

Protective Barriers Reduce Product Damage and Accident Risk

BY JEAN FEINGOLD

People and equipment share the space in a warehouse with product inventory. When anything moves from one place to another, there is the risk of accidents, injuries or product, equipment and facility damage. By installing appropriate protective barriers, many of those negative consequences can be prevented.

Protective barriers are typically installed to designate the edges of pedestrian walkways and paths for moving equipment (like hand trucks and forklifts) by separating work areas from travel areas, setting off space around equipment and along doorways and walls within warehouses. They protect employees, inventory, support structures, racking, machinery, the vehicles themselves and the warehouse's structural elements (walls, columns, doors, docks and floor). Barriers help workers know where walking is safe and where they may encounter moving equipment. Barriers can better direct traffic flow so vehicles can efficiently collect and deliver goods without crossing into pedestrian walkways. They also prevent unnecessary contact with equipment and facility structures.

Barriers can be made of steel, plastic or other polymers and are designed to deflect moving equipment while protecting an area, material or structures. Each

type has advantages and disadvantages. These are based on rigidity, flexibility and ability to absorb or deflect impact, along with how the product dissipates impact forces, enabling it to return to its original shape or form. The way each barrier solution is mounted impacts how it withstands impacts and the possible damage that impact could cause to the item to which it is attached. Barrier installation takes several days depending on the facility's size and the products selected.

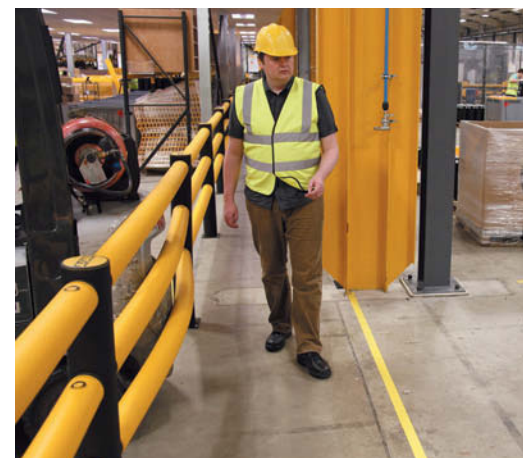
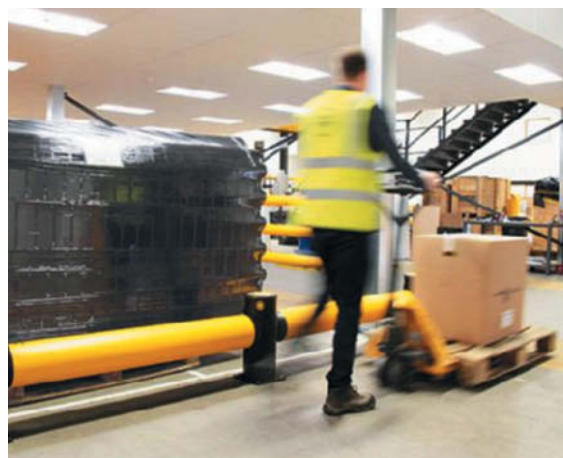
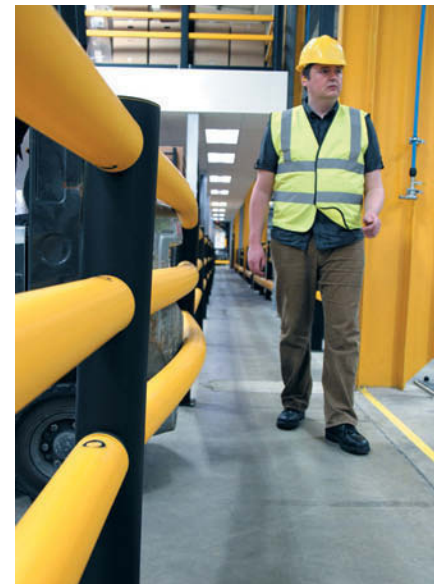
Barrier product forms

Typical products include double and single rail barriers, mast and column protectors, bollards, hand rails, dock rollers, parking lot barriers, traffic barriers, impact barriers, pedestrian barriers, slide, lift and swing gates, and mezzanine, photo eye, light curtain and rack barriers. Before selecting specific products, safety staff must examine how they will handle facility temperatures, product strength, mounting and anchoring styles, electricity needs, barrier offset requirements, required height and length, the weight and speed of moving objects and whether lights or audible signals are required. Addressing these questions will lead to products appropriate for a specific

setting. Custom designed products can be made for special situations.

Barrier products are available in many colors with yellow, orange and red considered standard. They can be manufactured in any color at an extra charge. "Yellow is the most popular as it is the universal color for safety," noted Claire Porter of flexible barrier maker MHI member A-Safe Inc.

Both steel and special polymer barriers can be used for cold storage applications. These polymer barriers will maintain their flexibility without becoming brittle in freezing



temperatures. The blend of polyolefins and rubber is altered to accommodate the temperature difference and they work the same as if the barriers were at room temperature.

Many companies want to reduce maintenance costs on internal structures caused by forklift truck impacts while providing a safer working environment for employees, pedestrians and vehicle drivers. For this purpose, appropriate barriers include pedestrian barriers with gates, column protectors, rack guards, curb barriers, traffic barriers and dock rollers.

To prevent employees from straying into areas with active forklift traffic, pedestrian barriers can be used to reduce vehicle/pedestrian crossover points and clearly segregate vehicle routes from pedestrian walkways. Green gates can be fitted into walkways at convenient safe crossing points. Install column protectors far enough from the actual structures to keep vehicles from hitting them directly while absorbing impact when vehicles get too close.

Cost savings

The lifecycle cost of barriers depends on their design, mounting and material composition. The biggest factor in how long barriers will last is how abusive the facility environment into which they are placed is.

But no matter the cost, the investment in barrier solutions to protect everything in your warehouse is prudent. Why? Failing to protect your employees, equipment and facility structures will cost you many times over. Spending money upfront for barriers and on occasional repair of damaged barriers saves thousands of dollars on the bottom line.

Think about the total cost of a person injured by a moving object. The company will have to pay for lost wages, increased insurance premiums, recruiting and training new employees and damage to other employees' morale. What is the total cost of inventory damage? Shipments will be late, products will need replacement and customers will be unhappy (and possibly lost)

because of late delivery. What is the total cost of facility or equipment damage? An unprotected facility could create an unsafe work environment, increase facility costs and result in lost production time and late deliveries.

Expert help available

The Protective Guarding Manufacturers Association (ProGMA) Product Group of MHI is made up of leading solution providers of many kinds of guarding products designed to protect personnel, equipment, inventory and the facility.

Take a look at your facility. Could adding barriers make it safer? "The cost savings and safety improvements for the warehouse begin on the day that barriers are installed," Porter noted. Don't wait to make this important safety improvement.

ProGMA is a resource for the hundreds of different types of protective guarding solutions for manufacturing and distribution facilities. Learn more at mhi.org/progma. ●

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