quick acceleration, smoother directional changes, longer battery shift life and an AC Lift Motor that enables more efficient use of power – lowering overall energy costs. Intuitive ergonomics make them easy to learn to drive, offering clear vision, precise control, and smooth handling for the ultimate in operator comfort and productivity.

Decreased downtime with the utmost reliability and ease of service – and most important – a lower total cost of ownership, makes Raymond Reach-Fork® trucks the bestselling reach trucks in North America. And, we offer the most comprehensive line of customer based Reach-Fork truck solutions in the market – with more than 200 configurations available and capacities up to 4,500 pounds.

7000 SERIES REACH-FORK TRUCKS

Whether your operators need to perform in high stacking applications, move from dock to stock areas or travel long distances in your warehouse, Raymond offers the right solution designed to keep your operator comfortable and productive.

UNIVERSAL STANCE

Given today's trend toward higher racks, Raymond's exceptional Universal Stance Reach-Fork truck allows the operator to comfortably look straight up while storing and retrieving loads for a natural posture.

With the Universal Stance, the driver can face forward with an open view when handling and storing pallets, and face his/her body toward the direction of travel when moving tractor-first. By always facing the direction of work and able to regularly shift positions, operators are more comfortable and productive in busy, high-traffic warehouses.

The flexible and ergonomic Universal Stance Reach-Fork truck excels in pallet storage and retrieval in higher stack applications.

ADDITIONAL STANCES



SIT/STAND

Ideal for longer runs in the warehouse (non-dock related applications); designed to offer a range of operating positions with the option to sit or stand.



DOCKSTANCE

Ideal for dock to stock and narrow aisle applications; designed to allow operator to vary positions throughout the shift.



NARROW AISLE STORAGE SOLUTIONS



UNIVERSAL STANCE



DOCKSTANCE



SIT/STAND



DEEP-REACH®



**4-D®
(FOUR-DIRECTIONAL)**

Ideal for high stacking applications; operator faces the direction of work

Ideal for shorter lift heights; dock to stock applications

Ideal for longer travel distances

Ideal for high density storage; 6–8 pallets of the same SKU

Ideal for long load handling in narrow aisles. Four directional travel eliminates the need to right angle stack

MODEL VOLTAGE	7200/7300/7500/7520 24 & 36V	7200/7300/7500/7520 24 & 36V	7700/7720 36V	7200/7300/7500/7520/ 7700/7720 24 & 36V	7310 36V
CAPACITY HEIGHT	3,500 – 4,500 lb., up to 37'	3,500 – 4,500 lb., up to 37'	4,500 lb., up to 37'	3,000 – 3,200 lb., up to 37'	4,500 lb., up to 22'

STANDARD FEATURES

ACR System, AC Traction, AC Lift Motor, A-Frame Suspension, Open View Mast, Ergonomic Control Handle.

STEERED IDLER	X*	X*	X	X
INERTIAL DAMPENER	X*	X*	X	X*
DUCTILE IRON BASELEGS	X	X	X	X

**Standard with elevated heights ≥272". Optional below.*

+ patented, open view mast
allows the operator to see the baselegs, load and rack

+ longer battery life
lowers energy costs with the exclusive ACR System

+ steered idler and A-frame
provides improved directional stability during plugging, braking and cornering - avoiding caster snap

+ ductile iron baselegs
stronger and more durable than steel, more effectively absorbs impacts

+ bolt-on load wheels
change out in minutes with floating articulation

+ large 9.25" mainframe
rigid mast construction reduces mast sway

+ single-axis control handle
provides intuitive and ergonomic control

+ optional secondary control handle*
provides added comfort and convenience when traveling tractor-first
*Secondary Control Handle only available on 7500 and 7520 Universal Stance.

+ inertial dampener
absorbs shock, minimizing truck dynamics when right angle stacking at higher elevations and uneven floors

+ single deadman pedal
low profile with padded rubber mat allows operator to adjust positions all through the shift



PERFORMANCE WITHOUT COMPROMISE

At Raymond, moving more pallets doesn't have to mean more battery changes. Our trucks move pallets in less time using less energy — as much as 9% less time and as much as 21%* less energy. It's a result of optimizing the power system and making smarter choices for materials.

We call this combination of efficiency and productivity Eco-Performance, and you can put it to work for you in two ways: you can move more pallets on a single battery charge, which means less frequent work disruptions and higher overall productivity or, you can use the same energy efficiency to increase warehouse storage capacity by choosing a truck designed for a smaller battery, reducing the aisle width requirement.

**Results from the 2011 United States Auto Club Comparison Data Report.*



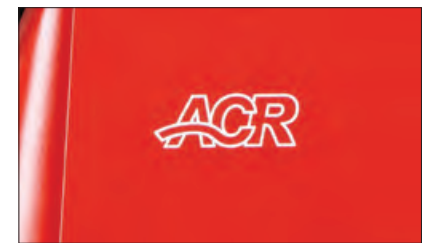
EFFICIENT DESIGN

Engineered to fit your application with multiple configurations available. Battery compartments up to 12% smaller by volume than competing models, may allow more aisles in the warehouse, resulting in more pallet positions. It's our design and your choice.



REGENERATIVE LOWERING

Creates power by returning energy to the battery when the truck is lowering its load, resulting in fewer battery changes and reduced downtime.

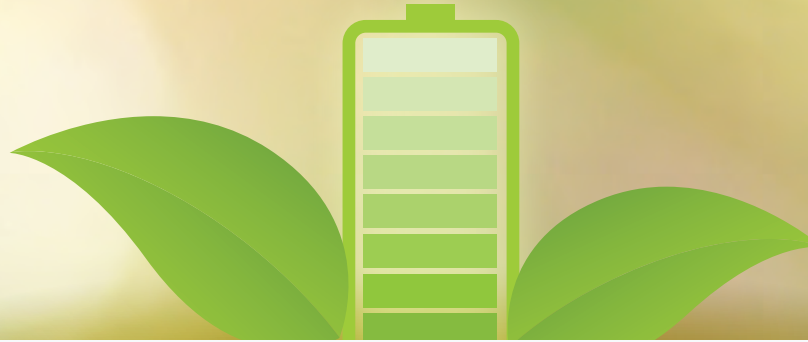


ACR SYSTEM

Provides quicker acceleration and electronic braking, faster lift and lower speeds, and smoother direction changes for more efficient load handling and movement in storage aisles.

ELEVATING GREEN, LOWERING COSTS

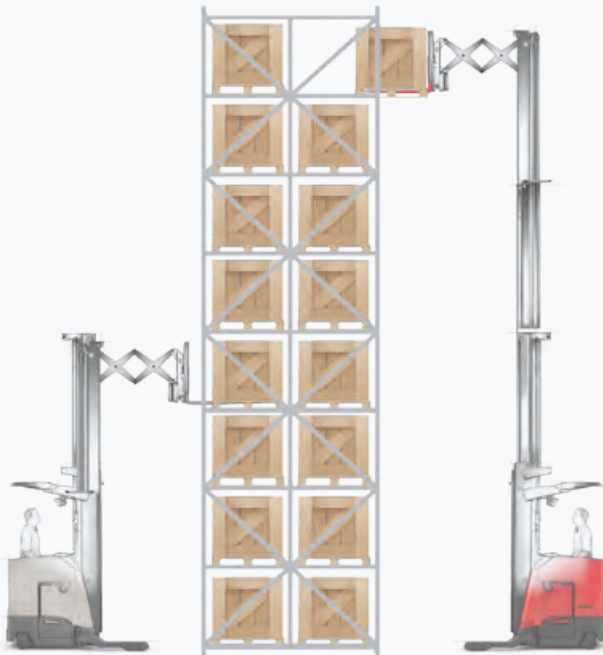
Efficient lift trucks can help distribution centers conserve energy and increase productivity. At Raymond, we documented in an independent load handling test the comparison of five basic types of lift trucks. The test was conducted by PosiCharge™, an organization specializing in electric vehicle power systems and monitored by the United States of Auto Club Properties, Inc. (USAC Properties). * Raymond lift trucks were found to move more pallets faster while using less energy.



ENERGY CONSUMPTION COMPARISON

Based on:

- o 7500 Reach-Fork with Regen
- o 9 trucks
- o 0.06 \$ kWh
- o 2 shifts
- o 300 work days per year
- o \$18.00 labor rate



	COMPETITOR	RAYMOND	ECO-PERFORMANCE ADVANTAGE	
BATTERY CHANGE LABOR	\$32,400	\$25,499	\$6,901	21.3%
ENERGY COST	\$9,850	\$7,752	\$2,098	21.3%
LABOR <i>(to move 1 million pallets)</i>	\$631,800	\$578,097	\$53,703	8.5%
TOTAL	\$674,050	\$611,348	\$62,702	9.3%

THAT'S ALSO ABOUT 45,000 LBS. OF CO2 EMISSIONS REDUCTIONS. YOU CAN TAKE ADVANTAGE OF THE INCREASED EFFICIENCY TO MOVE ALMOST 90,000 ADDITIONAL PALLETS.

*Elevating Green, Lowering Costs white paper is available on www.raymondcorp.com. In independent third-party testing monitored by the United States Auto Club Properties, Inc. (USAC), five Raymond lift truck models performed identical load-handling tasks to compare energy consumption and productivity versus comparable competitor trucks. Raymond lift trucks were found to move more pallets faster, while also using less energy.

PUTTING PRODUCTIVITY FIRST

Productivity is often the result of faster point-to-point travel and driven by the whole cycle; a combination of factors including acceleration, deceleration, time spent lifting and traveling, and battery consumption.

The 7000 Series Reach-Fork trucks are designed with industry-leading lift, lower, acceleration and travel speeds – maximizing the number of pallets moved per hour. Our trucks travel 8.0 mph in any direction; and faster than our competitors when loaded.



CONTROL

The ACR System provides smoother direction changes for more efficient load handling and movement in storage aisles.



CONFIDENCE

The steered idler reduces time spent backing away from the rack with a load elevated at 30' because of no caster snap, assisting operator confidence.



COMFORT

Intuitive controls provide a smoother ride and precision load handling capabilities for quicker cycle times.



PRECISION

Visibility leads to increased productivity and operator confidence, fewer errors and less product, rack and facility damage.

ACCELERATION TIMES

With average pick distances ranging from 20 to 50 feet, productivity is driven by acceleration. Raymond's faster acceleration gets your operators from pick to pick more quickly for industry-leading productivity.

A typical warehouse can have up to 200 intersections which require deceleration and acceleration at each intersection.

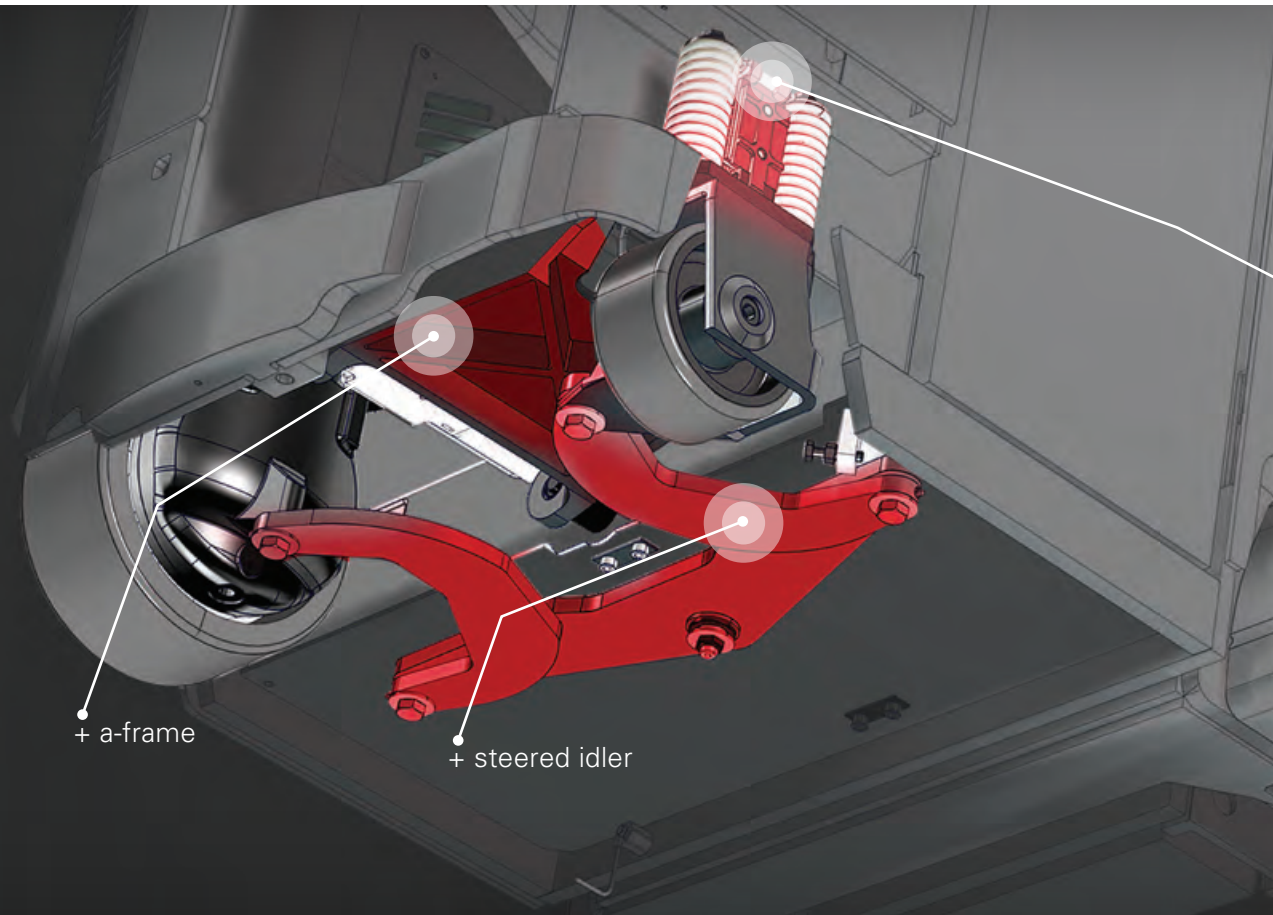
A typical Reach truck application is:

- + 75% travel
- + 25% lift
- + 2-3 mph average speed



LOAD STABILITY AT HEIGHT ALL SHIFT LONG

When backing away from the rack with the mast extended and the forks carrying a ton of payload, the exclusive Raymond suspension has many features to make the action secure, providing the operator with confidence. This stable design starts from the base and continues on up to a large 9.25" mainframe that reduces mast sway and contributes to better load control.



+ a-frame

+ steered idler



A-FRAME

Both drive wheel and caster (idler) provides four point suspension, enhancing lateral stability and support.



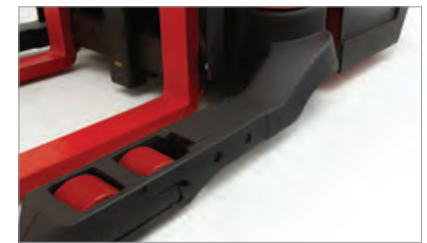
STEERED IDLER

Automatically aligns the steered idler wheel with the drive tire to provide full-time traction and steering alignment; provides lateral support, stability and prevents caster snap.



INERTIAL DAMPENER

Provides a stable response to the dynamics of right angle stacking at higher elevations and uneven floors; reducing shocks and sways and increasing operator performance.

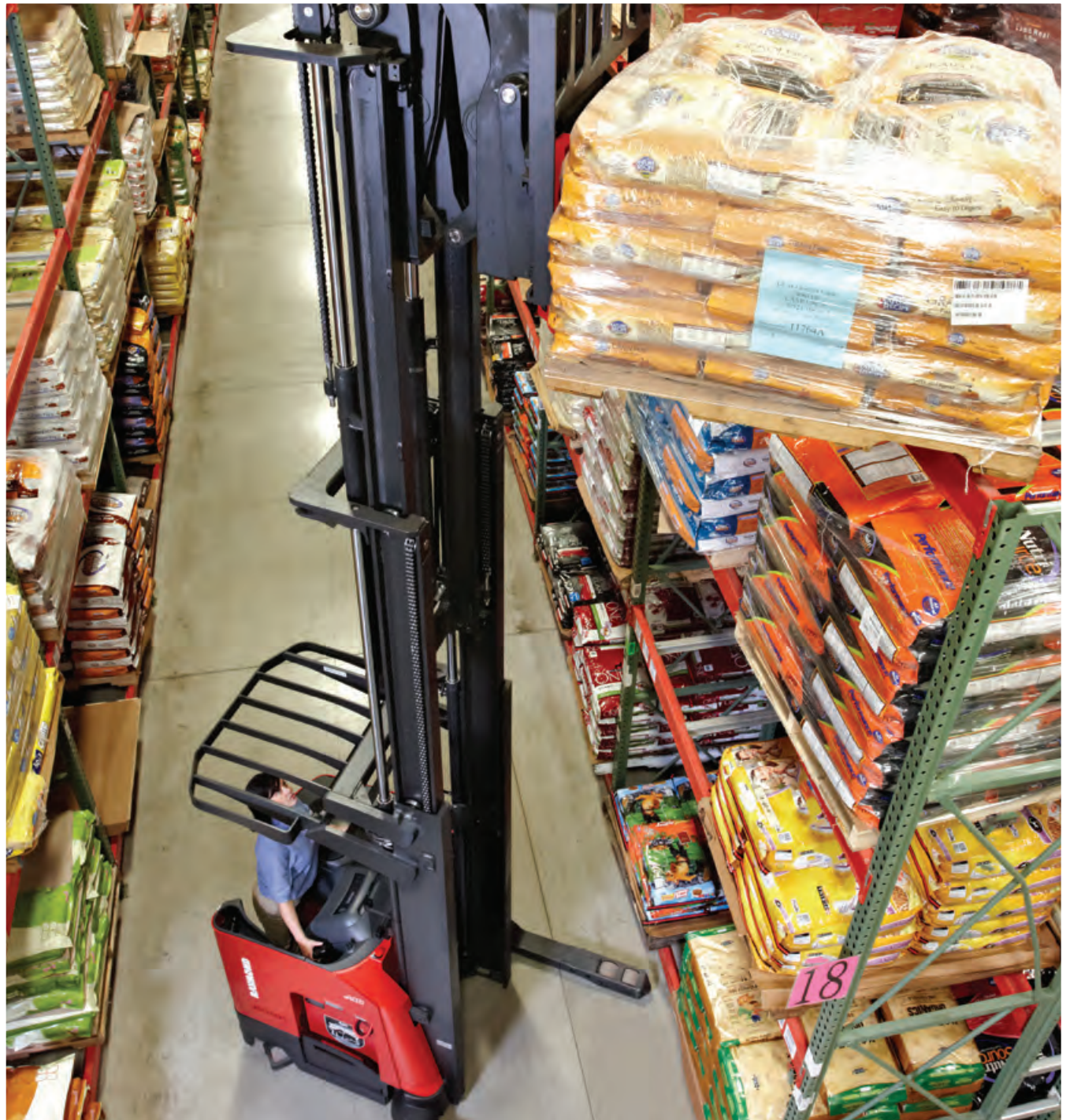


DUCTILE IRON BASELEGS

Ductile iron is 30% stronger and more durable than steel; steel breaks at 45000 psi and it takes 65000 psi to break ductile iron – ensuring more reliable load support when absorbing stresses.

+ inertial dampener

+ ductile iron baselegs

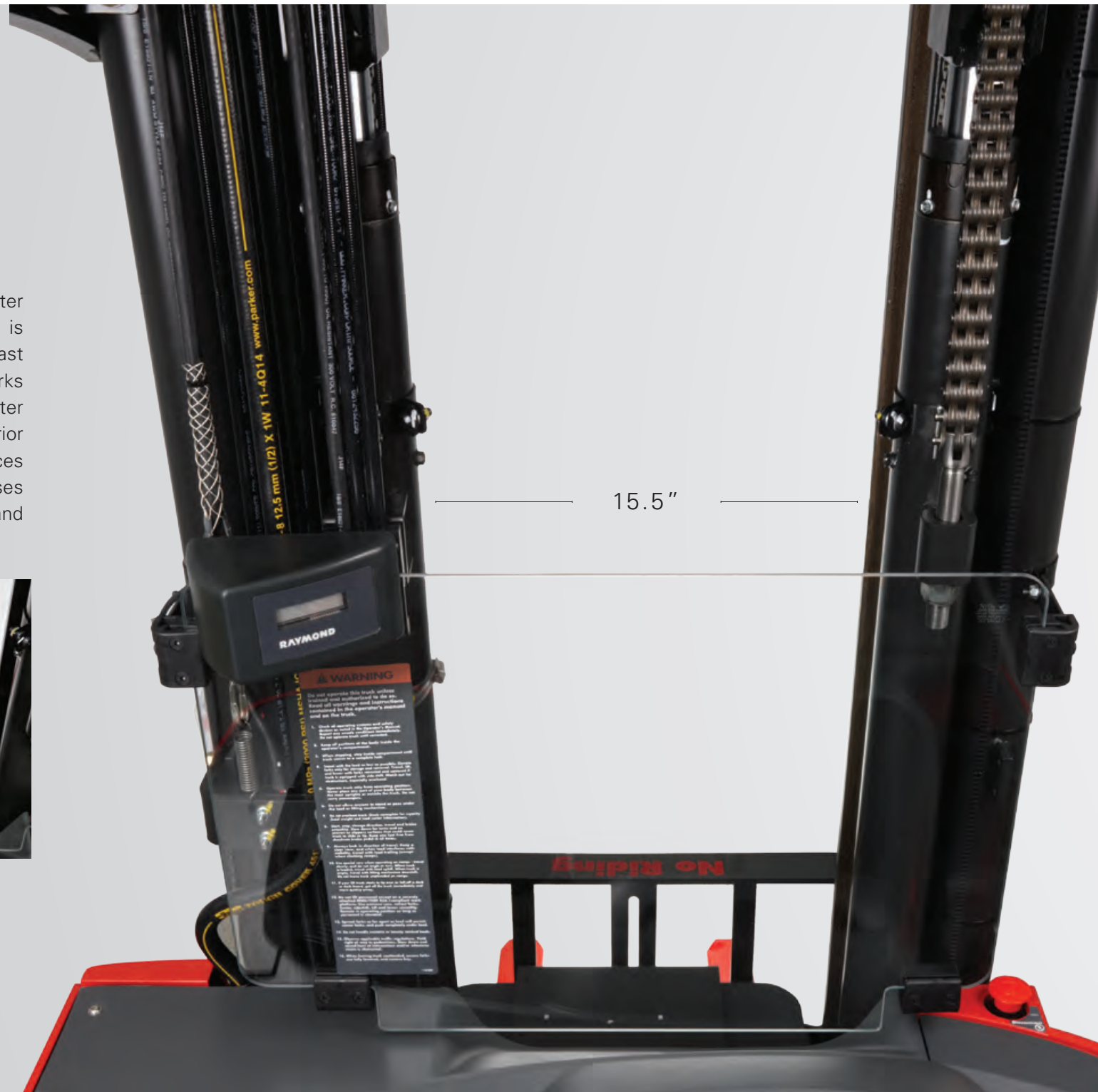


SOLID REACH MECHANISM

Torsion tube scissor tie, anti-friction scissiors and radial thrust bearings provides support for lateral stresses, improving load handling.

VISIBILITY IN EVERY DIRECTION

One of the most critical factors for better control and precise load handling is visibility. Our patented open view mast design allows operators to see both forks on either side of the truck no matter where they are positioned. This superior visibility at all areas of operation reduces product and facility damage, increases operator comfort and confidence – and ultimately – your bottom line.



15.5"

SUPERIOR VISIBILITY

Visibility is dynamic in a busy warehouse; especially where trucks are passing one another in aisles or exiting an aisle into an intersecting aisle.

Raymond's Universal Stance provides the operator the opportunity to find the best line of sight based on the application and task at hand. The operator has flexibility to match the application by facing forward with an open view when handling and storing pallets, as well as face the direction of travel when moving tractor-first.



IDEAL FOR: RACK INTERFACE



IDEAL FOR: SHORT RUNS



IDEAL FOR: TRANSPORTING

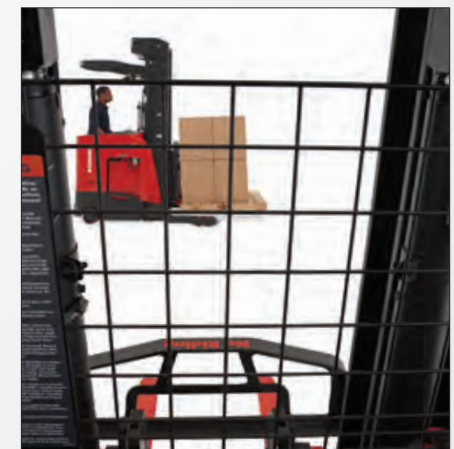
SECOND LEVEL PALLET POSITION

The Raymond 7000 Series offers visibility of the forks and load when reaching a second level pallet position, making this truck ideal for rack interface work. There is no center cylinder that blocks the operator's vision.



OPEN VIEW MAST

With a 15.5" open view, operators can clearly see the baselegs, load and rack. This provides more control and precise handling of pallets and load transports. The operator can look up with ease in higher applications.



COMFORT AT EVERY TURN

Operators love the 7000 Series Reach-Fork trucks because they are easy to learn and designed with smart ergonomics that make them easy to operate. The trucks' ergonomic design matches the operator's natural motions and feature intuitive operator interfaces with roomy compartments and ample space for multiple work positions.



**SINGLE-AXIS
CONTROL HANDLE**

Simultaneous function provides discrete, intuitively mapped controls that are easily learned. Consistency of handle design included on other Raymond models assists in cross-training of operators.



**LOW 9.25" ENTRY
STEP HEIGHT**

Helps operators avoid unnecessary climbing for easier entry into compartment.



**SECONDARY
CONTROL HANDLE**

Provides intuitive and ergonomic control.

Secondary Control Handle only available on 7500 and 7520 Universal Stance.



**OPERATOR
DISPLAY**

Provides well positioned, readable feedback to the operator with real-time data for increased confidence and efficiency. Programmable performance and active maintenance with one button access are also included.

DOCKSTANCE



Compartment designed to allow operators to vary positions through the shift. Three elbow/forearm rest positions provide a comfortable, ergonomic workstation.

UNIVERSAL STANCE



Compartment designed for changing direction of travel – each position makes ergonomic sense to reduce fatigue and increase comfort.

SIT/STAND (7700/7720)



Compartment designed with a cushioned suspension ride seat that flips up for standing operation, and has an adjustable steer tiller.

DESIGNED FOR MORE UPTIME

With increasing demands on operations, warehouse managers work lift trucks longer and harder to stay ahead – so there's no time for downtime. To maximize cost effectiveness, Raymond Reach-Fork trucks are designed to lower your total cost of ownership by fully applying the principles and practices of the Toyota Production System (TPS). Our commitment to quality delivers longer component life, longer scheduled maintenance intervals, and easier service access and diagnostics. All of which keep your trucks on the floor and working longer, harder, and even smarter.



BOLT-ON WHEEL PLATES

Standard equipment on the 7000 Series Reach-Fork, provides easy load wheel replacement. Technicians can remove and take to a workbench for convenience.

DUCTILE IRON BASELEGS

Maintainability starts with ductile iron baselegs that absorb stresses and improve ride quality.



FLEX-CIRCUIT TECHNOLOGY

Easy-to-remove control handle with only 35 parts - 61% fewer parts than competing models - for less maintenance and lower costs.



ENGINEERED 500-HOUR SCHEDULED MAINTENANCE

500 hours scheduled maintenance interval compared to competitor's 250 hours, results in lower cost of ownership.



RAYMOND TRUCKS HAVE LESS TO GO WRONG. THEY ARE EASIER TO SERVICE WHEN DOING A SCHEDULED MAINTENANCE. OVERALL I HAVE WORKED ON ALL BRANDS AND I LIKE RAYMOND THE BEST.

Jesse Peterson
Certified Field Service Supervisor

BECAUSE ONE TRUCK FITS ALL IS NOT AN OPTION

Raymond offers a spectrum of options that save you space, time, labor and money. Our engineers design options that add functionality to meet specific application requirements. And, our Sales and Service Center Representatives work collaboratively with customers to help determine the right equipment to get the job done. They can perform a detailed, data-driven analysis of your facility and survey your application to recommend the most cost-saving solution.



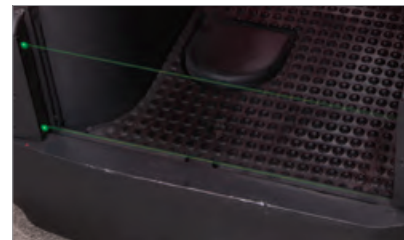
**FORK-TIP
LASER GUIDE**

Projects green or red laser lines onto the pallet to show fork positioning, increasing operator accuracy.



**VANTAGE POINT®
SYSTEM**

Camera located below the fork carriage delivers high-resolution images to a color monitor in the compartment, helping operator to identify, retrieve, and place pallets at greater heights.



**OPERATOR COMPARTMENT
SENSOR SYSTEM (O.C.S.S.)**

Light sensors spanning the entry to the operator compartment, designed to assist in training by reinforcing the need for the operator to assume and maintain a proper operating position within the operator's compartment.



**HEIGHT-TILT
INDICATOR**

Digital readout shows height of forks and condition of tilt. Ideal for lift heights above 200 inches.



ENGINEERED FOR HIGH PERFORMANCE IN LOW TEMPERATURES

Refrigerated warehouse facilities are a tough environment to work in. It takes innovative design and robust systems to take on temperatures that can run down to -20° F.


With more than 60,000 lift trucks operating in refrigerated warehouses around North America, Raymond leads the way with superior quality and design features and options that leave the competition far behind...and out in the cold.

COLD STORAGE CONDITIONING

All temperature hydraulics, transmission oils and temperature sensing components protect control systems — assuring peak performance and productivity.

THERMAKIT™ SYSTEM

Improves operator comfort and productivity in freezers and cold storage applications by heating the control handle, floor cushion and seat. This keeps hands and feet warm and reduces frost build-up inside the compartment.



7000 SERIES REACH-FORK TRUCK COLD STORAGE OPTIONS

THERMAKIT™ SYSTEM

Helps keep operators as comfortable and productive as possible in temperatures that dip to -20°F. Features include:

- **HEATED CONTROL HANDLE**
Allows operators to wear lighter gloves for enhanced mobility
- **HEATED SEAT**
Enhances operator comfort inside the compartment
- **HEATED FLOOR CUSHION**
Keeps the operator's feet warm. Reduces frost build-up inside the operator's compartment
- **THERMOSTATICALLY CONTROLLED HEATERS**
Shut off when trucks are operated in ambient environments saving energy

COLD STORAGE CONDITIONING PACKAGE

Protects sensitive lift truck control systems with hydraulic, mechanical, and electrical components that are matched to different temperature levels to assure peak performance and productivity.



+ warranty coverage

Raymond Asset Protection™ is Raymond's industry-leading warranty that begins with a Standard Warranty – coverage that starts the moment the new truck arrives at your facility. Additional coverage options are available; select the option that fits your fleet so you can maximize performance while looking in affordable, predictable service costs.*

**For complete details, refer to the Raymond Standard Warranty.*



+ maintenance

Designed to fit your budget, Raymond offers three plans specific to your needs which you can tailor for individual trucks or entire fleets: contract maintenance, comprehensive fixed-price maintenance and scheduled maintenance audit.



+ expert technicians

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 Sales and Service Center.



+ parts

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



+ financing

For an outstanding and flexible Raymond equipment solution, your Raymond Sales and Service Center and Raymond Leasing Corporation 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.



+ pre-owned lift trucks

Raymond RENEWED™ offers certified, pre-owned electric lift trucks that have undergone a rigorous quality inspection and reconditioned with genuine OEM parts from top to bottom. Every truck is delivered with full warranty coverage.



+ 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.



+ rentals

A Raymond rental is the smart and economical solution to meet your interim material handling needs – whether you are looking for seasonal rentals, unplanned peaks in activity, replacing trucks for scheduled repairs or waiting for delivery of new equipment. Or, if you just want to establish the value of the equipment before purchasing or leasing.



+ 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.



+ training

Studies have shown that effective operator training can help improve how your operation runs. Designed to help you protect your people, equipment and materials, Safety on the Move® can assist in satisfying the OSHA mandate to train your operators.



FROM FLEET TO FINANCE, WE'VE GOT YOU COVERED

In warehouse management, the bottom line is the bottom line. And because efficiency works best when it works end to end, everything Raymond offers is built to work together.

- + Trucks and Training
- + Fleet Maintenance and Parts
- + Warehouse Optimization System
- + Certified, pre-owned lift trucks and Rentals
- + Industry Leading Warranties
- + Flexible Financing Solutions

From initial consultation to custom-designed solutions to long-term product and operational support – and with a network of more than 100 Sales and Service Centers – Raymond provides unmatched, world-class support tailored to meet your needs, help you drive down costs and run your business better and smarter.

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.

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Due to continuous product improvements, specifications are subject to change without notice. Some systems and features shown are optional at extra cost. ACR System, Raymond, Safety On The Move, Raymond Asset Protection, Raymond RENEWED, Raymond Parts, Deep-Reach, Reach-Fork, 4-D, iTRACK, iWAREHOUSE, Vantage Point and ThermaKit are U.S. trademarks of The Raymond Corporation.

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