New Technology in Fork-Lift Trucks

Fleet Management & Lift Truck Safety Trends

Presented By: Jared Green
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Today’s Agenda

• Using Operator & Fleet Management Technology to Improve Safety
  – OSHA Compliance
  – Impact Detection Tools
  – Operator Performance Levels
  – Service Efficiency

• End User Requirements of an Operator & Fleet Management System
Operating the Forklift:
Pre-Operation

A vehicle that is in need of repair, defective or in any way unsafe should be removed from service. The problem should be recorded on a log and reported to a supervisor immediately. This section discusses pre-operation and operational inspections that operators should perform to ensure that forklifts will operate safely. Only operators who have been trained and evaluated in accordance with 29 CFR 1910.178(l) can operate forklifts.

- Pre-Operation Inspection
- Operational Inspection
1910.178 - Powered Industrial Trucks
This standard covers the design, maintenance and operation of all kinds of powered industrial trucks, from forklifts to motorized hand trucks.

• In the last 12 months, 1910.178 was the **most frequently cited standard** for the Motor Freight Transportation & Wholesale Trade SIC groups.

• This same standard was also **in the top 5** for number of citations for the Manufacturing & Retail Trade SIC groups.

**Top 5 Powered Industrial Trucks Standards Cited in 2010:**
1910.178 (l)(1)(i) – Failure to ensure operator competency
1910.178 (l)(6) – Lack of operator certification
1910.178 (p)(1) – Failure to remove unsafe trucks from operation
1910.178 (l) – Lack of operator training
1910.178 (q)(7) – Failure to inspect trucks
OSHA Compliance

Only operators who have been trained & evaluated in accordance with OSHA standard can operate forklifts

- Vehicle Access Control
OSHA Compliance (Cont.)

• Pre Shift Inspection

**1910.178(q)(7)** Industrial trucks shall be examined before being placed in service, and shall not be placed in service if the examination shows any condition adversely affecting the safety of the vehicle. Such examination shall be made at least daily. Where industrial trucks are used on a round-the-clock basis, they shall be examined after each shift. Defects when found shall be immediately reported and corrected.

**1910.178(p)(1)** If at any time a powered industrial truck is found to be in need of repair, defective, or in any way unsafe, the truck shall be taken out of service until it has been restored to safe operating condition.
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OSHA Compliance (Cont.)

- Electronic Pre Shift Inspection Checklist
  - Manual processes can be difficult to manage
    - How does the company ensure the checklist is done?
    - And done correctly?

  - Challenges in getting real time information
    - What happens if a truck requires a repair?

  - Ensuring unsafe equipment is taken out of service
    - How does management ensure trucks are safe to operate?
Impact Detection System

• Impact detection systems have been available since 1992 for various industries.
  – Various off the shelf systems were used on lift trucks, with marginal success.
  – Today’s technology can communicate with the truck to eliminate false positives which provides accurate & consistent information. This can then be used with confidence to coach or discipline unsafe operators.
Remote Performance Mode Adjustments

- Managers can set operator performance levels that follow the individual from truck to truck.
Service Efficiency

- Automated PM Notifications.
  - Intervals can be based on actual hours of use or calendar days.

- Today’s lift truck control systems utilize service event codes for maintenance.
  - Wireless technology enables remote notifications directly to managers or service providers as the event codes occur.

- Electronic checklist technology can generate e-mail alerts to managers or service when truck requires attention.
End User Requirements

• System must be easy to use for operator

• System must be easy to use and maintain by managers / supervisors

• System must assist with identifying opportunities
  – Manage by exception through benchmarking

• System must provide accurate and consistent information
Summary

• Operator & Fleet Management Technology Can Assist to Improve Safety
  – OSHA Compliance
    • Vehicle Access Control
    • Operator Certificate Management
    • Electronic Pre Shift Inspections
  – Impact Detection Tools
    • Accurate and Reliable Information with Lift Truck Validation
  – Operator Performance Levels
    • Remotely Manage Operator Performance Truck to Truck
  – Service Efficiency
    • Automated PM Notifications
    • Lift Truck Event Code Notifications
    • Electronic Checklist Service Notifications

• End User Requirements of an Operator & Fleet Management System
Questions?

Thank You Very Much

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