

## Rough Terrain Forklift

Used Rough Terrain Forklift Mesa - 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. 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. 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 rough terrain and industrial forklifts is the cushion tires that are on industrial forklift models. 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 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.

Rough terrain forklifts function well in treacherous locations that are often found in construction sites and military settings. Rough terrain forklift units have better performance and maneuvering options. 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. Better accessibility and maneuverability are offered by these units thanks to their pneumatic cushion tires. These allow the forklift truck to easily travel over rough terrain on the worksite. It is common for straight mast forklifts to come with 2-wheel or 4-wheel drive. 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. Straight mast forklifts have a similar lift capacity compared to standard forklift models; ranging from 5K to 36K lbs.

**Telehandler or Telescopic Handler Forklifts** The distinct telescoping boom on telehandlers and telescopic handler forklifts contribute to the unit's 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 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. 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 left side of the machine houses the cab and the hydraulic fluid tank and the fuel tank are found opposite to the cab. The forklift engine and transmission are situated along the center of the machine. 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. Telehandler forklifts provide much greater lift heights when compared to a standard forklift. 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-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. More recently, Telehandler forklift models have included additional features that incorporate the latest in ergonomics. Operator comfort is enhanced via larger cabs and tilted steering. 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. The majority of telehandler forklifts are operated by a single joystick. The

joystick is essential for controlling the boom functions and the hydraulics responsible for forward operation. 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. The rotating function allows the forklift to swivel a full 360 degrees around, enabling access a much larger work area without having to reposition the forklift. With rotating telehandlers, one joystick handles the lift capacity and a second joystick is responsible for the rotation factor. 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. 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. 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. Rotator telehandlers are usually smaller than their fixed cab counterparts, the standard telehandler. 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. 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. 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. The latest safety upgrades include automatic load restriction and other features. By automatically weighing a load, these systems calculate the loads' safe reach distance while taking the boom angle and its' extension into account. An alarm sounds once the safe distance is reached, warning the operator to make load weight, reach distance or boom angle adjustments.