Eastern Lift Truck Co., Inc.

presents

FORKLIFTS 101:
A Tutorial on Powered Industrial Truck Classifications

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What are powered industrial trucks?

The Federal Occupational Safety and Health Administration (OSHA), provides this definition:
"Powered industrial trucks, commonly called forklifts or lift trucks, are used in many industries, primarily to move materials. They can also be used to raise, lower, or remove large objects or a number of smaller objects on pallets or in boxes, crates, or other containers. Powered industrial trucks can either be ridden by the operator or controlled by a walking operator. Over-the-road haulage trucks and earth-moving equipment that has been modified to accept forks are not considered powered industrial trucks.

The hazards commonly associated with powered industrial trucks vary depending on the vehicle type and the workplace where the truck is used. Each type of truck presents different operating hazards. For example, a sit-down, counterbalanced high lift rider truck is more likely than a motorized hand truck to be involved in a falling load accident, because the sit-down rider truck can lift a load much higher than a hand truck. Workplace conditions also present different hazards. For example, retail establishments often face greater challenges than other worksites in maintaining pedestrian safety."

All forklifts may be categorized into one of seven different classifications.

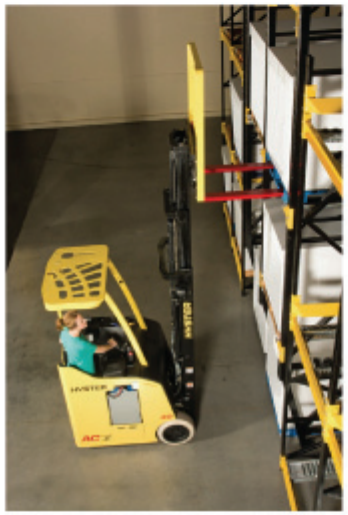
The best way to protect yourself and your employees from injury, when operating a powered industrial truck, is to understand the type of equipment you are operating, and how it should be used in your particular application. Safety starts with proper training. In this document, we provide examples of Classes I-VII, including Class VIII (Burden/Personnel Carriers) as well as Commercial and Utility Vehicles.

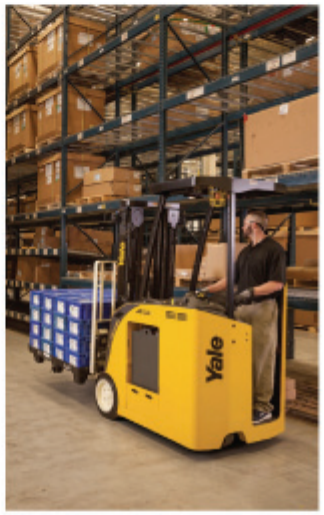
The Industrial Truck Association (ITA) is responsible for defining powered industrial truck classifications.

The Industrial Truck Association (ITA) which dates to 1971, is headquartered in Washington DC, and represents North American lift truck manufacturers such as Hyster, Yale and others. It is responsible for defining classifications of powered industrial trucks. The ITA works with sister organizations in Europe and Asia to establish joint statistical and engineering programs to promote safer products worldwide and was instrumental in securing revisions of the operator training regulations enforced by OSHA. Those revisions have helped reduce the number and severity of accidents and saved lives.

CLASS I Electric Rider Trucks

Trucks in this class may have 3 or 4 wheels with cushion or pneumatic tires. Both sit down and stand up styles are included. Class I trucks from Hyster and Yale have capacities that range from 2,500 to 12,000 pounds.





CLASS II Electric Narrow Aisle and Very Narrow Aisle Trucks

Narrow aisle lift trucks include single and double (aka deep) reach trucks, straddle trucks, order selectors (also known as order pickers or cherry pickers), special enclosed end riders, moving mast forklifts and robotic-guided reach trucks. Multi-directional trucks, sideloaders, turret trucks and lift trucks equipped with an articulated mast are considered very narrow aisle trucks (VNA). Order picker and turret truck operators ride up and down with their load and must take precautions to secure themselves with a tether and harness system. Hyster and Yale Class II trucks have capacities ranging from 3,000 to 10,000 pounds.

CLASS III Walk-Behind and Ride-On Electric Hand Pallet Jacks

Low lift and masted electric hand pallet trucks are also known as “walkies” or “walk behind” units. However, some pallet trucks are designed to be ridden from a center or an end “rider” position. Low lift units are so named, because they only lift product 5 or 6 inches off the floor. Pallet trucks equipped with a fixed mast are capable of lifting almost as high as a traditional forklift, and include stackers, straddle stackers and reach stackers. Capacities range from 2,000 to 8,000 pounds. (Class III continued on next page.)

CLASS III Tow Tractors and Low Level Order Pickers

Electric tow tractors and low level order pickers are also included in the Class III designation. These units are rated by draw bar pull, which may be as high as 10,000 pounds and rolling load capacity. Hyster and Yale units have a rolling load capacity between 10,000 and 15,000 pounds. Some units may be equipped with robotic technology to automate repetitive picking tasks.

CLASS IV ICE (Internal Combustion Engine) Cushion Tire Trucks

These durable and versatile forklifts are perfect for indoor (and even some outdoor) applications. Hyster and Yale lift trucks have long proven themselves in the paper, steel, machinery and fabricated metal industries. Hyster and Yale Class IV trucks range in capacity from 3,000 to 15,500 pounds.

CLASS V ICE (Internal Combustion Engine) Pneumatic Tire Trucks

Hyster Class V capacities range from 3,000 to 115,000 pounds and Yale Class V capacities range from 3,000 to 36,000 pounds. Both brands offer tough, dependable lift trucks that are ergonomic and fuel efficient.

CLASS VI Ride On Tuggers

Tuggers are sometimes referred to as “tow tractors.” Eastern Lift Truck Co. offers many Class VI options from trusted brands like Taylor-Dunn and Cushman. Towing capacities range between 4,000-168,000 pounds, depending on the brand and model, and each manufacturer differs. Contact us for more information to find what fits your needs.

CLASS VII Rough Terrain Forklift Trucks

These trucks have pneumatic tires and are almost exclusively powered by diesel engines and used outdoors. Some trucks are equipped with a traditional (fixed) mast, while others utilize a telescopic boom. Eastern Lift Truck Co. offers rugged rough terrain trucks from Load Lifter, Genie and JLG with a wide range of capacities and applications.

CLASS VIII Personnel & Burden Carriers

Taylor-Dunn and Cushman offer a wide range of ICE and Electric powered vehicles. Capacities range between brands and models, and customized vehicles are available. Please contact your Eastern Lift Truck Co. Account Manager for more information.

Commercial and Utility Vehicles

Commercial and utility vehicles are in their own category, outside of ITA Classification. They are a popular choice for a variety of applications and settings, including colleges and universities, government and municipalities, hotels, resorts, parks/recreation, distribution and warehousing. Many manufacturers offer customization for your specific needs. Please contact your Eastern Lift Truck Co. Account Manager for more information on new and used sales or service and parts (all makes and models).

Polaris Pro XD 2000D 2WD

Polaris Pro XD 2000D AWD

Polaris Pro XS 4000D AWD

GEM e2 Passenger

GEM e4 Passenger

GEM e6 Passenger

GEM eL XD Work Vehicle

GEM eM 1400 LSV
Street Legal Vehicle