

## Rough Terrain Forklift

Used Rough Terrain Forklift North Dakota - Forklift trucks utilize two forks to transport pallets and load and unload cargo. The two main categories of forklifts are industrial forklift and rough terrain forklift. Industrial forklifts are mainly used in loading docks and warehouse applications with smooth and level surfaces. 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 main difference between rough terrain and industrial forklifts is the cushion tires that are on industrial forklift models. 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. A rough terrain forklift also offers increased maneuverability and performance. Safety considerations are taken into account for rough terrain locations with raising loads in difficult environments to keep the operator safe from tipping over. The machine needs to remain in a stable position prior to lowering, lifting or moving any items. 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. Pneumatic cushion tires allow this forklift better maneuverability and accessibility around difficult terrain. These allow the forklift truck to easily travel over rough terrain on the worksite. 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. Straight mast forklifts have a similar lift capacity compared to standard forklift models; ranging from 5K to 36K lbs. 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 reachability of the forklift provides the operator with greater flexibility when placing a load. 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 left side of the machine houses the cab and the hydraulic fluid tank and the fuel tank are found opposite to the cab. Within the frame itself, the transmission and engine are located along the center-line of the forklift. Creating a balanced machine is essential for a well-designed forklift. Having this particular configuration generates a stable environment for lifting, lowering and transporting 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. 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. Recent telehandler units showcase top-of-the-line ergonomic design to generate increased comfort and operator satisfaction. 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 responsible for the hydraulic system and the boom operations. 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 Roto telescopic handler forklifts or rotating telehandlers have numerous items in common with the standard telehandler model. The rotating telehandler can lift excessive loads to extreme heights safely and efficiently. 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. 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. Any machine with rotation capabilities will have additional safety measures to consider. 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. Certain rotating telehandlers operate without stabilizers; minimizing the time it takes to reposition the machine and move to other workplace locations. The standard telehandler offers fixed cab components and rotator telehandlers are generally smaller in comparison. Therefore, rotator telehandler units can access smaller loads when compared to standard telehandler units. 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. 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 Numerous attachments can be found for rough terrain forklifts including articulating booms, rotating fork carriages, booms, winches and similar items. More rough terrain forklift attachments will be unleashed onto the market in future years thanks to their ability to make the forklift more multi-purpose than ever before. 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. 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. An alarm sounds once the safe distance is reached, warning the operator to make load weight, reach distance or boom angle adjustments.