

Very Narrow Aisle Forklift

Used Very Narrow Aisle Forklift South Carolina - 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. These warehouse configurations are often referred to as warehouse optimization. Warehouse Optimization There are several significant benefits of implementing very narrow aisle warehouse optimization. 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. Many very narrow aisle forklifts offer greater stack height capability which further increases the storage capacity per square foot. This means that costs are decreased because less warehouse space is necessary for the same amount of stock than if a standard aisle configuration were used. Square footage is costly in urban areas and any way to reduce warehousing costs can save a company money. Adding a very narrow aisle width system can increase storage up to eighty percent when planned properly. Very narrow aisle design facilitates greater product access and more rack faces. 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. Very narrow aisle layouts and narrow aisle layouts are popular for warehouses. Narrow aisles are measured as those that use fewer than eleven feet of aisle width. 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. It is necessary to know the dimensions of the aisle when selecting a forklift for a certain job. 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 As these units are mostly powered by electricity, rechargeable batteries are popular for very narrow aisle forklifts. These very narrow aisle trucks are more commonly available as stand-up riders, which helps increase productivity and operator comfort. There are different very narrow aisle forklift designs such as order pickers, reach trucks, wing-mast or turret and end-control riders. Reach Forklift Trucks The reach trucks were created as a type of rider stacker forklift but can be modified specifically for narrow aisle usage. The reach trucks developed their name from their forward-reaching actions to get a load. The two kinds of reach trucks the moving carriage and the moving mast. The moving carriage functions by lowering and raising the carriage and the operator. The moving mast raises and lowers the forks as the operator remains at ground level. Of the two kinds of reach trucks, the moving mast reach truck is the safer of the two varieties. Reach trucks use a pantograph system, a type of jointed framework, which allows the operator to reach for or place a load without the need to move the forklift itself. 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 machines that pick loads up at floor level and move the items horizontally as opposed to lowering or lifting over numerous heights. Turret or Swing-Mast Forklift Swing-mast or turret very narrow aisle forklifts feature an articulating swivel mast that pivots. The mast swivels to enable pallets to be positioned on the right or left side of the forklift. Guided Very Narrow Aisle Trucks Many very narrow aisle forklift trucks are able to be guided down aisles by wire or rail. Because the forklift is guided, thereby reducing the possibility of the forklift bumping racks while moving down the aisle, the aisles can be extremely narrow. 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. Wheel

guides on the forklift slide into the floor rails to stop the machine from traveling out of bounds. Wire-guidance forklift systems install wires on the floor instead of rails and the wires run down the middle 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. 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 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 cracks in the floor are spotted, they should be assessed and, when necessary, repaired immediately. Cracks may affect the floor's level and, when they are approximately 3/8 inches wide, will need to be properly filled with a material at least as hard as the surrounding floor.

Floor Load Capacity Minimum flooring requirements must be met before considering a narrow aisle installation. 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 Of great importance is the proper installation of the racking system. There is a major chance of rack failure if improper installation occurs. Every rack needs to be plumb to ensure a safe system and work environment. 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. Such failure is likely to result in costly damage to goods, the warehouse facility, forklifts and, worst of all, employees could be significantly injured or even killed. Due to these potential problems, the most significant part of creating a narrow aisle configuration for warehousing optimization is the initial measurements.