

Forklift Classifications

There are seven classes of forklift that describe the fuel option of the forklift and the use. Each forklift operator must be certified to use on each class of forklift that they will operate.

Class 1 - Electric Motor Rider Trucks

These forklifts can be equipped with either cushion or pneumatic tires. The cushion tired lift trucks are intended for indoor use on smooth floors. The pneumatic tired models can be used in dry outdoor applications. These vehicles are powered by industrial batteries and use transistor motor controllers to control travel and hoist functions. These are very versatile and are found from the loading dock to the storage facility. They are generally used in applications where air quality factors need to be considered.

Class 2 - Electric Motor Narrow Aisle Trucks

This forklift is for companies that opt for very narrow aisle operation. This allows them to maximize the use of storage space. These vehicles have been developed unique features that are designed to minimize the space occupied by the truck and to improve speed and efficiency.

Class 3 - Electric Motor Hand or Hand-Rider Trucks

These are hand controlled where the operator is in front of the truck and controls the lift truck through a steering tiller. All controls are mounted on the top of the tiller and the tiller is moved side to side to steer the truck. These vehicles are battery powered with the smaller capacity units using industrial batteries.

Class 4 - Internal Combustion Engine Trucks - Cushion Tires

These forklifts are used inside on smooth dry floors for transporting palletized loads to and from the loading dock and the storage area. The cushion tired forklifts are lower to the ground than pneumatic tired forklift truck. This allows cushion tired forklift trucks more useful in low clearance applications.

Class 5 - Internal Combustion Engine Trucks - Pneumatic Tires

These trucks are most commonly seen in warehouse. They can be used either inside or outside and used in virtually any type of application. Because of the large capacity range of this series of lift truck, they can be found handling small single pallet loads to loaded 40 foot containers. These

lift trucks can be powered by internal combustion engines and are available for use with LPG, Gasoline, Diesel, and Compressed Natural Gas fuel systems.

Class 6 - Electric and Internal Combustion Engine Tractors

These vehicles are versatile and can be used in a variety of applications. They can be equipped with either internal combustion engines for outdoor use or battery powered electric motors for indoor use.

Class 7 - Rough Terrain Forklift Trucks

Rough terrain forklifts are fitted with large flotation type tires for outdoor use on difficult surfaces. They are often used at construction sites to transport and lift building materials to various job site locations. They are also common with lumber yards and auto recyclers.

Today the forklift can be powered by a number of fuel options including gasoline, diesel, electrical battery, compressed natural gas (CNG) and liquid propane gas (LPG). The first hybrid forklift has been developed by Mitsubishi that runs on diesel and a lithium ion battery.

It consumes 39 per cent less fuel than existing models and its carbon dioxide emissions are 14.6 tons less than those of models powered by internal combustion engines.