



THE IMPACT OF CUSTOMIZATION ON MATERIALS HANDLING SUCCESS

This white paper outlines significant challenges facing businesses today and discusses how they can be addressed through more effective materials handling processes and equipment. It also highlights the critical role customization plays in increasing uptime, throughput and performance to improve the bottom line and offers guidance on what materials handling professionals should look for when deciding which lift truck brand to choose.



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Introduction

It is no secret that materials handling applications have grown increasingly complex over the years. In a world where we are challenged to do more with less, to continually seek out new growth opportunities and to adjust quickly to changing market demands, tremendous pressure is placed on daily operations.

Despite the pressures to adapt and increase productivity, every organization faces the problems of downtime, disruptions and bottlenecks. While these can never be completely avoided, smart companies learn to think ahead to minimize their impact.

Many pressures and challenges can be alleviated by employing the right materials handling equipment and processes. Although often overlooked, materials handling professionals can play the hero by dramatically improving throughput, efficiency and return on investment (ROI). The key to doing this lies in arming them with more information and providing them the opportunity to customize products to meet their specific business goals and application needs.

Overcoming the Enemies of Productivity

The enemies of productivity are downtime, disruptions and bottlenecks. In fact, a study showed that 59 percent of companies experience at least 1.6 hours of downtime per week, and 90 percent of flow is tied to materials handling. This downtime could be due to:

- + Availability of specific type of lift truck
- + Capacity constraints
- + Aging fleets
- + Physical limitations
- + Seasonal spikes
- + Weather conditions

It is important for materials handling operations to seek out lift trucks that can be designed around their needs, providing customized solutions to fit their specific application, facility layout and best practices. Having the right equipment in place can have a positive impact on operations—much more than simply choosing from a range of options. True customization allows customers to build and use the right equipment to meet their needs and address challenges, rather than tailoring their processes to fit their truck. This approach allows the lift trucks to become a solution for the facility, helping provide the tools and support needed to scale and grow business, respond to changes and effectively manage the fleet throughout its full lifecycle.

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However, to turn lift trucks into opportunities, customers need a few key things:

- + Reliable equipment that performs better and lasts longer
- + Support from a strong and well-trained dealer and service network
- + Solutions customized to the applications and tasks that must be performed

Overcoming the Enemies of Productivity

Capacity range is a major factor in customization, helping to drive nearly all other decisions. Hyster offers the broadest capacity range in the industry, with more than 130 models, ranging from 2,000 to 105,000 pounds and every power configuration. Engine choice is also paramount. Lift truck buyers should seek out manufacturers who offer engine options designed specifically for their equipment. Advanced features, like Hyster® Variable Power Technology™, offer different engine modes to allow operators to balance power and fuel economy, based on need.



It's also best to look for manufacturers willing to create non-standard products or services. For example, if an existing model or configuration does not work for a customer, Hyster has a dedicated Special Products Engineering Design (SPED) group which allows application engineers to work with customers to specify and build customized solutions to meet their exact specifications. Many lift truck manufacturers also offer customized financing and fleet management services to help customers determine the exact balance of equipment to support changing needs.





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Customization by Segment and Industry

It is important to note that while every situation is unique, each industry, from lumber and steel to retail and food service, faces a set of common problems. OEMs and dealers must have the ability to “go deep” and offer thorough industry knowledge, helping to create custom products and solutions for customers’ exact issues.

Hyster has Application Solutions Consultants (ASC) that take this industry expertise to the next level, committing company time and resources to intimately understand target industries. These consultants are part of a cross-functional team that works alongside customers as informed business partners. The team conducts a thorough analysis of operational requirements, equipment needs and processes, which results in a specialized recommendation on products and non-product gaps. This “blueprinting process” gives customers a fresh view of their operations and provides specific recommendations on product mix, outsourcing options, software changes and product enhancements.

Commitment to Continuous Improvement and Engineering Excellence

While in-depth industry knowledge helps drive customization capabilities, nothing would be possible without advanced engineering.

+ Development Centers

The best manufacturers focus on continuous improvement through solving pressing industry challenges as part of their new product development efforts. They employ teams of engineers to focus on creating unique new solutions and on validating the technologies they develop. Hyster has created Counterbalanced, Warehouse and Big Truck Development Centers to help ensure that all products, whether custom or intended for broader use, meet the company’s exacting standards. At each of these centers, rigorous testing protocols are performed to emulate the entire lifecycle of a lift truck. Customer operating environments and conditions are simulated, including extreme weather, temperature and water exposure, steep grades, extremely narrow aisles, tight turns and very heavy loads. This testing helps ensure the quality, toughness and durability of a Hyster® lift truck.

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+ Special Engineering

Another key factor to customization capability is a manufacturer's ability and willingness to efficiently and cost-effectively create special projects in limited quantities. Hyster offers a Special Products Engineering Design (SPED) group, which allows application engineers to work with customers to specify and build customized product solutions to meet their exact specifications, ones that cannot be met through existing products or modifications.

Hyster application engineers are extensively informed on how trucks can be modified to fit applications or environmental needs, and make their recommendations based on knowledge of the segment in which customers operate. They take their recommendations to design engineers, who determine the technical feasibility of the desired modification, create the design plans and specify the parts needed to build the custom lift truck.

Common modifications focus on specific needs in the following areas:

- Additional capacity and more counterbalance weight
- Accounting for variances in ground conditions
- Filtration requirements
- Unique alternative fuels and power sources
- Engine modifications
- Cooling requirements
- Explosion protection
- Physical plant limitations and the need for unique slotting strategies
- Modified operator compartments and configurations
- Unique fork options





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More than Equipment

The best lift truck manufacturers have customization at the heart of their sales process. They focus first on understanding their customer and industry challenges, and then work closely to find solutions that provide the best opportunities. With this in mind, a lift truck manufacturer's commitment to customization should extend well beyond just building the equipment. It should include the right mix to get the job done, as well as unique processes to improve flow, and the best fleet and financing options to achieve the greatest impact on the customer's bottom line.

Fleet Management

Plant operations are complicated, requiring a nearly limitless number of moving parts to work together seamlessly. Even when functioning properly, inefficiency in a single component process or piece of equipment can have major impact on the overall uptime and throughput of the business.

These businesses should seek out lift truck manufacturers who can evaluate and assess existing assets and processes, and provide a detailed, customized action plan to address the following areas:

- Identifying underutilized or excess equipment to achieve economies of scale and reduce fleet size
- Analyzing fleet age and optimum economic life cycles and establishing a schedule for obsolescence and replacement
- Creating a maintenance and replacement plan and determining whether outsourced or in-house options are best to improve maximum uptime and efficiency
- Eliminating specification/configuration inconsistencies
- Suggesting an appropriate mix of financing options, including buying terms and short- and long-term leases
- Implementing formal training programs for drivers and operators to ensure safety and enhanced productivity





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Telemetry and Data-based Customization

Telemetry systems have evolved to enable effortless access to immediate and actionable data. With the ability to evaluate fleet utilization, impacts, idle time and maintenance, operations can make quick and informed decisions about fleet size and composition. This allows them to continuously improve operations and maintain a right-sized fleet composed of equipment tailored to meet their specific operational challenges. With telemetry system data, operations can right-size fleets to eliminate the cost of running excess trucks.

The Custom Solution

Because of the massive complexities and variances within the industry, it is clear that peak performance cannot be achieved without the ability to customize. By utilizing customized lift trucks, customers are able to:

- + Create scalable solutions that optimize performance and use of physical space
- + Dramatically increase productivity and throughput
- + Adapt fleets to evolving business needs
- + Respond to changing demands or unplanned spikes
- + Run trucks longer between repairs and get them back to work faster
- + Do more with less, while keeping costs low

Choosing the right lift truck manufacturer to help with these efforts can turn materials handling from an overlooked area, to a corporate superstar, actively making major contributions to the growth and profitability of the business.

For more information on how Hyster can create a customized product or plan to meet your needs, please contact your local authorized Hyster® dealer.

*Peak performance
cannot be achieved
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¹ Assessing the Financial Impact of Downtime, Vision Solutions, 2008

