

## Very Narrow Aisle Forklift

Used Very Narrow Aisle Forklift Northwest Territories - Warehousing solutions often focus on layout and space saving solutions in order to cut down on costly square footage and decrease travel time required to transport goods throughout the warehouse and loading dock areas. Extremely narrow aisles offer more storage space since there is less space needed for aisle access. Warehouse optimization consists of warehouse configurations. Warehouse Optimization Implementing very narrow aisle warehouse optimization is a huge benefit of warehouse optimization. One of the most important benefits is the increased storage space. Because very narrow forklift trucks were developed to take up less space in maneuvering, it is now possible to decrease warehouse aisle width to less than half the width required by standard forklifts. Numerous narrow aisle forklifts deliver better stacking heights to increase the storage capacity on a square foot basis. Costs can be drastically decreased with a narrow aisle forklift compared to a standard aisle configuration as less warehouse space is required for the same quantity of stock. In most urban areas where square footage is very costly, this is a huge benefit to warehouse operations. When planned carefully and properly, it is possible to increase warehouse storage area by up to 80 percent by implementing a very narrow aisle width configuration. Very narrow aisle design facilitates greater product access and more rack faces. Since greater quantities of products are situated in a more accessible area, there is less travel time needed for gathering and storing items. It is common for warehouses to use a very narrow or narrow aisle layout. Less than eleven feet of aisle width is needed by narrow aisles. These widths reduce even further to roughly 6.5 feet for very narrow aisles. Either of these widths drastically increases storage potential. Standard forklifts can have issues with turning in these aisle widths. A variety of very narrow forklifts have been designed to easily maneuver in narrow aisles. Before choosing a forklift for a particular job, it is vital to know the dimensions of the aisle. Having the right aisle dimensions will save money and time instead of purchasing the wrong forklift that won't be able to conquer the applications. Taking note of any utilities, columns or posts is necessary before choosing a particular narrow aisle forklift design to maximize warehouse optimization and safety.

**Very Narrow Aisle Forklift Trucks** Very narrow aisle forklift trucks are almost always powered electrically, usually by rechargeable battery. These very narrow aisle trucks are more commonly available as stand-up riders, which helps increase productivity and operator comfort. The most popular kinds of very narrow aisle forklift trucks include turret or swing-mast, end-control riders, order pickers and reach trucks.

**Reach Forklift Trucks** The reach trucks were created as a type of rider stacker forklift but can be modified specifically for narrow aisle usage. This machine earned its name by its ability to reach its forks to secure a load. The moving mast and the moving carriage are two types of reach trucks. The moving carriage works by raising and lowering the carriage, along with the operator. While the operator stays at ground level, the moving mast is responsible for raising and lowering the forks. Of the two kinds of reach trucks, the moving mast reach truck is the safer of the two varieties. Reach trucks utilize a pantograph system that is a jointed framework design enabling the driver to place and reach loads without moving the forklift.

**Order Pickers** Order pickers have been created to pick items from difficult, high racking systems. These machines are used for picking up lighter stock that can be moved by hand. Order pickers elevate the operator to the level of goods to pick and identify particular items required for filling an order.

**End-Control Riders** End-control riders are used to pick loads located at floor level and transport the load horizontally, rather than lift or lower loads from various heights.

**Turret or Swing-Mast Forklift** Turret or swing-mast very narrow aisle forklift have a pivoting articulating swivel mast. The mast swivels to enable pallets to be positioned on the right or left side of the forklift.

**Guided Very Narrow Aisle Trucks** Rail or wire can guide the very narrow aisle forklift trucks down the aisle securely. Since the forklift truck is guided, the chance of colliding with racks while traversing down the aisles is very low. Rail-guided applications use special rails set into the floor on either side of the aisle, funning the length of the location and curving around the edge. The forklift is fitted with special wheel

guides that slide into the rails, preventing the forklift from moving outside the rail guards. The wire-guidance system requires that the wires be installed into the floor, along the center of the aisle. The wire-guides function similarly to the rail systems except the forklift has a wire-guide system to prevent the machine from traveling where it is not supposed to.

**Work Site Considerations** To use a narrow aisle configuration, there are some key considerations that need to be made. Because these very narrow aisle configurations include very tall racking systems, the condition of the floor and the construction of the racks must be done properly in order to avoid potentially disastrous outcomes. There are four main locations that need to be ideally prepared before any racking system can be installed. These areas need to be monitored continuously including fixing cracks in the floor, ensuring the racks are straight, a level floor and an appropriate load capacity of the floor.

**Level Floor** Because of the height of the racking systems, any slight slope of the floor is likely to negatively affect the plumbness of the racks, especially over time when loads are continuously placed and removed on the racks. A level floor is vital for the safety and integrity of the operator, employees, stock and the warehouse.

**Crack Repair** When there are floor cracks found, they need to be assessed and immediately fixed for safety concerns. Safety can become compromised when flooring cracks become 3/8 inches wide. They require proper filling with a substance that is as hard as the floor.

**Floor Load Capacity** The floor should meet certain minimum requirements before considering a narrow aisle configuration. The floor should have three thousand psi concrete minimum and contain evenly distributed rebar at three to four inches under the surface. Depending on the load requirements and configuration, additional reinforcements may be needed.

**Plumb Racks** The racking system is essential to the whole process and needs to be installed properly. There is a major chance of rack failure if improper installation occurs. One of the most important details to ensure proper installation, is that all racks are plumb. Rack shims can help the rack stay plumb to one inch at the height of thirty feet. Racking failure can happen if the aforementioned measures are not taken or implemented correctly. Racking failure can kill or injure employees, damage equipment and result in horrible damage. These measurements are vital to the success of installing a safe and productive narrow aisle configuration.