

## PRESS RELEASE

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### ***Robotic Machine Loading Reaches Top Speeds by Integrating the New FANUC M-1iA Robot***

May 2010, Blacksburg, VA — ESS Technologies, Inc. has developed a robotic system that integrates FANUC's new M-1iA delta style robot. The system incorporates custom ESS-designed end-of-arm-tooling (EOAT) and programming to create a very compact system for machine loading and unloading. A real world application involves integrating the M-1iA robotic system with an ESS Technologies Monoblock Filler/Capper to unload filled and capped micro-tubes and place them onto a labeler infeed conveyor at a rate of 60 tubes per minute.

In this application, the M-1iA loading system is integrated directly with the machine, eliminating the need for a separate stand or robot base. The robot incorporates line tracking, which allows it to accurately pick micro-tubes from the Monoblock starwheel and place them onto a labeler infeed conveyor. Custom gripper-style EOAT handles two vials at a time. Programming includes a reject component, so incorrectly filled or capped micro-tubes are removed from the production stream and placed into reject trays. At a rate of 60 tubes per minute, the high speed robotic system allows both the Monoblock Filler/Capper and the labeler to run at the required production speed.

Other applications for the robotic system include loading blister packaging machines and thermoformers, loading or unloading pucks, high speed sorting or assembly systems, loading moving conveyors, or picking parts from moving conveyors. ESS Technologies specializes in EOAT design, creating a robotic system that handles almost any type of product.

The FANUC M-1iA robot is available in two models. The M-1iA/0.5S has four axes while the M-1iA/0.5A is a six-axis robot. Both models are lightweight, compact high speed units that can be integrated directly with a machine or ordered with a desktop stand or a reverse stand for mounting the robot to the ceiling. The mechanical unit weighs only 17kg yet handles a payload up to 5kg with a reach up to 892mm and excellent repeatability (0.02mm). A camera port in the M-1iA mechanical unit allows the robot to be easily integrated with FANUC's iRvision system. As an authorized FANUC system integrator and strategic partner for secondary packaging and palletizing of pharmaceuticals and cosmetics, ESS has years of experience integrating robotic systems into new and existing packaging lines.

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, case packing equipment, custom designed solutions for medical device assembly and pharmaceutical packaging, and integrated robotics. Engineered for reliability and efficiency, ESS Technologies' products offer you tomorrow's packaging technology today.

