

*iWarehouse*TM

The Industry's Most Advanced Fleet Optimization Solution



RAYMOND
Above. And beyond.®

The Clear Choice For Reducing Fleet Operations Costs

Introducing *iWarehouse*, the industry's most powerful and comprehensive fleet optimization solution. A revolutionary leap forward in the way businesses **acquire, analyze, and act** upon information about their lift truck fleet operations.

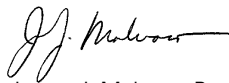
iWarehouse is what you need when you want to control and reduce costs throughout all of your warehouse operations.

Engineered as a uniquely integrated suite of tools that continuously collects hundreds of data points in real-time about **truck and operator performance**.

iWarehouse is the only solution that is easy to understand and automatically transforms data into intelligent, intuitive graphic reports that you can immediately evaluate and act upon.

The result: unparalleled visibility into your operations that you've never had before.

Better, smarter and faster. That's how Raymond goes above and beyond any other company. And what we will do for you.



James J. Malvaso, President and CEO



RAYMOND



 **Optimization DNA**

Review intuitive reporting from a single web portal

Decrease operating costs across the board

Right-size your fleet without sacrificing productivity

Improve truck utilization

Conduct remote diagnostics

Digitally complete operator checklists

The *iWarehouse* Advantage

Only one company can combine technology, precision intelligence, and a global sales and service network into a single solution that will enable you to optimize and manage fleet operations immediately. Raymond.

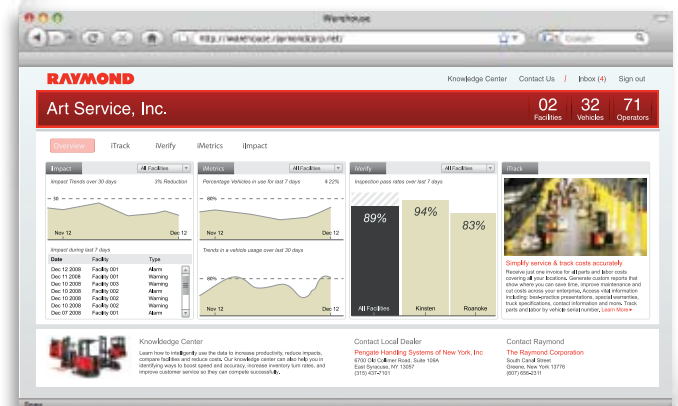
iWarehouse is the only fleet optimization solution that enables you to clearly “see” information related to your lift truck operations, and make the critical decisions necessary to improve performance, productivity and profitability. All with the click of a button.

With *iWarehouse*, you will be able to precisely right-size your fleet. Immediately know the actual operational cost per hour of each truck, each type of truck, in each warehouse. Electronically complete daily operator checklists. Remotely detect potential truck issues in real time. Accelerate service to levels which you have never seen. And much more.

What separates *iWarehouse* from all others, however, is its ability to capture over 200 customizable data points and automatically synthesize them into intuitive, clean, graphical reports allowing you to make critical decisions in real time. Only with *iWarehouse*.

And *iWarehouse* is a plug-and-play solution that is compatible with legacy enterprise systems — so it can be up and running quickly without disrupting day-to-day operations or burdening your IT infrastructure or personnel — and can be accessed from your computer desktop.

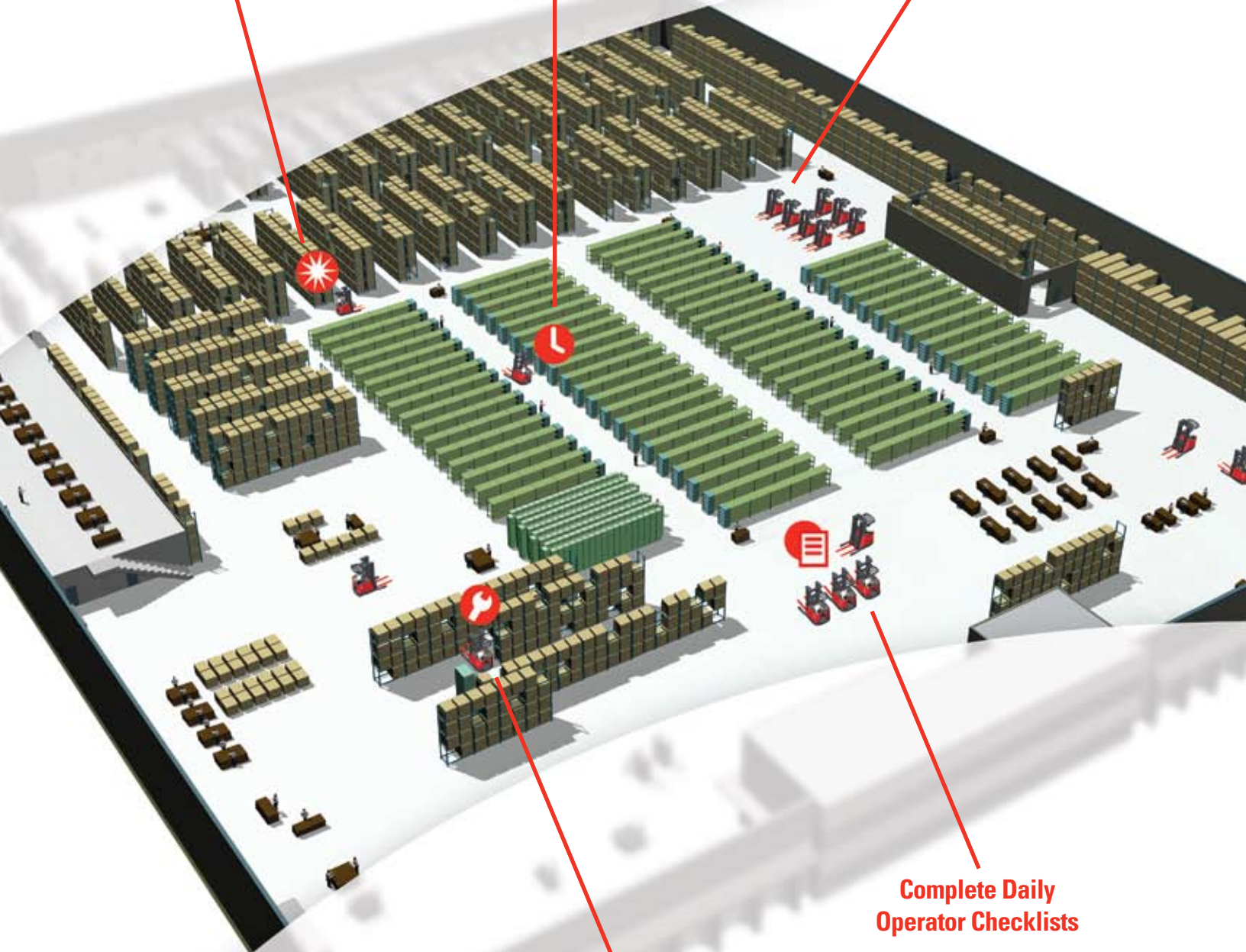
iWarehouse Gateway™ Web Portal



**Immediately
Identify Impacts**

**Analyze Truck
Utilization in Real Time**

**Right-Size
Your Fleet**



**Remotely Detect
Truck Issues**

**Complete Daily
Operator Checklists**

The *iWarehouse Gateway*[™]: One **Web Portal** For Optimal Productivity

Where the comprehensive power of *iWarehouse* comes together into a single interface.

Seamless process is the key to successful fleet optimization, and nowhere is that better represented than through *the iWarehouse Gateway*, Raymond's uniquely designed, single web portal through which you take full command and control of your fleet.

Accessing the *iWarehouse Gateway* from your desktop, you are immediately presented with an **intuitively formatted dashboard** that consolidates — and enables immediate review of — your *iWarehouse* modules. **No multiple login screens**, no spreadsheets to wade through. Instead, you get a management-level snapshot of your entire fleet across multiple sites and the instant ability to **drill down** to individual truck and operator specifics.

And only the *iWarehouse Gateway* enables you to make quick comparative analyses by being able to move between modules and reporting screens with the click of a button.





The *iWarehouse* Fleet Optimization Suite

iWarehouse consists of six distinct modules, each providing specific remote reporting, control, and/or diagnostic functionality. You create a custom solution by choosing the *iWarehouse* modules that fit your operational imperatives.

- › ***iMetrics***[™] Real-Time Performance Monitoring
- › ***iVerify***[™] Checklist Maintenance Review Monitoring
- › ***iImpact***[™] Real-Time Impact Alerts
- › ***iAlert***[™] Fleet Health Monitoring And Alerts
- › ***iControl***[™] Remote Performance Parameter Adjustment
- › ***iTrack***[™] Anytime, Anywhere Maintenance Management

iPort - Where Fleet Optimization Begins

Without quality information, you can't make quality decisions. *iWarehouse* gives you more and better information, starting at the root of fleet optimization: the truck itself.

Innovation At Work: Wireless Data Gathering

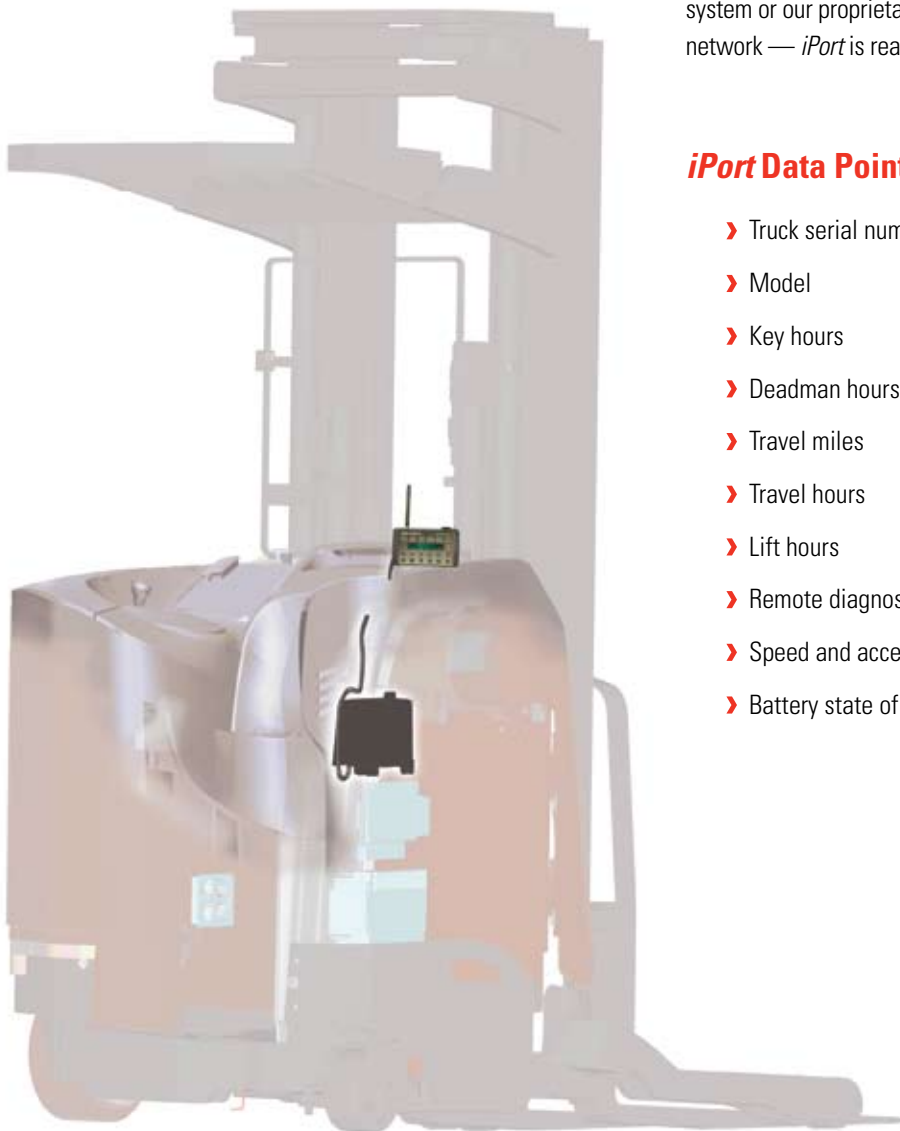
Until now, state-of-the-art data gathering at the truck meant installing and supporting a "wired" solution of sensors and wires that required the manual collection of data, truck by truck.

Through advanced engineering, *iPort*, exclusively from Raymond, changes all of that. It is the next generation of connectivity, and it's here. Now, *iPort* is integrated into the truck's onboard vehicle manager, and wirelessly connects it to the *iWarehouse* platform.

iPort transmits truck data at one-second intervals, effectively giving you **real time data monitoring of each and every truck in your fleet**. And because data can be carried on either your existing Wi-Fi system or our proprietary system, there's no need to install a wireless network — *iPort* is ready when you are.

iPort Data Points:

- › Truck serial number
- › Model
- › Key hours
- › Deadman hours
- › Travel miles
- › Travel hours
- › Lift hours
- › Remote diagnostic codes
- › Speed and acceleration parameters
- › Battery state of charge

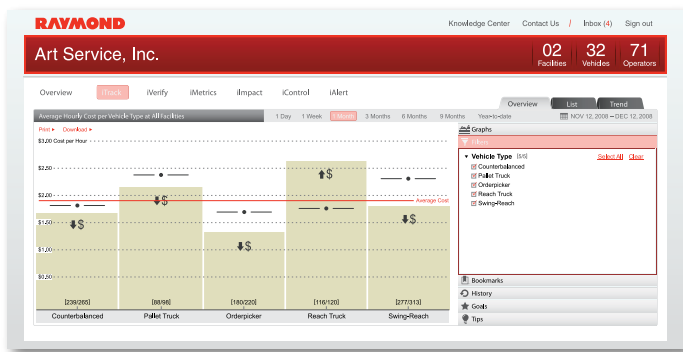


iTrack - Anytime Maintenance Management

iTrack provides you with accurate, actionable fleet maintenance data reports that stretch from individual trucks to aggregate data for specific facilities, regions, or your entire company. And, it allows you to monitor and reduce your overall cost per operating hour.

With *iTrack* via The *iWarehouse Gateway* Web Portal, You Can:

- › Track parts and labor cost by truck
- › View custom reports that can identify facility or region cost-saving opportunities
- › Conduct fleet replacement analysis
- › Consolidate invoicing
- › Access best-practice presentations and service center tech contact information
- › Enter service orders

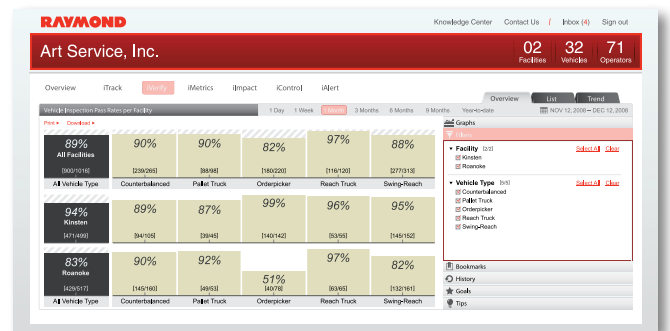


iVerify - Inspections Completed? Check.

No longer will pre-shift truck inspections need to be done on paper. With *iVerify*, operators are required to complete an electronic inspection checklist on their trucks at the start of every shift before being approved to drive a truck.

iVerify also records and stores inspection data with date/time stamps and operator names, critical for your warehouse's OSHA compliance requirements.

Additionally, *iVerify* lets you decide how to prioritize and handle issues revealed during inspection.



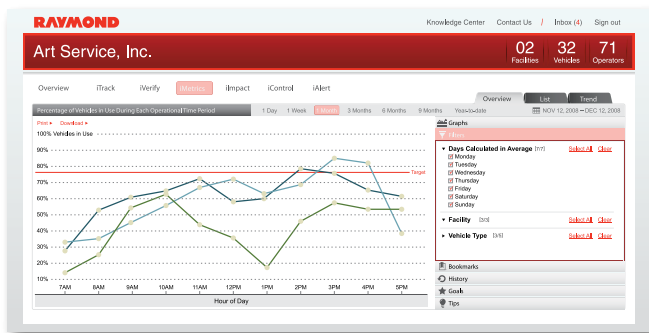
iMetrics - Track Total Fleet Performance

iMetrics lets you see your fleet like never before, and gives you a clear view of every lift truck — how it's being used, and how efficiently — so that you can **determine the right number and mix of trucks** (and operators) for maximum performance and optimum efficiency.

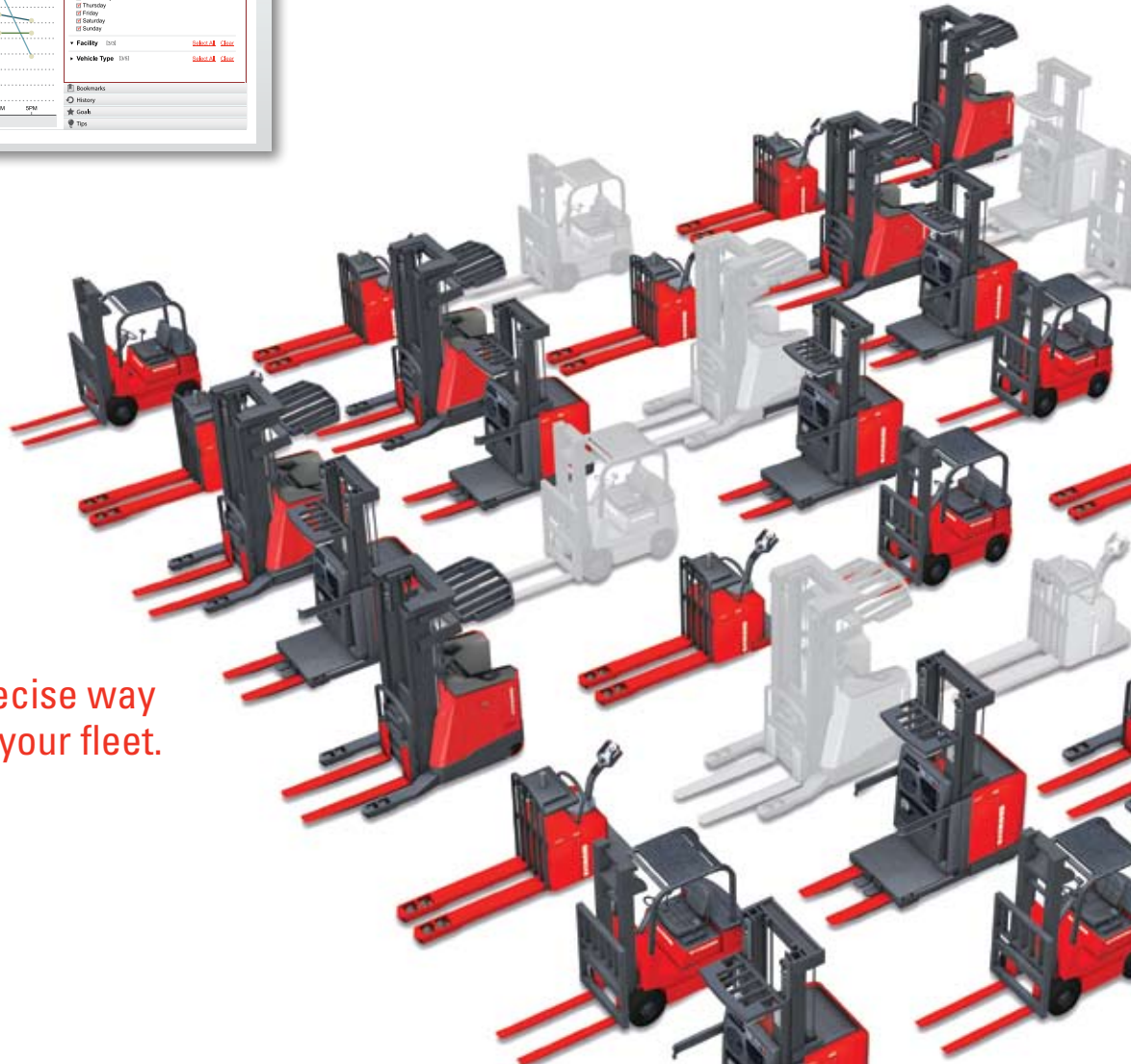
iMetrics compiles individual truck "histories" based on usage data linked to each truck's serial number. It enables you to generate custom reports on truck utilization and productivity, to help you right-size your fleet and put each truck to its best use.

iMetrics Lets You:

- › Compare operator efficiency within a site or across an enterprise
- › Compare distribution centers' efficiency
- › Spot opportunities to balance workload throughout the day
- › Determine appropriate fleet size and make informed purchase decisions
- › Receive battery change notifications



The most precise way
to right-size your fleet.



iAlert - The Remote Diagnostic System

If your trucks could ask for service help when they needed it, you'd save time, money, and aggravation. Now, they can do precisely that and only through *iPort*.

iAlert monitors your fleet health by capturing dynamic, real time truck diagnostic codes and automatically transmitting them to an authorized service and support technician, or your in-house technician for remote diagnosis and service dispatch.

iAlert Can Immediately Improve The Efficiency Of Truck Servicing Because:

- › The truck can be taken out of service before a failure actually occurs
- › The tech arrives for the service call having already diagnosed the problem, and carrying the right parts and equipment
- › You can monitor hour-meter readings and schedule maintenance at optimal times
- › Repairs can be less costly because the process is more efficient



RAYMOND Knowledge Center Contact Us / Inbox (4) Sign Out

Art Service, Inc. 02 Factories 32 Vehicles 71 Operators

2.2.1 - System Status | Software Setup | Monitor Setup | Event Setup | iAlert Setup | Operator Access | Setup Wizards

Event History

| Date/Time | Unit | Type | Data | System Note | Whom | Comment | Category |
|-------------------|------|------------|------|--|-----------------|---------|----------|
| 09-01-09 13:54:58 | G20 | Fault Code | 8L | BSSCC: D: Brake Feedback Current Out-of-Range | Bruce Eggleston | | |
| 09-01-09 13:54:58 | G20 | Fault Code | SJ | BSSCC: D: No Communication from LRI Power Amplifier Series CA7FA (AC IH) | Bruce Eggleston | | |
| 09-01-09 13:54:58 | G20 | Fault Code | SG | BSSCC: D: No Communication Received from Traction Power Amplifier | Bruce Eggleston | | |
| 09-01-09 13:54:58 | G20 | Fault Code | FH | BSSCC: D: Battery Voltage Out-of-Range | Bruce Eggleston | | |
| 09-01-09 13:54:58 | G20 | Fault Code | 8L | BSSCC: D: Brake Feedback Current Out-of-Range | Bruce Eggleston | | |
| 09-01-09 13:54:58 | G20 | Fault Code | SJ | BSSCC: D: No Communication from LRI Power Amplifier Series CA7FA (AC IH) | Bruce Eggleston | | |
| 09-01-09 13:54:58 | G20 | Fault Code | SG | BSSCC: D: No Communication Received from Traction Power Amplifier | Bruce Eggleston | | |
| 09-01-09 13:54:58 | G20 | Fault Code | FH | BSSCC: D: Battery Voltage Out-of-Range | Bruce Eggleston | | |
| 09-01-09 13:54:58 | G20 | Fault Code | 8S | BSSCC: 8S: TPC Contractor Detected Open, Low DC Voltage After Power-Up | Bruce Eggleston | | |
| 09-01-09 13:54:58 | G20 | Fault Code | 8C | BSSCC: 8C: Street Contractor Detected Open When Commanded Closed | Bruce Eggleston | | |
| 09-01-09 13:54:57 | G06 | Fault Code | 93 | BSSCC: 50: Not Near Wire - Tractor Coil Pair | Shaun Murphy | | |
| 09-01-09 13:53:28 | G06 | Fault Code | 93 | BSSCC: 52: Not Near Wire - Tractor Coil Pair | Shaun Murphy | | |
| 09-01-09 13:51:56 | G09 | Fault Code | 93 | BSSCC: 56: Not Near Wire - Tractor Coil Pair | Shaun Murphy | | |
| 09-01-09 13:41:49 | G10 | Fault Code | 94 | BSSCC: 76: Not Near Wire - Load Coil Pair | Thomas DeMina | | |
| 09-01-09 13:27:14 | G10 | Fault Code | 93 | BSSCC: 76: Not Near Wire - Tractor Coil Pair | Thomas DeMina | | |

iControl - You're In The Driver's Seat

Through our unique *iPort* architecture, *iControl* allows you to remotely adjust truck operating parameters, including which operators may use each machine, and within what speed parameters — travel and acceleration — they may operate. *iControl* therefore increases productivity and efficiency by allowing a supervisor to modify restrictions on a given truck right from his desktop, **without having to personally visit each truck on the floor.**

iControl Data Points:

- › Travel speed
- › Travel acceleration
- › Operator name
- › Truck model
- › Facility location

The screenshot shows the iControl web interface for Art Service, Inc. The header includes the RAYMOND logo, navigation links (Knowledge Center, Contact Us, Inbox (4), Sign out), and site statistics (02 Facilities, 32 Vehicles, 71 Operators). A navigation bar contains links for System Status, Software Setup, Monitor Setup, Event Setup, Alert Setup, Operator Access, and Setup Wizards. The main content area is titled "Operator and Key Configuration" and features a table with columns for Name, Site, E-mail, Supervisor, and Action. Below the table are input fields for "John LaFogola" (Default Site), "Max Speed (I) 0-12.8 mph" (set to 5.5), "Max Speed (R) 0-12.7 mph" (set to 4.0), and "Travel Acceleration" (set to Hard).



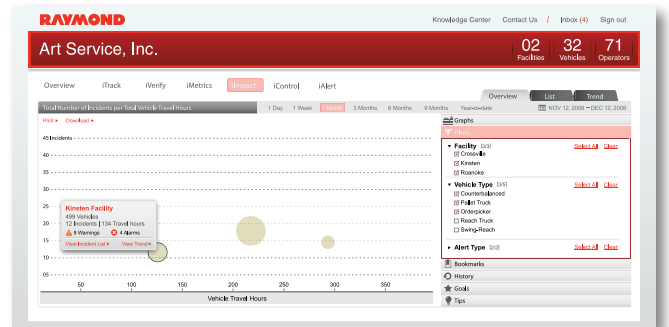
ilmpact - Real Time Impact Alerts

Until now, the vast majority of minor truck impacts — whether with walls, racking, stock, or other trucks — have gone unreported or undiscovered, making it impossible to analyze causes or take preventive measures.

With *ilmpact*, whenever your truck strikes a wall, racking or another vehicle, you **automatically receive an email or text message** notification identifying which truck and operator. You can also program the system to limit the truck's travel speed after the event. And with greater operator accountability, the results are lower costs related to truck repairs and damaged inventory and racking, for a more productive operating environment.

ilmpact Provides:

- › Operator name
- › Impact level (g-forces)
- › Date/time stamp
- › Serial number
- › Truck model
- › Facility location
- › Severity level (warning vs. alert)



We're Here When You **Need Us.**

No matter what time of day or night, whatever you need, all you have to do is contact us. No matter how many *Raymond* trucks you own, no matter how old, we'll be there to keep you running.

Unmatched Commitment and Leadership

When you purchase *iWarehouse* from Raymond, you get more than the industry's most technologically innovative fleet optimization solution. You get a commitment to excellence from the company that has been transforming the industry for over 85 years — and a global network of sales, service and support professionals that are dedicated to only one thing: **satisfying your every need**, no matter how large or small, 24 / 7 / 365.

Better. Smarter. Faster. That is our commitment to you.

www.raymondcorp.com





Relentlessly Pursuing Perfection

It takes more than innovative engineering to satisfy your goals for increased productivity, efficiency and operational cost reductions.

It takes a single-minded focus on understanding your specific needs, and the ability to provide and seamlessly implement the right solutions — every time.

When you require fleet, technology and sustainability strategies to enable you to compete and win in today's global marketplace, Raymond and its world-renowned network of authorized sales and service centers is there for you. And that's how we go above and beyond.

RAYMOND

Above. And beyond.[®]

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