



Palletizing

Flexible. Integrated. Solutions.



Proven Innovation

The Hartness robotic palletizing portfolio was designed to help our customers meet their goals for product flexibility, gentle pack handling, and lower total cost of ownership. From low-level, continuous motion systems to high-level palletizers with robotic layer forming, Hartness offers a full complement of innovative, robotic-enabled depalletizers and palletizers to meet virtually any speed or footprint requirements. Hartness has assembled a team of robotic specialists from around the world to offer industry-leading, innovative robotic palletization solutions. As with any Hartness product, Hartness robotic palletization solutions are backed by our decades-long, powerful commitment to customer satisfaction.



Case depalletization

Industries Served:

- Food
- Home Care
- Personal Care
- Beer
- Soft Drink
- Spirits and Wine
- Pharmaceutical
- Grocery
- Distribution

Hartness customers benefit from over 50 years of tool design and manufacturing experience, as well as the expertise of Hartness Systems Group, that ensures that our clients receive a vertically-integrated solution which minimizes customer risk and ensures more vertical start-up. Hartness Systems Group provides complete systems, including scope development, line design, case and pallet conveyance, project and site management, training, and after-sales support.

As always, Hartness is committed to providing its customers with the solutions required to meet the ever-changing needs of the market.



Hartness world class manufacturing

Why Robotic Palletizing?

Environmental considerations and cost saving initiatives continue to result in the growth of lighter weight primary and secondary packaging, as well as the use of alternative packaging materials such as film and flexible packaging. Consumer desire for greater choice continues to rapidly increase the number of SKUs for all manufacturers. These fundamental changes in the market are forcing manufacturers to consider alternative product handling solutions. Flexibility and gentle handling are more critical than ever. The growth of robotic palletization is a testament to the changing needs of the market. Some of the benefits of robotic palletization include:

- / *Gently handles lightweighted primary and secondary packaging*
- / *Flexibility - handles a greater variety of SKUs*
- / *Versatility – flexible footprints*
- / *Lower total cost of ownership vs traditional palletizers*
 - Less maintenance
 - Fewer wear parts
 - Quicker changeover
- / *Simplification of complex pallet patterns*
- / *Presents opportunities for additional lightweighting of primary and secondary packaging*
- / *PC-driven pattern generation programs*



Low-level, High speed

Hartness pioneered the low-level, high-speed palletizer market in North America. The industry-leading system features a two-stage process for palletizing of product. Utilizing a universal, servo-controlled robotic tool for gentle, accurate and continuous motion pack placement, the system creates a layer of product. Each layer of product is then indexed onto a master robotic tool, which accurately positions the entire layer on the pallet. Changeovers are accomplished automatically and with the push of a button, ensuring quick and repeatable product changes. “Soft touch” handling eliminates product damage often associated with lightweighted primary and secondary packaging. The layer forming robot can handle multiple packages per cycle for even greater speed. Speed is rated at up to 100 pack/minute.



High-level, High speed

Lightweighted primary and secondary packaging, along with massive SKU proliferation in many industries, have given rise to the need for gentler handling and more flexible palletizing solutions, all without affecting speed. Traditional, high-level palletizers typically offer the highest speed solutions. However, traditional palletizers have relied on high-impact methods such as bump turning to form layers. These practices may increase product damage and waste. Hartness high-level palletizers utilize our industry-leading robotic layer forming tools to gently and accurately form layers, sacrificing little speed. Layer configuration changes are more easily accomplished as well, virtually eliminating the need for expensive, on-site support.



Low-level, Medium speed

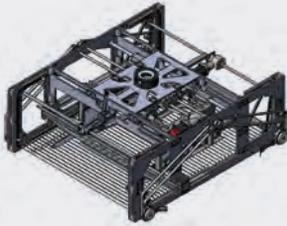
Hartness supplies specialty pick and place palletizing solutions across a variety of market segments. With over 50 years of tool design and manufacturing experience, we offer robust, customized tool designs for virtually any palletizing application. Our low-level medium speed systems pick and palletize individual packs, as well as rows of products for higher speed production lines. A common application in the Hartness product portfolio is the creation of palletizing banks, in which palletizers are fed by more than one packaging line. This solution offers both space and labor savings to manufacturers seeking optimized end-of-line solutions. Innovative systems and fully integrated solutions differentiate the Hartness offering and bring value to our clients.

Tool Modeling and System Simulation

Hartness uses state of the art modeling and simulation software to decrease lead time, minimize client risk and ensure more vertical startups. These programs are used to verify arm reach, speed and numerous other factors that contribute to project success.

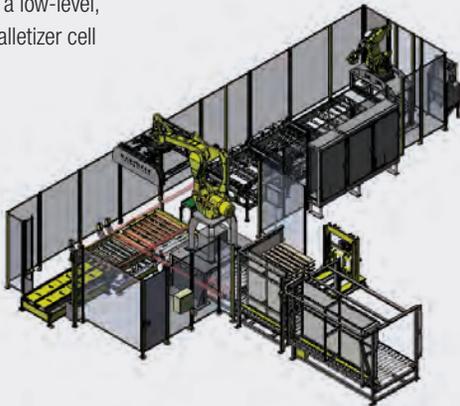
Tool Modeling

Model of the latest Hartness layer handling tool



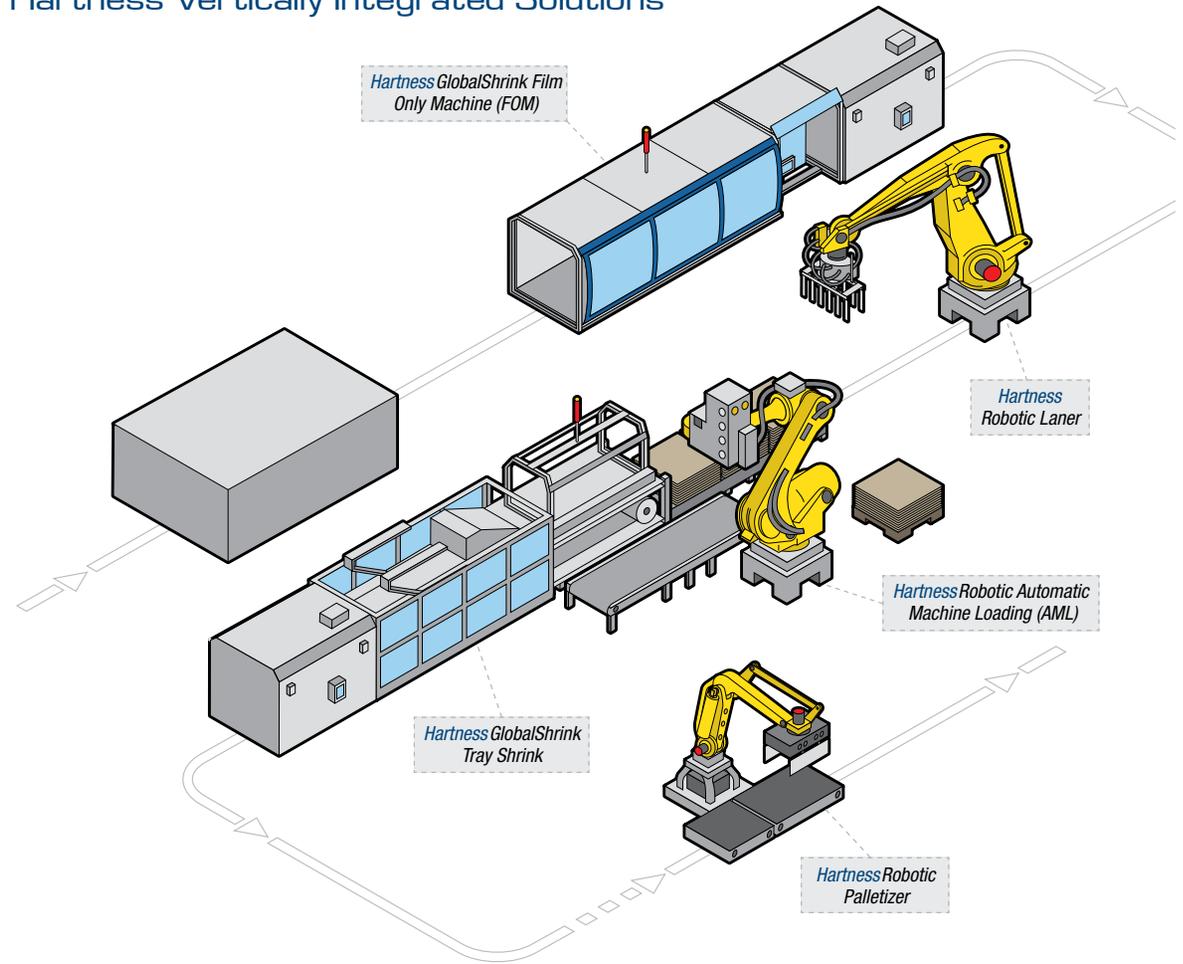
System Simulation

Simulation of a low-level, high speed palletizer cell



Hartness is a proud member of the ITW family of companies. 

Hartness Vertically Integrated Solutions



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