

## **Study Session – Section 1**

### **TYPES AND BASIC PRINCIPLES OF A FORKLIFT**

**Class 1 Forklifts** are electric powered lift trucks that use industrial batteries to operate. This forklift is extremely versatile, so it is used most often from the loading dock to the warehouse storage facility. They are generally used in buildings where air quality factors need to be considered. Class 1 Forklifts are equipped with either “cushion” tires or “pneumatic” tires. Forklifts with cushion tires are primarily used indoors on smooth concrete surfaces. The pneumatic tire forklifts can be used for dry outdoor applications.

**Class 2 Forklifts** are electric motor, narrow aisle lift trucks powered by battery. These forklifts are also referred to as “order pickers.” The most common business application to use narrow aisle lift trucks are paper storage facilities. Class 2 Forklifts travel up and down very long and narrow aisles for the purpose of retrieving or placing storage boxes on metal racks. Typically, the operator stands on the back of the forklift while traveling in narrow aisles to retrieve a box for a customer.

**Class 3 Forklifts** are electric motor hand or hand-rider lift trucks powered by battery. These lift trucks are controlled by hand in which the operator walks with the lift truck and controls the lift truck through a steering tiller.

**Class 4 Forklifts** are internal combustion engine lift trucks with cushion tires. These forklifts are used inside warehouses on smooth surfaces for transporting loaded pallets to and from the loading dock and warehouse storage areas. These forklifts are counterbalanced and have sit-down operation consoles. Good ventilation in the warehouse is very important when using this lift truck.

**Class 5 Forklifts** are internal combustion engine lift trucks with pneumatic tires. These forklifts are used both inside a warehouse and outside for most applications. The Class 5 Forklift is the most flexible in handling small to large loads and can be powered by liquid petroleum gas (LPG), gasoline, diesel and compressed natural gas. Like the Class 4, it too is counterbalanced and the operator is sitting inside the protective cage.

**Class 7 Forklifts** are rough terrain lift trucks equipped with large inflatable tires for outdoor use on difficult surfaces. These forklifts come in many sizes and

shapes. This equipment is often seen at construction sites, lumber yards, and metal recyclers.