GLOBAL LIFT EQUIPMENT

Very Narrow Aisle Forklift

Used Very Narrow Aisle Forklift San Diego - 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. 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. Numerous narrow aisle forklifts deliver better stacking heights to increase the storage capacity on a square foot basis. 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. Most urban locations have expensive square footage; therefore, reducing costs is a benefit to warehouses and their business. When planned carefully and properly, it is possible to increase warehouse storage area by up to 80 percent by implementing a very narrow aisle width configuration. Very narrow aisle design facilitates greater product access and more rack faces. This usually equates to less travel time gathering and storing product as more product is located within a smaller, more accessible area. Warehouse layouts usually utilize a narrow aisle or very narrow aisle plan. 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. Storage options are greatly increased with these aisle width options. However, they also create challenges when turning within the aisles using forklifts for stocking and order picking. 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. When selecting a forklift for a job application, it is essential to know the aisle dimensions. 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. 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 As these units are mostly powered by electricity, rechargeable batteries are popular for very narrow aisle forklifts. 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. This machine earned its name by its ability to reach its forks to secure 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. 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. 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 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 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. 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. 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 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. 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 The floor needs to meet specific minimum requirements prior to 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. Rack failure can happen if they are improperly installed. One of the most important details to ensure proper installation, is that all racks are plumb. Rack shims can help the rack stay plumb to one inch at the height of thirty feet. Dangerous racking failure can occur if the above steps are not taken. 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.