Factory floor: glass handling equipment

Heave ho!

Glass handling machines provide health benefits. efficiency

Compiled by Sahely Mukerji

n the glazing industry, more injuries occur from improper lifting of heavy objects than from any other cause, according to MyGlassClass.com. Fortunately, today's glass handling equipment offers workers alternative solutions to manual lifting that are both efficient and easy on the back. Below are a few glass handling machines that promise to make your job easier.

Quattrolifts' one-man glass lifter

Quattrolifts, Henderson, Nev., released the Express, an innovative, small, portable lifter that allows one man to move lites weighing up 200 pounds or two men to



move lites weighing up to 300 pounds. The lifter can be loaded onto a truck in two 30-pound parts and easily assembled in under a minute. Once assembled, it can unload lites or windows off the truck and then transport them onsite. The large 13-inch pneumatic wheels allow for travelling over rough ground, and the wheelbase can be adjusted from 26 inches to 32 inches to accommodate narrow walkways.

The lifter can rotate lites or windows 360 degrees; the operator can also index lites to move through standard 36-inch-wide doorways. 800/983-5841| http://quattrolifts.com/

Wood's Powr-Grip's economical, rotator/tilter

Laurel, Mont.-based Wood's Powr-Grip's Manual Rotator/Power Tilter is built to meet the day-to-day demands of the glass production line. Durable and



dependable, this below-the-hook vacuum lifter helps speed production on edgers, bevelers and washers, reducing operator fatigue and injuries, while minimizing glass damage. The MRPT has manual 360-degree edgewise rotation with automatic locking at each quarter turn and 90-degree power tilt between upright and flat positions. It also comes standard with a high-flow vacuum system that is capable of attaching to glass and releasing it in seconds. The lightweight, interchangeable pad frame may be customized to meet customer specifications. For added safety, a movable control pendant allows the operator to step out of the way during the tilt. A variety of options also are available to meet customer requirements. 800/548-7341 | www.powrgrip.com

Erdman's ergonomic glass lift and placement system

The Erdman Manipulator from Erdman Automation Corp., Princeton, Minn., reduces the stress and strain associated with moving and placing large or heavy panes of glass. It can be used with just about any type of equipment, but it is particularly useful for the Erdman Hand Assist or Glass Lay-in. It also can be mounted on a portable or stationary base or suspended from a bridge, used with



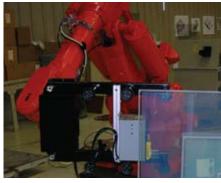
any large or heavy panel for single operator lift and placement, e.g. door panels, plywood and sheet rock. One person using the machine can do the job more efficiently than two or three without the machine. Custom models, sizes and capacities are available. Adjustable pressure and cup placement accommodate a variety of different product weights and sizes. 763/389-9475 | www.erdmanautomation.com

QComp's glass and module load/unload systems

QComp Technologies Inc., Greenville, Wis., offers a glass and module load and unload system that helps reduce labor, increase safety and productivity on the plant floor, and maintain product quality by eliminating scratching during the handling process.

The glass load/unload system uses a six-axis ABB robot to unload glass or substrates from A-frame or L-frame racks and place them onto the production line. Powered by an ABB robot, the glass system utilizes a proprietary





vision technology and tool developed by QComp. Vision is used to precisely locate the glass angle and edge for precision picking and placing without scratching. The system can be calibrated for various glass thicknesses and is capable of handling a large range of glass sizes. It features seamless integration with line controls.

The module load/unload system also uses a six-axis ABB robot to unload modules from the production line and place them into slotted racks. The ABB robot-powered module system utilizes QComp's vision technology to precisely locate the slots and can be calibrated for various module thicknesses. The system is capable of handling a large range of module sizes. As with the glass load/unload system the module system features seamless integration with line controls. 920/757-0775 | www.qcomptech.com

Bystronic glass' two-column lifter

Bystronic glass, with U.S. offices in Aurora, Colo., offers a variety of glass handling equipment, including one- and two-column lifts, manipulators, suction frames and accumulator-driven suction frames. The IZ two-column lift is capa-



Two-column lifter

ble of handling big, heavy glass plates by rigidly guiding the load using a hoisting telescope. It can accommodate working loads of 250 kilograms, 500 kg, 650 kg and 1,000 kg. Used in lightweight X-Y-craneways, the device's vacuum is generated alter-

natively by means of an electrical vacuum pump or Venturi nozzles. Functions include lifting, tilting (alternatively pneumatically or electromotorically), inclining (pneumatically) and turning (electromotorically). 720/858-7700 | www.bystronic-glass.com



Billco's fully automated glass transfer system

From Billco Mfg., Zelienople, Pa., the Unstacker uses a combination of hydraulics, vacuum cups

and sensors to identify and retrieve glass from a vertical pack and transfer it to a horizontal position for downstream processing. When ready to receive glass, the system automatically detects the glass size and adjusts accordingly. A multistage vacuum ensures the glass is securely held. The fully automated system can be used with any cutting line and can be easily interfaced with the cutting line control system. It is compatible with most rack storage systems and comes in both stationary and traversing models. 724/452-7390 | www.billco-mfg.com

Haeco's glass handlers and positioners

Haeco, Loveland, Ohio, offers the Famatec Gingo glass handler featuring balanced movement for loads up to about 550 pounds. Suitable for glass lites and windows, it has four adjustable suction cups, pneumatic tilting of ±10 degrees, frontal and axial rotation of 180 degrees and manual side movement of 160 millimeters. The portable equipment is available in a solid frame version and a dismountable version that can be taken apart into six pieces that users can hand-carry and re-assemble within three minutes, according to company literature. Haeco also offers the Famatec Friendly glass handler that allows operators to control all movements from an ergonomic, easy-to-use console. Available in various load limits up to 880 pounds, the Friendly can be mounted to the floor, a self-standing base, the ceiling or on an overhead rail system. It offers a quick return on investment by reducing time-off injuries and workman's comp claims, according to a release. 800/852-3522 | www.haeco.us

RESOURCES

Airmatic Inc. www.airmatic.com

Andela Products
www.andelaproducts.com

Anver Corp. www.anver.com

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www.meshbelt.com

Auduhon

Billco Manufacturing Inc. www.billco-mfg.com

Bystronic Glass Inc. www.bystronic-glass.com

Combilift USA www.combilift.com

EAM-Mosca Corp. www.eammosca.com

Erdman Automation Corp.

www.erdmanauto mation.com

F. Barkow Inc. www.barkow.com

Fenner Drives www.fennerdrives.com

Gardner Dist. & Mfg. 888/748-0330

Grenzebach Corp. www.grenzebach.com

Groves Inc. www.groves.com

Independent Engineering Co. 248/852-2222

Industrial Molded Rubber Products www.imr-inc.com

J.G. Wilson Inc. www.jgwilson.com Kalamazoo Packaging Systems/Ultra-Pak Inc. www.kalpack.com

North American Roller Products Inc. www.narp-trapo.com

Perfect Technology www.ptc-glass.com

Pyrotek Inc. www.pyrotek.com

QComp Technologies Inc. www.qcomptech.com

Quattrolifts http://quattrolifts.com/

RONI Inc. www.roni.com

Reis Robotics USA Inc. www.reisrobotics.com

Richter Enterprises Corp. www.richterenterprises. com

Ruco Equipment Co. Iwww.rucoequipment.com

Sashlite LLC www.sashlite.com

Schmalz Inc. www.schmalz.us

Tuff Temp Corp. www.tufftemp.com

UniTech Industries Inc.

Unruh Fab Inc. www.unruhfab.com

Vacutrade USA Inc. www.vacutrade.com

Valla Cranes Global www.valla.com

Wood's Powr-Grip Co. www.powrgrip.com

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