



**Service,
Training, Fleet
Management,
and Parts
Support**



Big Truck Product Support

1. Installation Support
2. Technical Training and Support
3. Parts Support
4. Fleet Maintenance Opportunities

The Jumbo Truck Aftermarket Support is just as Unique as the Unit and it's Applications



Jumbo Truck

Planned Assembly and Installation

- **Key Elements of Installation**

- Preparation

- Inland Freight and Permits
- Customer Logistics
- Delivery Audit of Parts and Components for Assembly
 - Assembly Guide on Site for Reference
- Equipment Planning – Cranes and Fork Trucks
 - Avoid Unnecessary Rental Fees
- Labor Scheduling



Jumbo Truck

Planned Assembly and Installation

- **Costs of Installation - \$5-\$20,000**
 - Equipment Requirements
 - Crane, or Availability of another assembled Jumbo Truck
 - Labor
 - Are you dealing with a union at the customers location
 - Do you have experience installing Jumbo Trucks
 - Experience
 - Factory Support is Available
 - Dealer Technician experience with the Product



Jumbo Truck Planned Assembly and Installation

- **Hyster Trucks are designed for Ease of Installation**
 - Rolling Chassis
 - Drive off / Roll off
 - Minimizes Crane Rental
 - Minimizes Labor time and cost

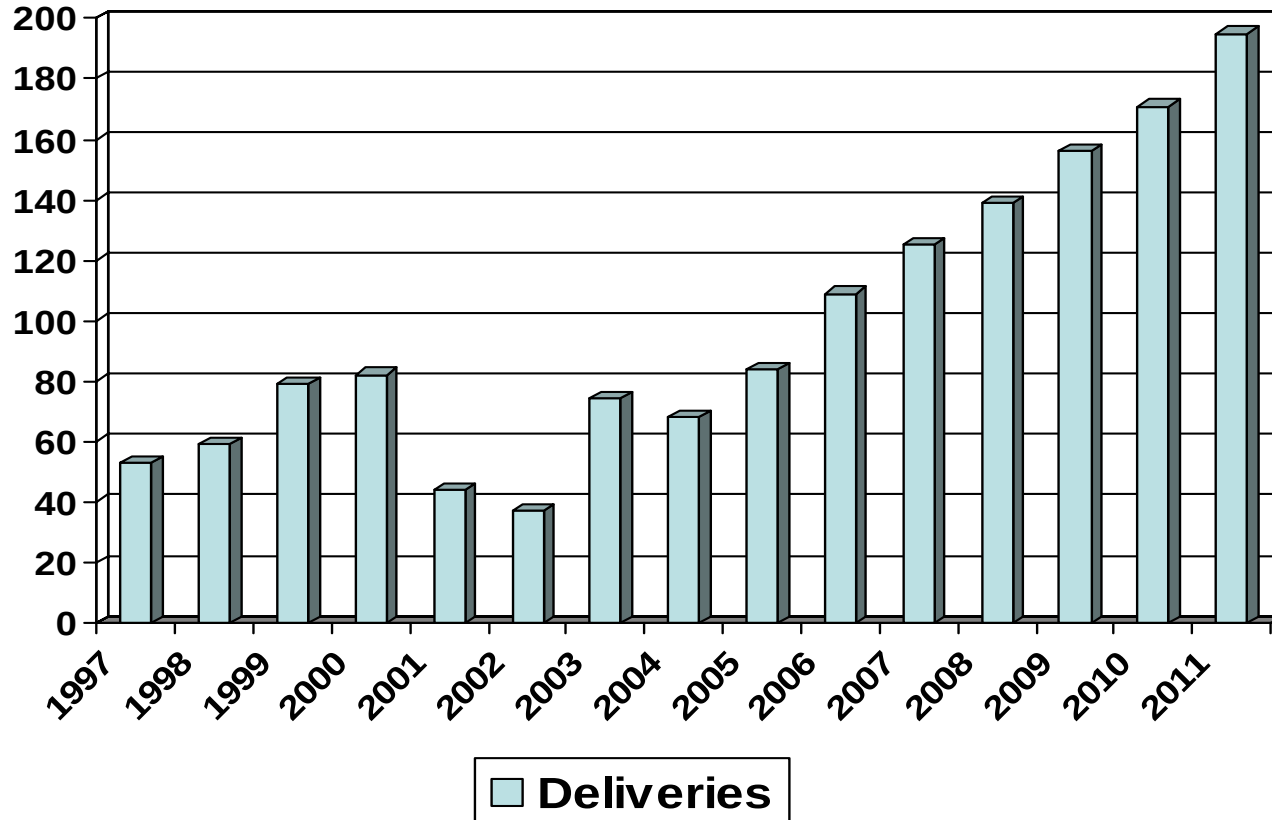


Jumbo Truck Technician Training

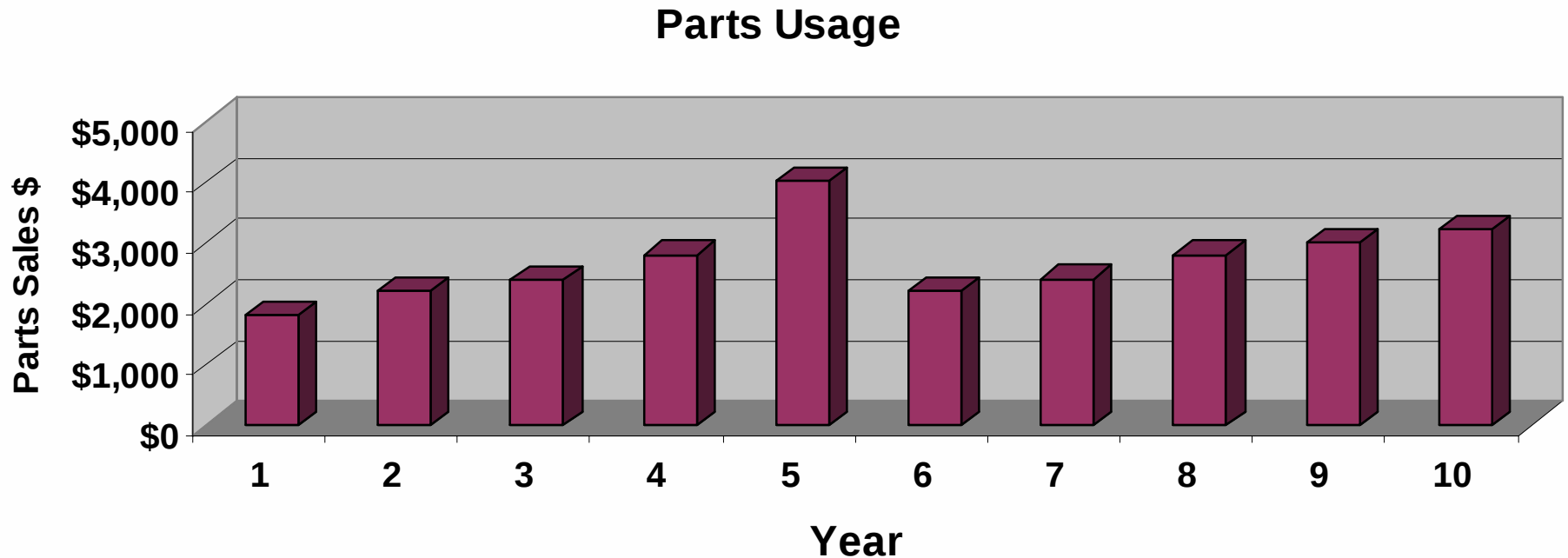
- **Requirements / Expectations**
- **Need to have at least 1 Technician Certified**
- **Hyster Training**
 - (3) eight hour sessions are offered for dealer and customer mechanics. Class size is limited to ten persons maximum
 - Jumbo Truck Service Engineers
 - TKC
 - All basic systems are covered as outlined in the price pages.
 - Training classes are most effective if scheduled thirty days or more after installation.
 - This provides Dealer and Customer mechanics suitable time to become familiar with the trucks systems and operation.
 - Cummins Engine Certification (by Cummins)



Product Support Population



Jumbo Truck Parts Opportunity



Jumbo Truck

Parts Support Initiatives

- **Old Method of Tracking Availability**
 - If a Common Part was used on the Jumbo Truck Series then we measured that part's total usage as part of our measurement.
 - Therefore Availability results were inflated!

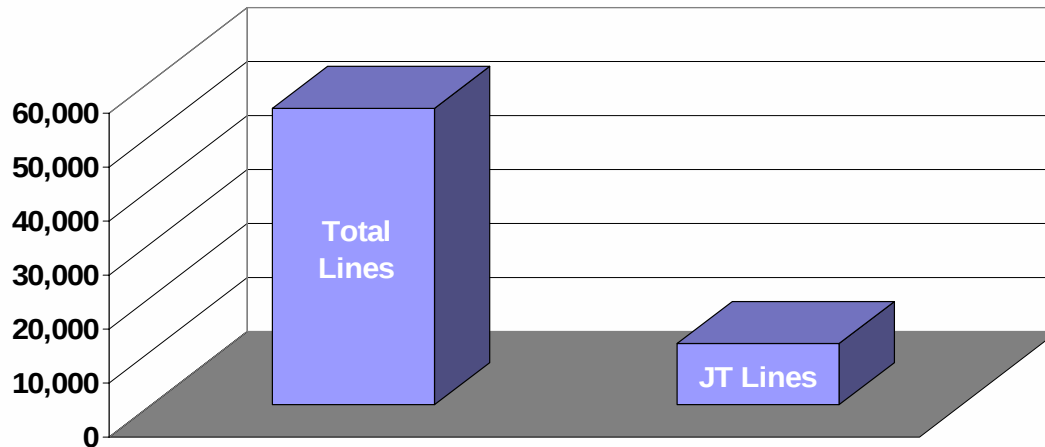
JUMBO TRUCKS	Total
LINES ENTERED	29,722
LINES SHIPPED	29,305
FILL PERCENT	98.6%



Jumbo Truck

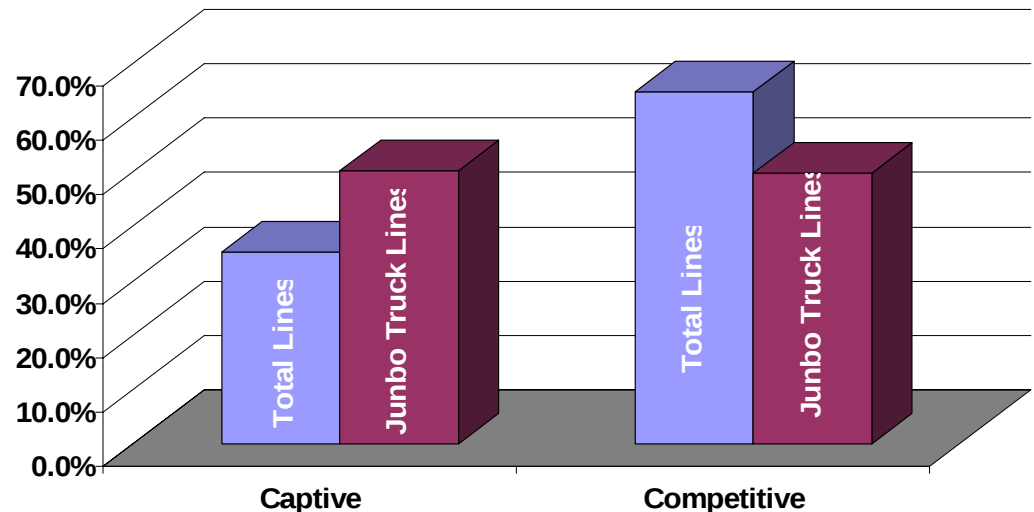
Parts Support Initiatives

PDC Lines



Assigned the common parts a Jumbo Truck contribution factor based on engineering estimated consumption based on the Jumbo Truck population

Additionally we are looking at Captive and Competitive parts differently as the Jumbo Trucks have a different profile than any other type of equipment



Parts Support Legacy Product Initiatives

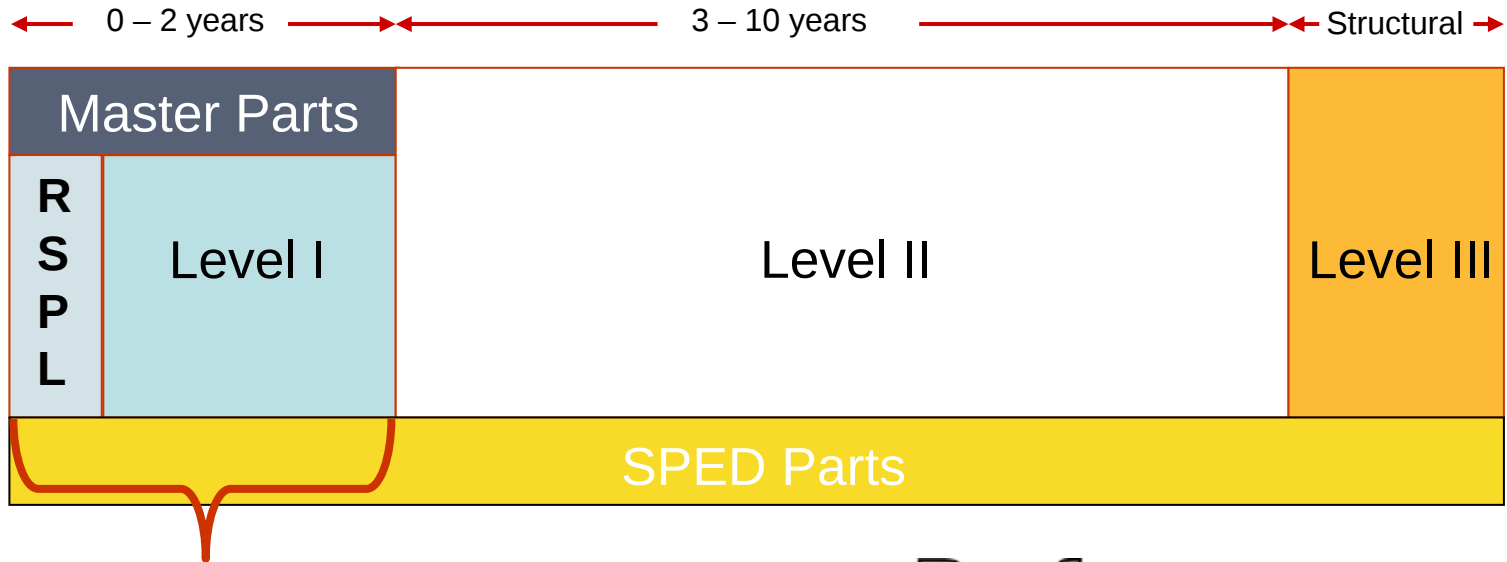
- Today we Measure Jumbo Truck utilizing a new “Allocated Fill”, which provides us with a clearer picture of actual availability.
 - This is just the start and we are continuing to fine tune this new process

ALLOCATED FILL	
JUMBO TRUCKS	Total
LINES ENTERED	1,455
LINES SHIPPED	1,355
FILL PERCENT	93.1%



Jumbo Truck

Parts Support Initiatives



If the parts are not available for pick up from your local dealership within one business day of order placement – the part is FREE



Jumbo Truck Global Parts Support Model
North America, Europe and Asia Pacific

Jumbo Truck

Parts Support Initiatives

- **Additional Action Plans for Improvement**

- HYPASS Online
 - Historically BT “Picklists” were generated from old, incomplete parts books.
 - Addition of SPED content to HYPASS Online
- L1,2,3 now shown on many more BT units in TRD with more to come.
 - Working backwards to include older units with the same methodology
- Forecast process
 - Utilizing PAP & Option Mix to decide stock qty.
- Audits (of legacy product) have resulted in many parts now in procurement and / or on order. Soon to be in stock.
 - Audits have resulted in safety stock added to assure restocking occurs.



Jumbo Truck

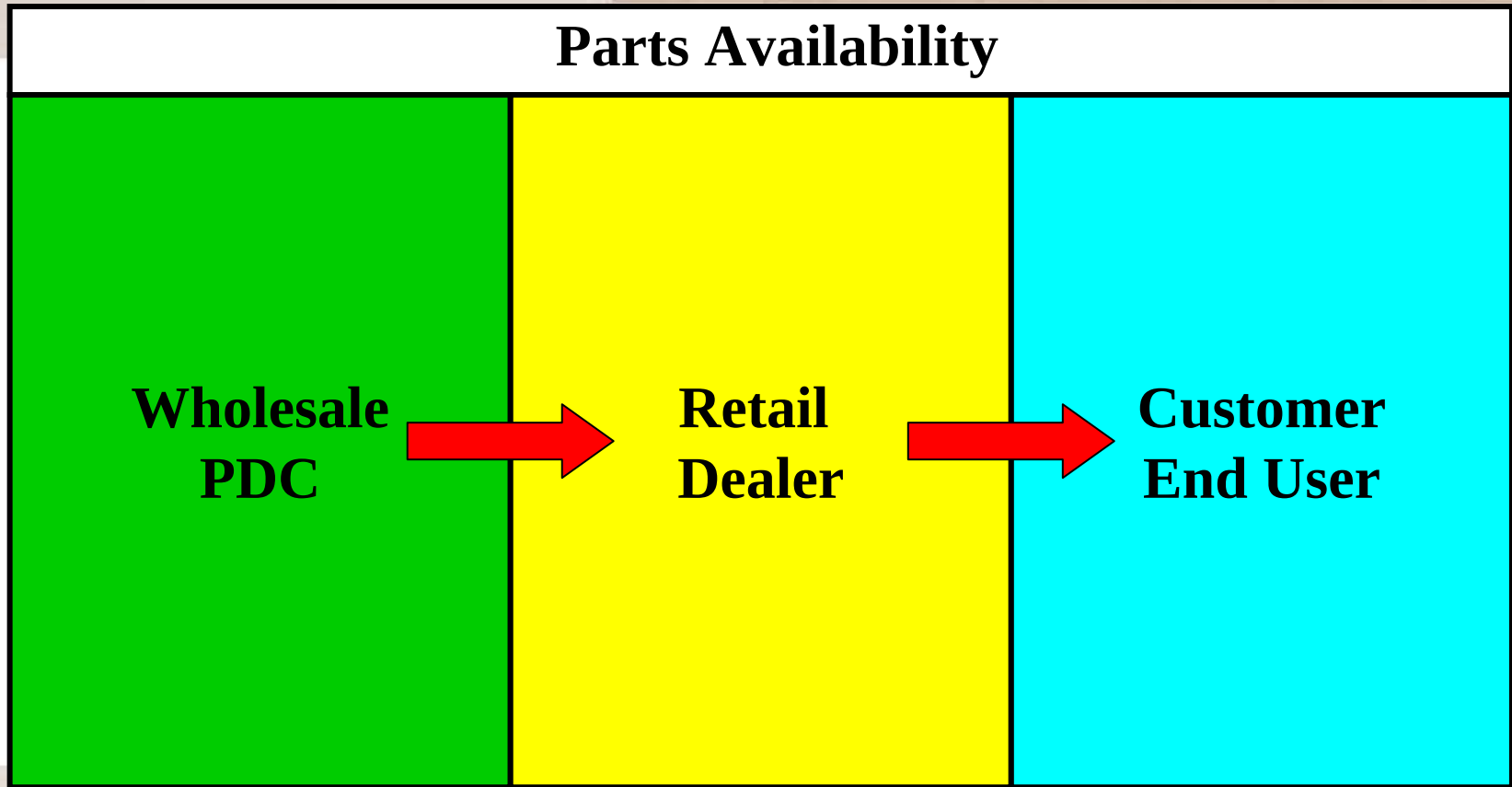
Parts Support Initiatives

- **Action Plans for Improvement**
 - Nijmegen Depot and PDC communications much improved
 - Collaborative planning by Danville / Nijmegen PDCs
 - Global Part Master
 - Defined common direction
 - Parts Readiness System and SRM
 - Review Gate & Project coordination
 - New Allocated Fill process inherently draws more attention to low volume strategic products.
 - Unique parts and parts common to just big trucks are weighted higher while common parts are not ignored.



Parts Support

Total Supply-Chain Management

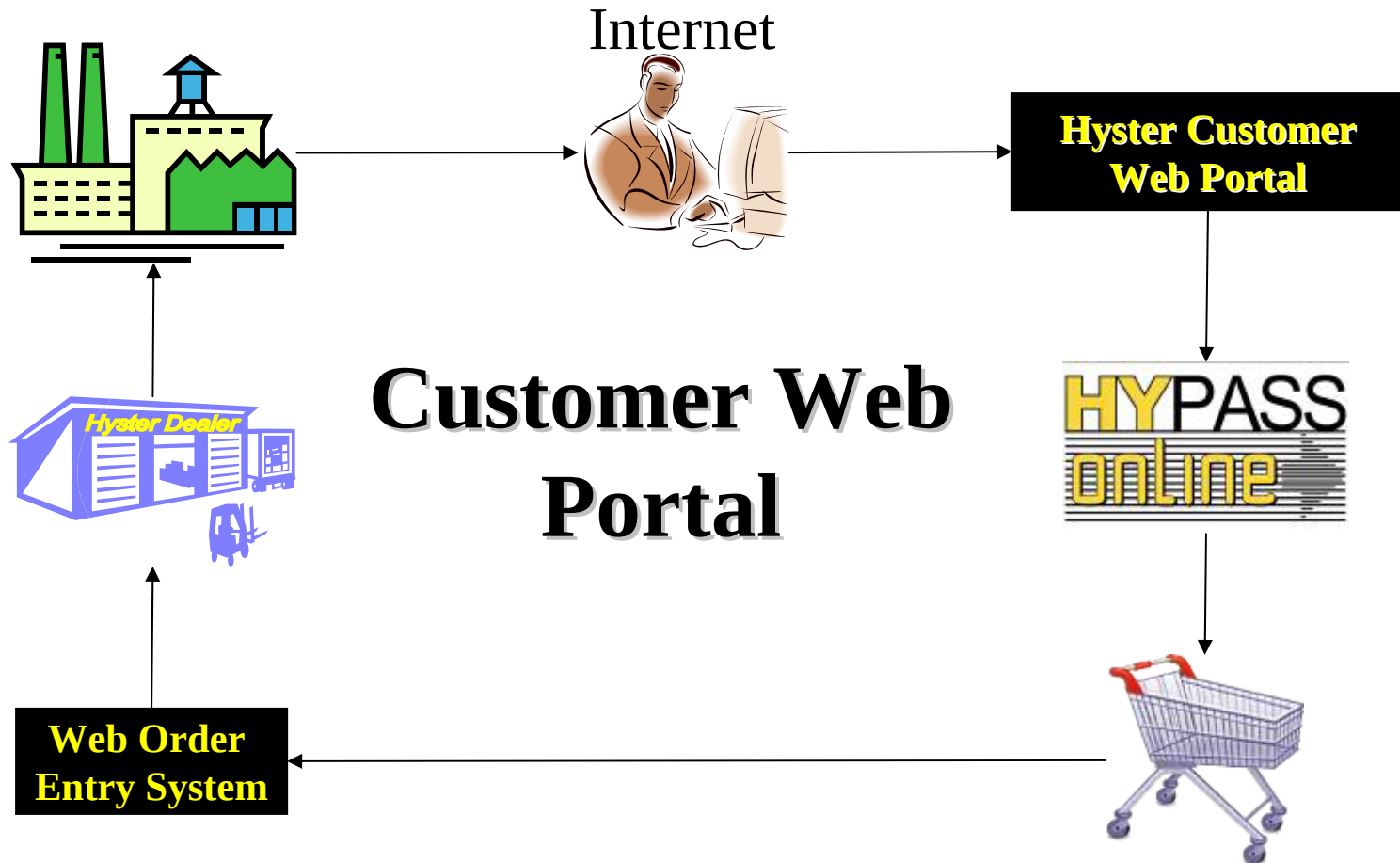


Total Supply-Chain Management Dealer's Responsibilities

- Dealers need to stock Level I category (including RSPL) parts.
- Dealers are invited to review our three categories and recommend adjustments.
- Dealers are encouraged to solicit input from principal customers for # 2.



Fleet Management Opportunities



Fleet Management Opportunities

What do Jumbo Truck users want?

- Know vehicle location and who is operating it
- Reduce vehicle maintenance costs
- Reduce fuel consumption costs
- Improve operator safety
- Improve vehicle utilization and driver productivity
- Reduce vehicle damage
- Minimize insurance costs



Fleet Management Opportunities

Additional Functions: Security

- Geo-fencing
- Remote shut-down
- Post-incident data analysis
- TSA sponsored & approved



Fleet Management Opportunities



Advantages of Wireless Asset Management



Provides improved safety for your operators reducing accidents and damage costs.



Real time access provides improved truck utilization to increase productivity.



Higher maintenance control drives down cost and improves operating life of equipment.



Allows you to maintain paperless records and reduces administrative effort.

WIRELESS ASSET MANAGEMENT OPTIONS

	RF IDS Systems - Wireless Asset Management System	RF G-Force Plus RF Powered Industrial Vehicle Fleet Mgmt System	RF G-Force 3 Fleet Safety & Mgmt Info Monitoring System	RF G-Force 2 Vehicle Safety & Drive Accountability System	RF G-Force 1 Vehicle Impact Alarm System	PAGER On - Board Communications
Level 6						
Real-time wireless communication	X					
Real-time visibility of who is driving what vehicle	X					
Access control for assigned work areas	X					
Remote software-controlled manual vehicle lockout	X					
Remotely, wirelessly adjustable impact thresholds/alarms	X					
Speed/distance, Lift weight/time, Parking brake/tow, and Oil pressure/temperature sensors	X					
GPS receiver for outdoor location tracking	X					
External serial/Ethernet interfaces (e.g. for RFID reader)	X					
Advanced operator labor productivity analysis	X					
Configurable, event-based LED alerts on vehicle	X					
Two-way text messaging to operators	X					
Level 5						
RF communication-near real time		X				
Battery Monitoring Electric Vehicles	X	X				
Fleet Management Software	X	X				
Maintenance lockout, PM Scheduling and work order entry	X	X				
Near Real-time visibility-of who is driving what vehicle	X	X				
Measurement vehicle login and productivity time	X	X				
Vehicle location tracking -Zone Based	X	X				
Vehicle inspection checklist and motion measurement	X	X				
Level 4						
Programmable Vehicle Safety Checklist	X	X	X			
Vehicle/Operator Timekeeping reporting	X	X	X			
Software Reporting Features: Export Log in data in Excel format	X	X	X			
Level 3						
Operator key log-in/Authorization	X	X	X	X		
Operator Accountability	X	X	X	X		
Software Reporting Features: Serial Port to PC, Export Impact & Maintenance Data	X	X	X	X		
Level 2						
Adjustable Impact Monitoring & Shutdown System	X	X	X	X	X	
Audible Alarm	X	X	X	X	X	
Lift Interrupt	X	X	X	X	X	
Level 1						
Hour Meter REading	X	X				X

FUNCTIONALITY & COST



Fleet Management Opportunities

RFID and WMS Opportunities

Industry and Customer Trends

- Release of mobile computers vs. terminals
- Trend toward mobile mounted computing
- Desire to track assets real-time in facilities
- Customers seek out 3rd party providers to deliver hardware and software solutions
- Some software providers looking for partnership opportunities
- Port Authorities are developing standards for the Port Operations

Forklift OEM Trends

- NMHG provides only mounts and cabling on limited models
- Strategic focus moving forward is centered around the truck as an information portal
- Some OEM's have begun partnerships in WMS/RFID (Raymond/Symbol)2

