PRESS RELEASE

For immediate release.

V 30P Robotic Case Packer/Palletizer Cell Reduces Required Floor Space for End-of-Line Packaging

November 2009, Blacksburg, VA — Designed specifically for packaging facilities that have limited floor space, the ESS Technologies, Inc. Model V 30P combines a vertical robotic case packer with an integrated palletizer cell to provide multi-function end-of-line packaging in a very small footprint. The packaging cell integrates a FANUC robot, an ESS-designed end-of-arm tool (EOAT), a palletizing cell and Allen Bradley controls using the CompactLogix® platform with a color touchscreen display. The palletizing cell may include tier/deck sheet placement and an automatic pallet dispenser with flow-through pallet conveyor to fully automate the end-of-line packaging process. A fully automated V 30P system occupies less than 16' x 9' of floor space.

The case packer portion of the system can handle a range of products, including cartons, bottles, sachets, bundles, etc. ESS designs the infeed of the case packer to automatically collate products into the correct pack pattern. Once collated, the robot with custom EOAT loads the product into a case. Cases are sealed using either tape or glue and conveyed directly into the palletizing portion of the cell. As cases accumulate, the V 30P automatically palletizes the cases. After the accumulated cases are palletized, the system returns to case packing. The flow of pallets through the system may be manual or automated. Optional pallet dispensers index empty pallets into place while the full pallet is conveyed out of the cell via an optional pallet conveyor. The addition of an integrated pallet stretch wrapper creates a complete end-of-line packaging solution that requires very little operator involvement.

A number of FANUC robots can be specified, depending on the payload requirements of the application. The EOAT may be vacuum-style, mechanical gripper-style, or a hybrid design that includes both vacuum and gripper elements. Quick release connections on the EOAT allow for fast changeover (under five minutes if only the EOAT changes). The overall system has been meticulously engineered to reduce the number of required spare parts and simplify maintenance. Open access to the system allows for ease of inspection and cleaning.

As an authorized FANUC Robotics system integrator, ESS Technologies, Inc. has the expertise needed to integrate the V 30P into existing and new packaging systems to meet any application. Superior design and turnkey systems integration from ESS Technologies, Inc. make the V 30P Vertical Robotic Case Packer/Palletizer the ideal solution for case packing applications in the pharmaceutical, nutraceutical, cosmetic and consumer product industries.

About ESS Technologies, Inc.

ESS Technologies, Inc., founded in 1993, specializes in complete packaging line design, equipment manufacturing, and integration. Our expertise includes filling/capping equipment, robotic palletizing systems, horizontal/vertical cartoners, horizontal/vertical case packers, tube fillers, overwrappers, custom designed solutions for medical device assembly and pharmaceutical packaging, and integrated robotics. ESS Technologies, Inc. is a FANUC Robotics authorized system integrator and strategic

partner for the secondary packaging and palletizing of pharmaceuticals and cosmetics. Engineered for reliability and efficiency, ESS Technologies' innovative solutions offer you tomorrow's packaging technology today.