Very Narrow Aisle Forklift

Used Very Narrow Aisle Forklift Virginia - 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. Narrow aisles need specific solutions to allow goods to be accessed and stored properly. More space can be given to storage as less space is needed for accessing the aisle. These warehouse configurations are often referred to as warehouse optimization. Warehouse Optimization There are several significant benefits of implementing very narrow aisle warehouse optimization. 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. Square footage is costly in urban areas and any way to reduce warehousing costs can save a company money. Warehouse storage can be increased up to eighty percent with careful planning when a narrow aisle width configuration is utilized. 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. 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. 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. 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. It is necessary to know the dimensions of the aisle when selecting a forklift for a certain job. It is important to have the correct aisle dimensions before forklift shopping to avoid securing a machine that won't fit its' intended location. 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 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 popular kinds of very narrow aisle forklift trucks include turret or swing-mast, end-control riders, order pickers and reach trucks. Reach Forklift Trucks The reach trucks were created as a type of rider stacker forklift but can be modified specifically for narrow aisle usage. 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 functions by lowering and raising the carriage and the operator. 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 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 designed and developed specifically for use in picking orders from high, typically hard-to-reach racks. Order pickers are specific for lighter stock items that can be lifted 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 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. 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. 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. Specific wheel guides are on the forklift. These slide into the rails to stop the forklift from moving out of the rail guards. Wire-guidance forklift systems install wires on the floor instead of rails and the wires run down the middle 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. The floor and the rack construction needs to be evaluated to avoid any issues since the very narrow aisle units have extremely high racking systems. 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 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. Extra reinforcements might be needed depending on the load requirements and the configuration. Plumb Racks The racking system is essential to the whole process and needs to be installed properly. There is a major chance of rack failure if improper installation occurs. 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. 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. These measurements are vital to the success of installing a safe and productive narrow aisle configuration.