

## Rough Terrain Forklift

Used Rough Terrain Forklift PEI - Forklifts rely on two forks to unload, load and transport items. 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. 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. Rough terrain forklifts, on the other hand, are fitted with pneumatic tires, a type of tractor tire allowing for better traction and flotation properties. 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. 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. As with all forklift operation, the machine must be in a position to remain stable before lifting, transporting or lowering a load. Stability of ground and knowledge of proper lifting technique is essential for safe operation of rough terrain forklifts.

**Straight Mast Forklifts** The straight mast forklift design enables easy transport around rough terrain locations including construction and demolition sites. 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. 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. 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. Better reachability delivers greater flexibility to the forklift operator while placing loads. Featuring two wheels found at the front and two wheels at the rear, the standard telehandler is a long and low 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 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 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. Also called compact telehandlers or high-reach telehandlers, these forklift trucks can lift their full load capacities from 18 feet, for the compact telehandlers, to 56 feet, for the high-reach telehandlers, into the air. Load capacities are between 5K to 12K 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. Spacious cabs and tilted steering are some of the items redesigned for the ultimate comfort and productive features. 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. Most telehandler forklifts rely on 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. This unit's added turntable and rotation flexibility increases the types of jobs it can complete. 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. Useful additional features may be added to your standard telehandler or rotating telehandler including 4WD, increased traction via minimized slip differential on the rear axle, and power-assist steering. With the added rotating ability of these forklifts, comes additional safety considerations. Rotating telehandler rough terrain models come with standard stabilizers to establish more safety while rotating loads back and forth. 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. Rotating telehandlers offer load capacities ranging from 4000 to 10,000 lbs. and lift heights between fifteen to eighty 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** 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. Most of the proposed advancements will consist of included safety features within the rough terrain forklifts. Automatic load restriction units and certain safety features have started being implemented. By automatically weighing a load, these systems calculate the loads' safe reach distance while taking the boom angle and its' extension into account. 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.