

## Rough Terrain Forklift

Used Rough Terrain Forklift Costa 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. By contrast, the second category of forklifts, rough terrain forklifts, are commonly used to run on uneven and rocky surfaces. Due to size, tires, and weight capacity, a rough terrain lift is primarily used outdoors, often at construction sites. 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. Rough terrain models rely on pneumatic tires, a kind of tractor tire known for better floatation and traction abilities. 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. Rough terrain forklift units have better performance and maneuvering options. In the case of rough terrain forklift operations, extra consideration must be given while raising loads in these rough, variable conditions to prevent tip-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. These forklift trucks provide increased maneuverability and accessibility because it is fitted with big, heavy-duty pneumatic cushion tires. These allow the forklift truck to easily travel over rough terrain on the worksite. Most straight mast forklift units have 2WD or 4WD configurations. 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. Both standard and straight mast forklifts offer similar lifting capacities weighing from 5000 to 36,000 pounds, depending on the model.

**Telehandler or Telescopic Handler Forklifts** Telehandler or telescopic handler forklift trucks are equipped with a telescoping boom, giving them their name. This specially designed boom allows the forklift truck to pick up loads and place them at differing heights in front of the unit. 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. Mounted at the back of the forklift, the telescopic boom is on a pivot that is located many feet above 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. 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. Otherwise known as high-reach telehandlers or compact telehandlers, these models perform. Compact telehandlers can extend their full load capacity from eight-teen feet and the high-reach models to fifty-six feet. 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. 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 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** Rotating telehandler or roto telescopic handler forklifts have many features in common with the standard telehandler forklift. The rotating telehandler can lift excessive loads to extreme heights safely and efficiently. This unit's added turntable and rotation flexibility increases the types of jobs it can complete. Rotating the forklift a complete three-hundred-and-sixty degrees creates a larger working location without the need of repositioning the forklift. Commonly, rotating telehandlers have another joystick to handle the rotation portion separately 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. With the added rotating ability of these forklifts, comes additional safety considerations. Because of this, rotating telehandler rough terrain forklifts come with stabilizers to increase the safety when rotating loads from one side of the forklift to the other. 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. 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** 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. Most of the proposed advancements will consist of included safety features within the rough terrain forklifts. Some new safety features have already been developed such as automatic load restriction devices. 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 will go off once the safe distance is reached. This alerts the operator that immediate adjustments need to be made to the boom angle, reach distance or load weight.