

Very Narrow Aisle Forklift

Used Very Narrow Aisle Forklift New Mexico - Getting items from one warehouse location to another and to and from the loading docks is the focus of warehousing. Focus is often on space saving tools and the layout of the building. Very narrow aisle solutions allow for more space to be dedicated to the storage of goods because less space is required for aisle access. Configuring the warehouse is known as warehouse optimization. Warehouse Optimization Several benefits can be enjoyed for adding very narrow aisle warehouse optimization such as more storage space for the facility. Using narrow forklift trucks instead of traditional forklifts can enable the warehouse width of the aisles can be lessened to half. Certain models of very narrow aisle forklifts can increase the square foot storage capabilities by delivering greater stacking heights. 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. Adding a very narrow aisle width system can increase storage up to eighty percent when planned properly. This warehouse design creates more rack faces and increased product access. Reduced travel time for storing items and gathering products are some of the key benefits to this warehouse layout as more products are found in an accessible location. Warehouse layouts usually utilize a narrow aisle or very narrow aisle plan. Less than eleven feet of aisle width is needed by narrow aisles. Very narrow aisles reduce the aisle width further to around six-and-a-half feet. Either of these widths drastically increases storage potential. Standard forklifts can have issues with turning in these aisle widths. To meet these challenges, several different types of very narrow forklifts have been specially developed for various types of tasks to allow easier maneuvering in narrow aisle widths. When selecting a forklift for a job application, it is essential to know the aisle dimensions. Taking note of the proper dimensions will save valuable time and money by avoiding the mistake of acquiring a forklift that will not work in the intended application. 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 As these units are mostly powered by electricity, rechargeable batteries are popular for very narrow aisle forklifts. Stand-up riders are a popular design for very narrow aisle forklift trucks. The most commonly used types of very narrow aisle forklift trucks are: 1. Reach trucks 2. Order pickers; 3. End-control riders; and 4. Turret or swing-mast.

Reach Forklift Trucks Reach trucks were designed as a version of the rider stacker forklift but specially modified for use in narrow aisles. The reach trucks developed their name from their forward-reaching actions to get 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. The moving reach truck is typically considered the safest out of the two kinds of reach trucks. 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. They lift the operator up to reach the goods by identifying and choosing certain items to create 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. Pallets can be set on either the right or left side of the forklift due to the machine's ability to use its' swinging mast.

Guided Very Narrow Aisle Trucks Many very narrow aisle forklift trucks are able to be guided down aisles by wire or rail. Thanks to the guide rails, the possibility of crashing into racks is greatly reduced. In rail-guided models, sets of rails are placed into the floor on each side of the aisle. They run the length of the aisle and also curve around the aisles' 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. These wire-guides work along the same principle as the rail guards except that the narrow aisle forklift is fitted with a wire-guide system that allows it to communicate with the floor wires which effectively steer the forklift, preventing it from straying outside of an allotted range.

Work Site Considerations Certain essential considerations need to be dealt with before using a narrow aisle configuration. 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 Due to the racking system height, any minor floor slope can gravely impact how plumb the racks are, particularly over time if loads are placed and removed repeatedly on the racks. The height of the racking system means that any minute floor slope can have a negative impact on how straight the racks are, especially over time when loads are continually removed and placed on the racks. Without a level floor foundation, the rack stability could be compromised.

Crack Repair When there are floor cracks found, they need to be assessed and immediately fixed for safety concerns. The level of the floor can become unstable with cracks when they are only 3/8 inches wide. They will need to be filled properly with material as hard as the rest of the floor.

Floor Load Capacity The floor needs to meet specific minimum requirements prior to a narrow aisle configuration. Minimum flooring requirements include concrete measuring three thousand psi and rebar distributed evenly three to four inches below 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. If installed improperly, there is a great chance of rack failure. Every rack needs to be plumb to ensure a safe system and work environment. Rack shims are recommended to make sure the racks are plumb within one inch at the thirty-foot rack height. Dangerous racking failure can occur if the above steps are not taken. 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.