

Very Narrow Aisle Forklift

Used Very Narrow Aisle Forklift Oceanside - Warehousing needs greatly focus on space-saving techniques and layout to maximize expensive square footage and decrease travel time needed to get goods from the loading docks and from point A to point B. Extremely narrow aisles offer more storage space since there is less space needed 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. 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. 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. 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. Very narrow aisles usually use an aisle width of approximately 6.5 feet across. Storage options are greatly increased with these aisle width options. 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. 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 Rechargeable batteries are typical for powering very narrow aisle forklift trucks and most models are electric. Very narrow aisle forklift trucks are popular as stand-up riders to help increase operator comfort and productivity. 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 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. While the operator stays at ground level, the moving mast is responsible for raising and lowering the forks. 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 have been designed and developed specifically for use in picking orders from high, typically hard-to-reach racks. They are used for smaller picking items that can be lifted and 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 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 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. 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. Running down the center of the aisle, wire-guidance forklifts rely on floor wires instead of rails. 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

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. 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. 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 configuration and load requirements, extra reinforcements may be necessary.

Plumb Racks

Installing the racks safely and correctly is vital for the entire system. 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. If necessary, rack shims should be used to ensure the racks are plumb within 1 inch at the 30 foot height of the racks. 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. These measurements are vital to the success of installing a safe and productive narrow aisle configuration.