Very Narrow Aisle Forklift

Used Very Narrow Aisle Forklift Sunnyvale - Getting items from one warehouse location to another and to and from the loading docks is the focus of warehousing. Focus is often on space saving tools and the layout of the building. 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. 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. Certain models of very narrow aisle forklifts can increase the square foot storage capabilities by delivering greater stacking heights. 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. In addition, a very narrow aisle layout allows for more rack faces as well as better access to products. 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. 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. 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. 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 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 commonly used types of very narrow aisle forklift trucks are: 1. Reach trucks 2. Order pickers; 3. End-control riders; and 4. Turret or swing-mast. 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. 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 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. 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 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 The turret or swing mast very narrow aisle forklifts have a swivel mast that pivots and articulates. The mast swivels allowing pallets to be placed on either the left or right of the forklift. Guided Very Narrow Aisle Trucks Rail or wire can guide the very narrow aisle forklift trucks down the aisle securely. 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. Rail-guided applications use special rails set into the floor on either side of the aisle, funning the length of the location and curving around the edge. 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. 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. There are four main locations that need to be ideally prepared before any racking system can be installed. These areas need to be monitored continuously including fixing cracks in the floor, ensuring the racks are straight, a level floor and an appropriate load capacity of the floor. 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 Cracks in the floor ideally should be fixed once they are noticed to ensure everyone’s safety. 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 Minimum flooring requirements must be met before considering a narrow aisle installation. The floor should have three thousand psi concrete minimum and contain evenly distributed rebar at three to four inches under 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 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. Racking failure can kill or injure employees, damage equipment and result in horrible damage. Due to these potential problems, the most significant part of creating a narrow aisle configuration for warehousing optimization is the initial measurements.