Raymond Reach-Fork® Trucks: 7500 Universal Stance

April 21, 2016
Why Partner With Raymond?

When you partner with Raymond, you’re not just purchasing the world’s most reliable, energy efficient and productive lift trucks, you’re investing in the ultimate warehouse optimization experience.
Today’s Business Challenges

- To compete we must “do more with less” and “move more, quicker”
- Limitations on space, personnel and budget
- Recognize “cost drivers” and develop ways to reduce them
- Control asset cost of ownership

Did you know?
- Electricity, labor and maintenance account for 86% of warehouse operating expenses
- Raymond’s lift truck solutions:
  - Increase productivity
  - Decrease energy costs
  - Decrease maintenance costs
Raymond Lift Trucks in Motion

Engineered for productivity - Raymond Eco-Performance

- More pallets moved per shift
- Reduced battery changes → Lower energy costs
- Reduction in carbon footprint

Engineered for lowest cost of ownership

- 25% fewer moving parts, less downtime
- Easier to maintain
- Lower maintenance cost

Engineered for ergonomics and visibility

- Patented open view mast
- Easy to learn simultaneous function control handle
- A-Frame suspension and steered idler provides smooth, precise handling
- Operator Compartment Sensor System training aid
What Raymond Can Do For [Customer Name]

Increase productivity with Eco-Performance

- Raymond’s exclusive ACR System™ provides quicker acceleration and smoother directional changes

Reduce operator learning curve

- Get operators up to speed faster with:
  - Ergonomic designs
  - Unique open view mast allowing better visibility
  - Intuitive control handle
  - Smooth load handling with mast staging

Reduce maintenance & downtime

- Ease of maintenance innovations reduce cost of ownership

Reduce energy costs

- Raymond’s lift trucks feature our exclusive ACR System, increasing efficiency with:
  - Fewer battery changes
  - Lower maintenance costs
  - Greater productivity
Get More Truck with the 7500 Universal Stance
ACCELERATION AND BRAKING Affect Productivity.

- 2500 lbs.
- 50 ft. start to stop

Why are Raymond Trucks So Productive?

- A truck spends more time accelerating and braking than any other function
- Raymond’s ACR System gets to top travel speed in 6.5 seconds and comes to a complete stop in 9 seconds
- Closest competitor never achieves published top speed and requires more time to come to a complete stop
- Raymond’s ACR System provides more pallets moved with less labor
- Typical Reach-Fork truck application is:
  - 75% travel
  - 25% lift
  - 2-3 mph average speed
Lift Truck Innovation in Motion – Increase Productivity

How Raymond Lift Trucks Deliver Productivity

Patented hydraulic mast staging system
- Provides smoother operation, making the operator more efficient for greater productivity

Reach/Retract cushions
- Provide better control for the operator making them more productive
- Reduces wear and tear on reach mechanism
Faster Lift Speeds

- AC lift trucks have lift speeds increased from 130 to 150 fpm unloaded

Higher Speed Lift (160 fpm) with Regenerative Lowering

- **Standard** on 7520
  - Increasing the Lift Speeds from 107 to 160 fpm

- **Optional** on 7500
  - 18.12” & 21.12” battery compartments
Lift Truck Innovation in Motion – Increase Productivity

Operator faces direction of work
- Can face forward when handling and storing pallets
- Or, can turn around to face in the direction of travel when moving tractor-first

Single dead man pedal
- Allows the operator to move the lower half of the body to maintain comfort throughout the day – reducing fatigue

Operator training sensors available
- Activate brakes should operators lower body break the light beams

Single axis control handle
- Requires less Shoulder and Arm Movement
- Less Operator fatigue
Ergonomics
Floor impact absorbed at the source, not at the operator floor!

- Raymond uses patented A-frame suspension, inertial dampener and steered idler, with dynamic cushioning springs, for improved stability and handling.
Lift Truck Innovation in Motion – Increase Productivity

Greater stability with loads at higher heights = increased operator confidence

- Traction and steering alignment offer smooth, precise handling
- Raymond’s patented A-frame suspension features an exclusive steered idler wheel
- Automatically aligns with the drive tire
- Eliminating caster snap, which jars the truck and the load
Lift Truck Innovation in Motion –

Reduced Operators Learning Curve

Open View Mast provides excellent operator visibility and eliminates the need for the operator to hang outside the compartment to see
Lift Truck Innovation in Motion –

Reduce Maintenance & Downtime

Electric Brake

- No need for Regular Master Cylinder adjustments, hydraulic hoses or added moving parts.
- Provides operator with predictable and consistent stopping capability for greater confidence
- Extended life expectancy with less regular maintenance

![Electric Brake Image]

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest</td>
<td>3%</td>
</tr>
<tr>
<td>Electricity</td>
<td>5%</td>
</tr>
<tr>
<td>Maintenance</td>
<td>9%</td>
</tr>
<tr>
<td>Purchase Price</td>
<td>11%</td>
</tr>
<tr>
<td>Labor</td>
<td>72%</td>
</tr>
</tbody>
</table>
Lift Truck Innovation in Motion

Reduce Maintenance & Downtime

Ductile Iron

- 40% greater strength than steel
- Less weight
- We use it on:
  - A-frame arm
  - Drive unit
  - Caster
  - Drive and caster wheel hubs
  - Counterweight
  - Baselegs
  - Wheel plates

Patented articulating load wheels minimize “scrubbing” and improve ride quality
Lift Truck Innovation in Motion

Reduce Maintenance & Downtime

- No soldered wires internally in handle
- Ribbon technology with connectors and switches attached
- Plug and learn capability
Lift Truck Innovation in Motion

Reduce Maintenance & Downtime

- Fewer parts means less time maintaining and lower cost
- No need for additional brakes and associated parts on caster assembly to stop truck to meet ANSI requirements
- Having the caster wheel tied to the drive wheel eliminates “castor snap” and the associated feeling of instability
- No need for dozens of moving parts in floating floors

Interest 3%
Electricity 5%
Maintenance 9%
Purchase Price 11%
Labor 72%
Eco-Performance – Leadership Through Innovation

Saves Power
- Less batteries used
- Less KWH used
- Lower energy costs
- Reduced CO\(_2\) emissions

Creates Power
- Increased energy efficiency
- Increased productivity
- Increased $ to the bottom line
Lift Truck Innovation in Motion – Reducing Energy Costs

- Regenerative braking extends the life of components
- Regenerative lowering recharges the battery when the forks are lowered

**TRADITIONAL LOWERING**

- Lift Rams
- Pump
- Proportional Valve
- Reservoir
- Makes Heat

**LOWER REGEN**

- Lift Rams
- Controller
- Battery
- Motor
- Pump
- Reservoir
- Makes Electricity
Eco-Performance –

What does it mean for [customer Name]

Significant *reduction in battery changes* per year
- Hard savings in labor savings and equipment uptime
- Fewer battery changes means more time on the floor moving product

Significant *reduction in kWh usage*
- Hard savings in energy costs
- Hard reduction in CO₂ emissions/carbon footprint

Sizable *increase in pallet moves* per cycle
Eco-Performance – Leadership Through Innovation

- Eco-Performance is Raymond’s philosophy in how we design and engineer superior lift truck solutions for maximum economical and ecological benefits.

- Allows customers to reduce downtime, energy costs and CO$_2$ emissions while increasing pallet moves compared to competition.

- How do we do this?
  - Building with the best components (motors, controllers, gears) and
  - Maximizing truck performance (acceleration and low amp draws) through systems design.

- Over the last decade our customers have told us that with Raymond lift trucks
  - They move more product
  - Using fewer trucks
  - With less batteries vs. competitor’s models.

- We wanted to validate our efficiencies with third party benchmarking.
Eco-Performance – Third Party Tested

- Third party testing was conducted by PosiCharge™ and monitored by The United States Auto Club (USAC)

- Testing showed that Raymond lift trucks are 17-40% more energy efficient and up to 9% more productive than the leading competitor

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>USED LESS ENERGY</th>
<th>USED LESS TIME</th>
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</thead>
<tbody>
<tr>
<td>Reach (7400)</td>
<td>21%</td>
<td>4%</td>
</tr>
<tr>
<td>Reach (7500)</td>
<td>15.8%</td>
<td>9%</td>
</tr>
<tr>
<td>Reach (7500) with Regen</td>
<td>21.3%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Pallet Trucks</td>
<td>33.6%</td>
<td>6%</td>
</tr>
<tr>
<td>Stand-Up Counterbalanced</td>
<td>17%</td>
<td>9%</td>
</tr>
<tr>
<td>Swing-Reach</td>
<td>40%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Eco-Performance – Third Party Testing Criteria

- Three operators drove two similarly equipped trucks for 16 identical cycles each so driver skill would not affect the results
- Lift truck settings were set to “factory defaults”
- The trucks lifted to 200 inches
- The same test load of 2,000 lbs. was used on each truck
- Overall electricity consumption was recorded after each run

Appendix 1: Test Course Layout Reach Truck

Shuttle Course

Position 1 110'  Position 2

Lift Schedule

Note: Not to Scale

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## Customer name] Eco-Performance Results

### Energy Efficiency

<table>
<thead>
<tr>
<th>Competitor</th>
<th>Raymond</th>
<th>Raymond Eco-Performance Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery Changed / Year</td>
<td>14,900</td>
<td>11,412</td>
</tr>
<tr>
<td>Battery Change Labor $</td>
<td>$57,000</td>
<td>$85,492</td>
</tr>
<tr>
<td>kWh Used Annually</td>
<td>445,320</td>
<td>348,910</td>
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<tr>
<td>Energy Cost</td>
<td>$33,264</td>
<td>$27,122</td>
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</tbody>
</table>

21.3% increased efficiency
$26,042 saved

**Replace with your customer's Eco-Performance Calculator Results**

### Labor Savings

<table>
<thead>
<tr>
<th>Competitor</th>
<th>Raymond</th>
<th>Raymond Eco-Performance Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pallets Moved per Day</td>
<td>7,940</td>
<td>8,181</td>
</tr>
<tr>
<td>Pallets Moved per Year</td>
<td>1,833,000</td>
<td>2,045,225</td>
</tr>
</tbody>
</table>

8.5% saved
$144,202 saved

### Save in 1 Year

121,776 lbs. of CO₂ saved

$170,245

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RAYMOND
RUN BETTER. MANAGE SMARTER.