

## **Rough Terrain Forklift**

Used Rough Terrain Forklift Vermont - 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. Rough terrain forklifts are better suited for rocky environments and uneven surfaces. Rough terrain forklifts are often seen at construction sites and outdoors. They have the weight capacity, size and tires to handle heavy loads. The main difference between industrial and rough terrain forklifts is that industrial forklifts are fitted with cushion tires, a common, over-the-road type tire. 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. 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. A rough terrain forklift also offers increased maneuverability and performance. 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. Stability of ground and knowledge of proper lifting technique is essential for safe operation of rough terrain forklifts.

**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. Uneven ground and rough surfaces are no match for pneumatic tires. 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** Telescopic handler forklifts or telehandlers feature a telescoping boom; hence 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. The operator can achieve enhanced flexibility with better reach during load placement. 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. 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 fuel tank and hydraulic fluid tank are found opposite to the forklifts' cab that is typically mounted on the left side. Within the frame itself, the transmission and engine are located along the center-line of the forklift. This popular design showcases a balanced forklift which is ideal for the machine's stability with lifting, moving and lowering items. 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. The load capacities of these machines range from five thousand pounds to twelve thousand pounds. All-terrain forklifts rely on all-wheel steering to deliver better maneuverability and stability. The power-shift transmission and steering features allow the operator to move the forklift into a safe and successful working proximity. 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. 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 controls all the forklift's boom functions as well as the hydraulic system which allows for straightforward and efficient 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 Roto telescopic handler forklifts or rotating telehandlers have numerous items in common with the standard telehandler model. 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. 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. Stabilizers are a rough terrain forklift feature that rotating telehandler models rely on to increase safety while handling rotating loads that are swinging back and forth from each side of the machine. 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. Understandably, rotator telehandler machines can handle smaller load capacities compared to their standard telehandler counterparts. Ranging between four thousand and ten thousand pounds, rotating telehandlers can reach lift heights from 15 to 80 feet. Standard and rotator telehandlers can double as a crane when outfitted with specific winch accessories. These units can enable job sites that require a crane to get the job done without having to rent and transport a separate machine.

Advancements for Rough Terrain Forklifts Popular rough terrain forklift attachments include rotating fork carriages, booms, articulating booms and winches. Forklift attachments are vital for diversifying the machine. They will continue to be developed for years to come. However, the bulk of advancements are expected to be in the form of safety features, built-in to manufactured rough terrain forklifts. Automatic load restriction units and certain safety features have started being implemented. 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.