

## **Rough Terrain Forklift**

Used Rough Terrain Forklift Illinois - 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. By contrast, the second category of forklifts, rough terrain forklifts, are commonly used to run on uneven and rocky 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. Rough terrain forklifts, on the other hand, are fitted with pneumatic tires, a type of tractor tire allowing for better traction and flotation properties. Internal combustion engines can power industrial forklifts; however, more often they rely on an electrical source such as a fuel cell or better. Rough terrain models typically rely on an internal combustion engine. 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. Rough terrain forklifts function well in treacherous locations that are often found in construction sites and military settings. The rough terrain models travel and perform well in difficult locations. Safety considerations are taken into account for rough terrain locations with raising loads in difficult environments to keep the operator 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. Rough terrain forklift operators must practice correct lifting techniques to remain stable on the ground. Straight Mast Forklifts The straight mast forklift design enables easy transport around rough terrain locations including construction and demolition sites. Pneumatic cushion tires allow this forklift better maneuverability and accessibility around difficult terrain. Uneven ground and rough surfaces are no match for pneumatic tires. The majority of straight mast forklifts come in both two wheel and four wheel drive capabilities. The majority of straight mast forklifts rely on propane or diesel fuel to equip them for interior short-term jobs. However, these machines are best suited for outside jobs. 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 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 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 popular design showcases a balanced forklift which is ideal for the machine's stability with lifting, moving and lowering items. Telehandler forklifts provide much greater lift heights when compared to a standard forklift. Highreach 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. Allterrain forklifts often include all-wheel steering which allows for greater maneuverability. 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. A single joystick is a common design for most telehandlers. The joystick controls all the forklift's boom functions as well as the hydraulic system which allows for straightforward and efficient operation. Telehandler forklifts can also be equipped with non-marking tires which allow them to be used in other applications such as the installation of signs and billboards as well as maintenance on buildings and stadiums. Rotating Telehandler or Roto Telescopic Handler Forklifts Rotating telehandler or roto telescopic handler forklifts have many features in common with the standard telehandler forklift. Telehandlers are capable of rotating heavy-lift weights to tremendous heights. 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. 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. Of course, a machine that can rotate has extra safety considerations to understand. 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. 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. Rotator telehandlers are usually smaller than their fixed cab counterparts, the standard telehandler. Understandably, rotator telehandler machines can handler 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 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. 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.