



Engineered for Safety

Pentalift Lift tables and positioning equipment, a long history of integration into industry and ergonomics

A number of years ago, many Industries realized that it was cost effective and simply good business to invest in equipment that reduces employee physical effort. Not too long ago, an individual's ability to perform repetitive physical activities over an extended period of time was a key employment consideration. Over time, the individual became less and less capable of meeting the physical requirements of the job they were originally hired to perform. These employees were then often integrated into other job functions that were less physically challenging. The overall health and well-being of the company's workforce slowly declined over time. This situation often resulted in lower productivity, increased absenteeism, lower employee morale and increased health care costs.

Approximately 30 years ago Pentalift recognized this trend and set about to introduce the word "Ergonomics" into the industrial workplace. It became evident that by supplying material handling equipment to put the "work" comfortably within reach of the "worker" would greatly enhance productivity and safety. Pentalift lift tables raise the product to a comfortable height for the operator to complete their task. Simply by minimizing or often eliminating repetitive bending and lifting motions during the workday showed immediate positive results with less worker fatigue and injury. Productivity levels also increased and were now more consistent over the duration of the work day due to reduced effects of fatigue. Employee moral improved as employees recognized that equipment was now being utilized to make their job physically less demanding. Once their jobs became physically less demanding absenteeism dropped and health care costs began to lower significantly. Pentalift Rotators were introduced as a "Lazy Susan" top for lift tables. No longer did the operator have to reach/stretch across the pallet to position the component onto the pallet or conversely reach/stretch across the pallet to remove the component from the pallet. The operator simply rotates the pallet and raise/lower as required, this allowed the operator can now handle the component in the most comfortable ergonomic position.

Pentalift tilters were also introduced to address the issue of repetitive bending as operators reached into the bottom of a bin to retrieve components. It is generally an easy task to remove the top components from a full bin, however as the bin empties the operator has to reach deeper and deeper to remove the components at the bottom. The constant bending and reaching deeper into the bin quickly becomes a source of operator discomfort and the potential for injury significantly increases. By placing the bin on a tilter, the operator, once they have removed the top layers of

components, simply tilts the bin towards them making component retrieval much easier and less physically demanding. In addition to addressing the basic ergonomic topics, safety features began to become more commonplace in the design and manufacture of lift tables. Hydraulic velocity fuses were developed to arrest the downward descent of the lift table in the unlikely event of hydraulic hose rupture. Foot pedal controls (raise/lower) now began to replace hand held controls (raise/lower) thereby freeing the operator's hands to perform other tasks.

Having successfully addressed many of the ergonomic related factors at individual work stations, Pentalift began looking towards increasing productivity in other types of industries through improved automation. In industries such as the bottling industry and the packaging industry, the speed of the work in process is critical to the success of the company. Often there are no operators, or very few operators in sight, the complete process survives on the ability to streamline, speed up and automate the complete manufacturing/packaging process.

In many cases lift tables used in an automated process are required to cycle up and down quickly and it is very common for these lift tables to cycle more times per hour than the typical 8 cycles per hour. Also, it is not unusual for lift tables operating in this type of application to operate for more than one shift per day.

Pentalift recognized modifying equipment originally designed for ergonomic applications was not necessarily the best solution for lift tables to be used in an automated process. The lift tables designed to accommodate ergonomics, quite simply put, couldn't keep up with the speed of the automated production line requirements, or if they did, they wore out prematurely based upon the high frequency of operation. Pentalift invested heavily in research and development engineering to design and develop a complete line of lift tables that would successfully operate in this type of environment for extended periods of time. In addition to upgrading bearings at all of the pivot points, Pentalift provides a means to quickly and effectively lubricate the complete unit assuring a long life of uncompromised performance. Based upon the requirements of the specific application, the power units are also upgraded in many ways. Common power unit upgrades include features such as oil coolers; continuous running power units (eliminates repetitive jog starts); oversized reservoirs, and counter balance valves to name just a few.

The Pentalift Advantage

For approximately 30 years Pentalift has been successfully designing and manufacturing lift tables and positioning equipment to suit a wide range of industrial applications. As standard, we offer lift tables with load carrying capacities ranging from as low as 500 lbs. and upwards to 120,000 lbs. of load carrying capacity. Based upon our resources, engineering abilities and 30 years of focused experience, Pentalift works with our customers to assure they receive the product that best suits their specific application.

PENTALIFT EQUIPMENT CORPORATION

P O Box 1510 Buffalo NY U.S.A. 14240-1510

P O Box 1060 Guelph ON Canada N1H 6N1

Website: www.pentalift.com

Phone (519) 763-3625 Fax (519) 763-2894

Phone (519) 763-3625 Fax (519) 763-2894

Email: dock@pentalift.com