

## **Rough Terrain Forklift**

Used Rough Terrain Forklift Missouri - Broadly defined, a forklift truck uses two forks to load, transport and unload material. Forklifts fall into two main categories, industrial forklifts and rough terrain forklifts. Ideal for working on surfaces that are level and smooth, industrial forklifts are mostly utilized for warehouse applications and loading dock situations. Rough terrain forklifts are better suited for rocky environments and uneven surfaces. Commonly found at exterior construction sites, rough terrain forklifts have the tires, size and weight capacity to handle heavy loads. 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

The three types of Class 7 Rough Terrain Forklift Trucks include the rotating telehandler forklifts, telehandler forklifts and straight mast forklifts. Regardless of its type, all rough terrain forklift trucks are designed to handle, as their name suggests, natural rough terrain and disturbed rough terrain typical of construction and military sites. The rough terrain models travel and perform well in difficult locations. 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. For safety reasons, it is vital the forklift maintains stability before moving, lifting or lowering. Rough terrain forklift operators must practice correct lifting techniques to remain stable on the ground.

### Straight Mast Forklifts

Designed to facilitate safe transport along difficult terrain such as demolition sites and construction locations, straight mast forklifts can complete the job safely and efficiently. These forklift trucks provide increased maneuverability and accessibility because it is fitted with big, heavy-duty pneumatic cushion tires. These allow the forklift truck to easily travel over rough terrain on the worksite. It is common for straight mast forklifts to come with 2-wheel or 4-wheel drive. Most straight mast forklifts are powered by diesel or propane fuel, allowing them to be used indoors for short periods but are more suited to outdoor applications. The lift capacities of straight mast forklifts are similar to most standard forklifts with a range of approximately 5,000 to 36,000 pounds.

### Telehandler or Telescopic Handler Forklifts

Telehandler or telescopic handler forklift trucks are equipped with a telescoping boom, giving them their name. This telescoping boom allows the forklift truck to pick up and place loads at various distances and lift heights in front of the machine. The operator can achieve enhanced flexibility with better reach during load placement. A standard telehandler forklift is long and low, with two wheels at the very front of the forklift and another pair of wheels toward the rear of the machine. The telescopic boom can be found at the back of the forklift, mounted on a pivot that is attached many feet higher than the frame of the unit. The hydraulic fluid tank and fuel tank are mounted on the opposite side of the cab which is usually situated on the left side of the forklift. Within the frame itself, the transmission and engine are located along the center-line of the forklift. This common configuration allows for a balanced forklift which is necessary for the basic stability of the machine which lifting, transporting and lowering loads. Telehandler forklifts provide much greater lift heights when compared to a standard forklift. Otherwise known as high-reach telehandlers or compact telehandlers, these models perform. Compact telehandlers can extend their full load capacity from eight-teen feet and the high-reach models to fifty-six 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. These features include tilted steering options and roomier cabs to increase operator comfort. High in demand at job sites, these ergonomic options reduce operator

fatigue and repetitive stress injuries. The majority of telehandler forklifts are operated by a single joystick. The joystick is essential for controlling the boom functions and the hydraulics responsible for forward operation. These machines can use non-marking tires to allow them to be suitable for maintenance in stadiums and on buildings or billboards and sign operations.

### 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. The turntable or rotating ability add extra panache. Not having to reposition the forklift saves time and money. The rotating models have access to 360 degrees, creating a much greater workspace with immediate access. With rotating telehandlers, one joystick handles the lift capacity and a second joystick is responsible for the rotation factor. As with the standard telehandler forklift, rotating telehandlers are available with added features including power assist steering, four-wheel drive and minimized slip differential on the rear axle to boost traction and for additional safety. 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. Certain rotating telehandlers operate without stabilizers; minimizing the time it takes to reposition the machine and move to other workplace locations. Rotator telehandler units are typically smaller than standard telehandlers with their fixed-cab design. Understandably, rotator telehandler machines can handle smaller load capacities compared to their standard telehandler counterparts. 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

Many attachments are currently available for rough terrain forklifts, such as booms, winches, rotating fork carriages and articulating booms. 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. The majority of advancements will be delivered as safety features built to enhance the rough terrain models. 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.