Robot Palletizing
The definition of palletizing is the process of loading or unloading of product, i.e. boxes, bags, cartons onto or from a pallet. This process was normally done manually but with the drastic, decreasing price of robotic automation over the past 10 years, it has become more affordable and cost effective compared to manual processing. Today’s robotic palletizing systems are used in all different types of industries such as food packaging, manufacturing and shipping. With the evolution of robotic technologies, it can help companies save considerable money, labor, and time by automating their palletizing process. These systems have the ability to manage products of all shapes, sizes and weights. Modern palletizing robotic cells have the versatility to perform many functions simultaneously. The flexibility, speed, payload, and reach of robots has increased allowing them to take on varying sizes and shapes of products over multiple lines.

Welcome to Volmstack® Robot Palletizing Systems

Volm Companies is highly knowledgeable in complete packing solutions for the produce industry. We have a special division within our company that is dedicated to providing fully automated solutions for the palletizing of bags, boxes & cartons. This division is comprised of a team of engineering, sales, marketing, and robotics experts. Our team of experts can help you and your company step into the future of packing automation with the newest and most cost-effective ways. We have provided many different palletizing solutions over the years and based on your company needs and the budget for your project, we can build a custom solution for your company.

The Volm Companies robotic solutions team has designed numerous end-of-arm tools that are able handle a wide range of products from RPC cases, sealed bags and open trays to a large portfolio of different applications. Our flexible robotic palletizing systems can be programmed for high speed stacking or display ready presentation for your customer. Our team will consult with you from initial design set-up through fabrication, programming and final testing to make your transition to a fully or semi-automated palletizing system safe and easy to use. This is all backed up with a full support team from spare parts to a full mobile tech crew across North America.

We know that you need an automated system that will work effectively, from start to finish. The Volm Companies’ Volmstack should be your first choice in automated robotic palletizing systems.

What is Robotic Palletizing and How Can It Work for You?

The definition of palletizing is the process of loading or unloading of product, i.e. boxes, bags, cartons onto or from a pallet. This process was normally done manually but with the drastic, decreasing price of robotic automation over the past 10 years, it has become more affordable and cost effective compared to manual processing. Today’s robotic palletizing systems are used in all different types of industries such as food packaging, manufacturing and shipping. With the evolution of robotic technologies, it can help companies save considerable money, labor, and time by automating their palletizing process. These systems have the ability to manage products of all shapes, sizes and weights. Modern palletizing robotic cells have the versatility to perform many functions simultaneously. The flexibility, speed, payload, and reach of robots has increased allowing them to take on varying sizes and shapes of products over multiple lines.
Parts of a Volmstack Robotic Palletizer

IN-FEED CONVEYORS: Brings the product i.e. bags, bales, boxes & cartons into the palletizing cell.

PICK CONVEYORS: The end of the in-feed conveyor that holds or stacks product for the robot's end-of-arm tool.

END-OF-ARM TOOL (EoAT): It is built to move your product quickly, carefully & effectively from the in-feed conveyor to the pallet. You may need multiple EoAT for different products but the change over can be quick with preset programming.

ROBOT: The heart of the system is the robot, so we use top of the line technology that suits your needs with the right lift capacity and the choice of 4, 5 or 6 axis arms for flexibility.

BOOSTER FRAME: This is a heavy duty stand that is built to withstand the weight and torque of the robot and to also set up the robot for optimal working height.

CONTROL PANEL & PROGRAMMING: Here are the brains of the robotic palletizing system. We will provide you with custom programming for your products to be palletized, in the fastest and cleanest way possible, working in sync with your entire product line.

PALLET LOADING & BIN FILLING: This area is where the robot will stack and place the product on the pallets or in bins. This can be set up for regular stacking or store ready display stacking depending on product and stacking speed.

PALLET STORAGE & DISPENSER: This part of the system helps keep everything moving by making sure that there is never an empty loading zone. With fully automatic pallet in-feed, it can leave the operator available to tend to other things.

SAFETY FENCING & LIGHT CURTAINS: We will make sure that your palletizing system is safe for your workers and meets the local labor codes for safety. This safety system will contain fencing barriers with an access gate, a safety switch along with light curtains so product can enter and exit the cell without shutting down the palletizing system.

PALLET DISCHARGE: This is the final element of the system where your product comes out of the cell all nicely stacked and ready to ship to your customer. The pallet discharge can be equipped with an automatic pallet stretch wrapping system if required.
The Volmstack Advantage

KNOWLEDGE & EXPERIENCE:
Volmstack engineers & programmers have extensive career experience through many robotic, conveyor and material handling projects.

TRAINING:
As part of every installation, Volm Companies will offer operator and maintenance training. The systems are developed and built at our state of the art facility, so our team can work on your system prior to being installed at your facility. This training allows understanding of capabilities of the system prior to running at full production speed.

SERVICE AND SUPPORT:
Our highly trained and experienced service team includes 19 field technicians who are strategically located throughout North America, ensuring quick and efficient service. When you buy Volmstack, you’ll have access to our service helpline, available 24 hours a day.

The Benefits of Volmstack Robot Palletizing System

Real Time Data of Operations
Robotic palletizers can be monitored automatically through sensors and if anything goes wrong, the operator gets immediate notification.

Reduced Health & Safety Concerns
With a robotic palletizing system, the system handles the repetitive motions and heavy lifting resulting in a safer and healthier work environment.

Flexibility
A single robotic palletizing system can be programmed to handle more than one type of package style, allowing your company to do more with less equipment.

Improved Operations
Unlike manual labor, robotic palletizers can work 24 hours a day 7 days a week, which means increased production and turnaround times.

Reduced Product Damage
The chances of products being damaged by robotic systems are less likely.

Increased Productivity
Robotics allows faster palletizing operations with lesser chances of mistakes or damage.

Reliability
Robotic palletizers are very reliable and can function for years with minimal maintenance, unlike non-robotic systems.

Reduced Labor Force
Robotic palletizers greatly decrease the requirement of manual labor since the palletizing process is automated.
Volm Companies has been providing innovative packaging, equipment and supply chain solutions to fresh produce growers, packers, and retailers for over 60 years. Our long history in the food packaging industry has given us deep experience in what it takes to bring produce from field to market shelf.

Volm is a leading manufacturer and distributor of world class packaging equipment solutions. We bring together all of the disciplines necessary to create comprehensive handling systems, customizing equipment to meet any requirement. Our Volmpack automated equipment provides best-in-class speed and accuracy along with user friendly programming and features. Additionally, Volm’s professional services team (VEST) designs and engineers equipment solutions for new facilities or existing facilities looking to improve productivity and effectiveness. Our equipment portfolio includes:

- Weighers
- Baggers & Balers
- Sizers & Sorters
- Conveyors
- Stretch Wrappers

Volm strives to be recognized as the Most Valued Partner to every one of our customers. Our goal is to not only satisfy our customers’ needs, but to increase their competitiveness with quality products, operational gains, industry knowledge, and innovative solutions.