

Plastech upgrading its press fleet

By MICHAEL LAUZON

June 30, 2017



Plastech Corp. has installed a new Engel press and robot to focus on clear polycarbonate for appliance industry applications.

Custom injection molder Plastech Corp. is updating its injection press technology to improve efficiency, quality and cost.

The Rush City, Minn., firm has installed a new Engel injection molding machine and robot that will focus on molding clear polycarbonate for applications in the appliance industry. Jerry Miller, director of operations, said his firm also is looking to buy another advanced press for the upgrading program.

Miller said in a phone interview that press upgrading and expansion of Plastech's sales force underline a new phase for the 55-year-old company.

"The machines we've used in the past allowed us to provide tight-tolerance technical parts, but for the future, we are looking for technically advanced equipment that provides higher precision, repeatability and reliability, as well as processing and economical efficiencies," Miller explained.

The new press and robot are dedicated to molding clear PC for the appliance industry. By focusing on one type of resin, the system will have quick changeover times and lower scrap, leading to lower costs for customers, the company said.

Miller said Sub-Zero Inc. of Madison, Wis., is a major appliance customer. Sub-Zero produces premium refrigeration, wine preservation and cooking equipment. Plastech molds PC resin into several appearance parts for the company.

Plastech should capture more PC molding jobs with the new, dedicated system, Miller predicted.

The new molding machine is a two-platen Engel duo 3550/500, a 500-tonner. Running alongside it is an Engel Viper 40 linear robot that is completely integrated with the press's controller, explained Engel Machinery Inc. senior account manager Larry Davis in a phone interview.

The Eco version installed is a servo-controlled hydraulic machine. Eco refers to energy efficiency and quiet operation. During the cooling phase of the molding cycle, for example, the press only uses energy in the heater bands and for controller voltage, Davis added. The Viper robot is a four-axis type with an 88-pound arm load capacity.

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Miller said Plastech also wants to install a new 300-ton press as the next step for press fleet upgrading and could choose an Engel model again. Plastech said in a news release that Engel's high level of service during installation impressed the custom molder.

Plastech now runs 44 injection presses, from 30 to 1,500 tons. Other key markets are recreational vehicles, lawn and garden and automotive. A big customer is Polaris Industries Inc., another Minnesota-based company, in Medina, that is a major player in snowmobiles, all-terrain vehicles and electric vehicles.

Plastech's molding technologies include gas-assist, insert molding, in-mold decorating and processing of long and short glass-fiberreinforced resins. All molding machines are equipped with three-axis robots, except the new Engel press with its four-axis Viper model.

Seven in-house, full-time journeyman toolmakers maintain and repair Plastech's 800 active molds. Plastech juggles 450 mold changes per month.

Plastech's secondary services include spin, sonic, hot-plate and vibration welding, as well as assembly, packaging and shipping.

Plastech boasts higher-than-average retention rates for its 300 employees. Some 40 percent of workers have been with the firm for more than 10 years, and about 10 percent have been employed there for more than 30 years.

The Rush City plant covers nearly 500,000 square feet, of which 110,000 square feet is occupied by manufacturing. It runs around the clock for 364 days of the year. More than 14 million pounds of plastics are molded annually. Recent annual sales were \$65 million.