

Very Narrow Aisle Forklift

Used Very Narrow Aisle Forklift Maine - 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. Very narrow aisle solutions allow for more space to be dedicated to the storage of goods because less space is required 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. Certain models of very narrow aisle forklifts can increase the square foot storage capabilities by delivering greater stacking heights. Very narrow aisle forklifts can greatly reduce costs compared to traditional forklifts since the same amount of stock takes up less space in the warehouse. In most urban areas where square footage is very costly, this is a huge benefit to warehouse operations. Warehouse storage can be increased up to eighty percent with careful planning when a narrow aisle width configuration is utilized. In addition, a very narrow aisle layout allows for more rack faces as well as better access to products. 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. It is common for warehouses to use a very narrow or narrow aisle layout. Narrow aisles are usually those that use less than 11 feet of aisle width. These widths reduce even further to roughly 6.5 feet for very narrow aisles. Both of these aisle widths provide significantly increased storage opportunities. Using a forklift for order picking and stocking can be difficult in these aisle widths, especially when turning. A variety of very narrow forklifts have been designed to easily maneuver in narrow aisles. When selecting a forklift for a job application, it is essential to know the aisle dimensions. 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. Finally, it is critical that any utilities, posts or columns are taken into account before settling on a specific narrow aisle forklift design as these may affect access to aisles by some forklifts or prevent warehouse optimization. Very Narrow Aisle Forklift Trucks Very narrow aisle forklift trucks are almost always powered electrically, usually by rechargeable battery. Very narrow aisle forklift trucks are popular as stand-up riders to help increase operator comfort and productivity. 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. It got its name by its function of reaching its forks forward to get to 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 and the driver. The moving mast works by raising and lowering the forks along the mast, while the operator stays at ground level. The moving mast reach truck is generally considered the safer of the two types 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 were created to specifically pick orders from difficult-to-access racks. Order pickers are specific for lighter stock items that can be lifted by hand. These order pickers work by lifting the operator up to the level of goods in order to identify and pick the specific item or items necessary to fill 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, running 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. Narrow aisle forklifts rely on a wire-guide system to help it communicate with the floor wires. This allows the machine to be steered by the wires, stopping it from traveling outside of the specific location.

Work Site Considerations There are a few critical considerations when implementing a very 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. Four specific areas need to be perfectly prepared before a racking system can be implemented including a level floor, plumb racks, any floor cracks need to be repaired and the floor's load capacity must be accurate. These locations need to be maintained and monitored continuously.

Level Floor Due to the racking system height, any minor floor slope can greatly 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 cracks in the floor are spotted, they should be assessed and, when necessary, repaired immediately. 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 Minimum flooring requirements must be met before considering a narrow aisle installation. At a minimum, the floor should consist of 3,000 psi concrete as well as contain evenly distributed rebar approximately 3 to 4 inches below the surface. Depending on the load requirements and configuration, additional reinforcements may be needed.

Plumb Racks Of great importance is the proper installation of the racking system. Rack failure can happen if they are improperly installed. All racks need to be plumb and this is one of the most vital aspects of correct installation. 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.