

Very Narrow Aisle Forklift

Used Very Narrow Aisle Forklift Wyoming - 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 Several benefits can be enjoyed for adding very narrow aisle warehouse optimization such as more storage space for the facility. Since very narrow forklift trucks have been designed to take up significantly less space, warehouse aisle widths can be reduced to half the width needed by traditional forklifts. Many very narrow aisle forklifts offer greater stack height capability which further increases the storage capacity per square foot. 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. 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. Since greater quantities of products are situated in a more accessible area, there is less travel time needed for gathering and storing items. 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. 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. Before choosing a forklift for a particular job, it is vital to know the dimensions of the aisle. 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. It is essential to take any columns, posts or utilities into account before deciding a type of narrow aisle forklift design as these can block access.

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

Developed as a kind of rider stacker forklift, the reach forklift trucks can be configured for narrow aisle locations. The reach trucks developed their name from their forward-reaching actions to get a load. There are two types of reach trucks: the moving mast and the moving carriage. 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 reach truck is typically considered the safest out of the two kinds of reach trucks. 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 were created to specifically pick orders from difficult-to-access racks. These machines are used for picking up lighter stock that can be moved 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 can pick up loads along the floor level and transport goods horizontally instead of transporting items over 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

Rail or wire can guide the very narrow aisle forklift trucks down the aisle securely. Thanks to the guide rails, the possibility of crashing into racks is greatly reduced. For rail-guided systems, a series of rails are installed into the floor, on both sides of the aisle, and run along the floor for the length of the aisle, curving around the end

of the aisle. 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** 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. There are four areas which must be meticulously prepared before setting up a racking system and must be continuously monitored and maintained throughout the operation of the warehousing system: 1. The floor must be level; 2. Cracks must be repaired; 3. Load capacity of floor must be appropriate; and 4. The racks must be plumb. **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. 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. 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 configuration and load requirements, extra reinforcements may be necessary. **Plumb Racks** Installing the racks safely and correctly is vital for the entire 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 are recommended to make sure the racks are plumb within one inch at the thirty- foot rack height. If the above measures are not taken or are improperly implemented, it is likely to cause a racking failure. Employees can become hurt or killed in the event that racking failure occurs. Goods can be damaged along with forklifts and other equipment. Because of these reason, these measures are the most important part of implementing a narrow aisle configuration for warehousing optimization.