

## Rough Terrain Forklift

Used Rough Terrain Forklift Concord - Forklift trucks utilize two forks to transport pallets and load and unload cargo. The rough terrain forklift and the industrial forklift are the two main types of forklift trucks. The first category of forklifts, industrial forklifts, are mostly used in warehouses and at loading docks on surfaces that are relatively smooth and level. Rough terrain forklifts are better suited for rocky environments and uneven surfaces. Due to size, tires, and weight capacity, a rough terrain lift is primarily used outdoors, often at construction sites. The tire type is one of the key differences between rough terrain and industrial forklift units. Common road tires, cushion tires are the main kind found on industrial forklifts. Pneumatic tires are utilized by rough terrain models. They are similar to tractor tires that offer more traction and flotation. Industrial forklifts can be powered by internal combustion engines but are more frequently powered by an electrical source, such as battery or fuel cell whereas rough terrain forklifts are almost always powered by an internal combustion engine.

**Types of Class 7 Rough Terrain Forklift Trucks** There are three main kinds of Class 7 Rough Terrain Forklift Trucks. The rotating telehandler forklift, straight mast forklifts and rotating forklifts are in this category. Every rough terrain forklift truck is designed to operate on disturbed ground and difficult locations commonly found in military and construction atmospheres. Rough terrain forklift units have better performance and maneuvering options. Additional consideration needs to be given for rough terrain forklift options while raising loads in difficult conditions in order to stay safe from tipping over. The machine needs to remain in a stable position prior to lowering, lifting or moving any items. Stability of ground and knowledge of proper lifting technique is essential for safe operation of rough terrain forklifts.

**Straight Mast Forklifts** Straight mast forklifts are designed to transport building materials around a range of rough terrain sites such as demolition and construction sites. Pneumatic cushion tires allow this forklift better maneuverability and accessibility around difficult terrain. Pneumatic tires allow the machine to successfully traverse difficult terrain. The majority of straight mast forklifts come in both two wheel and four wheel drive capabilities. Even though these machines are better utilized in exterior locations, many straight mast forklifts operate with propane or diesel, enabling them to be used indoors for short timeframes. Both standard and straight mast forklifts offer similar lifting capacities weighing from 5000 to 36,000 pounds, depending on the model.

**Telehandler or Telescopic Handler Forklifts** Telehandler or telescopic handler forklift trucks are equipped with a telescoping boom, giving them their name. Telescoping booms are handy for allowing the machine to load and place items at different lift heights and distances in front of the forklift. Better reachability delivers greater flexibility to the forklift operator while placing loads. Standard telehandler forklift units are long and low. They are designed with two wheels located at the front of the forklift with a different pair of wheels found close to the end of the unit. A telescopic boom is mounted at the rear of the forklift on a pivot that is fixed several feet higher than the forklift frame. The fuel tank and hydraulic fluid tank are found opposite to the forklifts' cab that is typically mounted on the left side. Along the center of the machine, the engine and transmission can be found inside the frame. This common configuration allows for a balanced forklift which is necessary for the basic stability of the machine while lifting, transporting and lowering loads. Telehandler units offer significantly higher lifting heights compared to standard units. High-reach telehandlers can extend their full load capacity to 56 feet. The compact telehandlers can extend their full load capacity from 18 feet. Their load capacities usually range between 5,500 and 12,000 pounds. All-wheel steering is popular for all-terrain forklifts and provides increased maneuverability. This, along with power shift transmission and other steering features, means that the operator can move the lift in as close proximity to the work area as possible. More recently, Telehandler forklift models have included additional features that incorporate the latest in ergonomics. Operator comfort is enhanced via larger cabs and tilted steering. Increasingly, these types of ergonomic features are in demand at worksites as they have been shown to improve productivity by decreasing operator repetitive stress.

injuries and operator fatigue. A single joystick is a common design for most telehandlers. The joystick is responsible for the hydraulic system and the boom operations. Non-marking tires are a feature that telehandler forklifts can benefit from by allowing these units to be utilized for maintenance on billboards and signs and on stadiums and buildings.

### Rotating Telehandler or Roto Telescopic Handler Forklifts

The basic telehandler forklift has much in common with rotating telehandlers and roto telescopic handler forklifts. The rotating telehandler can lift excessive loads to extreme heights safely and efficiently. However, these forklifts have the added ability to rotate the forklift on a turntable. Rotating the forklift a complete three-hundred-and-sixty degrees creates a larger working location without the need of repositioning the forklift. Commonly, rotating telehandlers have another joystick to handle the rotation portion separately from the lift function. Power-assist steering minimized slip differential on the rear axle for additional traction and four-wheel drive are some of the extra features offered on rotating telehandlers and standard telehandler models. With the added rotating ability of these forklifts, comes additional safety considerations. Because of this, rotating telehandler rough terrain forklifts come with stabilizers to increase the safety when rotating loads from one side of the forklift to the other. Some rotating telehandlers do not have stabilizers. These units are created to move and work in various aspects of the job site and are easier to reposition without stabilizers. The standard telehandler offers fixed cab components and rotator telehandlers are generally smaller in comparison. Because of this, their load capacities are also smaller than the standard telehandler. Load capacities for rotating telehandlers usually range between 4,000 and 10,000 pounds, with lift heights ranging from 15 to 80 feet. Standard and rotator telehandlers can double as a crane when outfitted with specific winch accessories. This means that these forklifts can sometimes allow a project to forego the need for a crane at the jobsite, saving time, expense and workspace.

### Advancements for Rough Terrain Forklifts

Numerous attachments can be found for rough terrain forklifts including articulating booms, rotating fork carriages, booms, winches and similar items. Because of the importance of forklift attachments in their ability to adapt forklifts to many different types of specific jobs, it is expected that the creation and availability of new rough terrain forklift attachments will continue to increase. However, the bulk of advancements are expected to be in the form of safety features, built-in to manufactured rough terrain forklifts. Some new safety features have already been developed such as automatic load restriction devices. This system weighs a load automatically and then calculates the safe reach distance of the load while considering the extension and boom angle. An alarm sounds once the safe distance is reached, warning the operator to make load weight, reach distance or boom angle adjustments.