

## Rough Terrain Forklift

Used Rough Terrain Forklift Pennsylvania - Broadly defined, a forklift truck uses two forks to load, transport and unload material. 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. Ideal for uneven terrain and rocky locations, rough terrain forklifts travel well in difficult environments. 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 are commonly powered by internal combustion engines although a fuel cell or battery electrical source may be used. Internal combustion engines are mainly used by rough terrain units.

**Types of Class 7 Rough Terrain Forklift Trucks**

There are three main types of Class 7 Rough Terrain Forklift Trucks:

1. Straight mast forklifts;
2. Telehandler forklifts; and
3. Rotating telehandler forklifts.

Every rough terrain forklift truck is designed to operate on disturbed ground and difficult locations commonly found in military and construction atmospheres. A rough terrain forklift also offers increased maneuverability and performance. In the case of rough terrain forklift operations, extra consideration must be given while raising loads in these rough, variable conditions to prevent tip-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. Better accessibility and maneuverability are offered by these units thanks to their pneumatic cushion tires. Pneumatic tires allow the machine to successfully traverse difficult terrain. Most straight mast forklift units have 2WD or 4WD configurations. 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.

**Straight mast forklifts have a similar lift capacity compared to standard forklift models; ranging from 5K to 36K lbs.**

**Telehandler or Telescopic Handler Forklifts**

Telescopic handler forklifts or telehandlers feature a telescoping boom; hence their name. This specially designed boom allows the forklift truck to pick up loads and place them at differing heights in front of the unit. The reachability of the forklift provides the operator with greater flexibility when placing a load. 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. The forklift engine and transmission are situated along the center of the machine. This common configuration allows for a balanced forklift which is necessary for the basic stability of the machine which lifting, transporting and lowering loads. Compared to standard forklifts, telehandlers deliver higher lift heights.

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. Thanks to steering features including power-shift transmission, the operator can maneuver the machine in excellent proximity to the work location. The latest telehandler models feature ergonomic upgrades for ultimate operator comfort. Operator comfort is enhanced via larger cabs and tilted steering. These ergonomic upgrades have been shown to lessen repetitive stress injuries and lessen operator fatigue. The majority of telehandler forklifts are operated by a single joystick. 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. Telehandlers are capable of rotating heavy-lift weights to tremendous heights. However, these forklifts have the added ability to rotate the forklift on a turntable. 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. Because of this additional feature, rotating telehandlers often have a second joystick to allow operation of the rotation function apart from the lift function. 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. Any machine with rotation capabilities will have additional safety measures to consider. Rotating telehandler rough terrain models come with standard stabilizers to establish more safety while rotating loads back and forth. There are some rotating telehandlers that are designed to move heavy weights without stabilizers to reduce the time it takes to reposition the forklift for work in other areas of the jobsite. 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. Ranging between four thousand and ten thousand pounds, rotating telehandlers can reach lift heights from 15 to 80 feet. Winch attachments can transform rotator telehandlers and standard models into a crane. 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. The latest safety upgrades include automatic load restriction and other features. These systems automatically weigh a load and then calculate the safe reach distance of that load, taking into consideration the angle and extension of the boom. If the safe reach distance is reached, an alarm will sound, warning the operator to make the proper adjustments to either the boom angle, the reach distance or load weight.