

## Screws put new spin on foam PLA extrusion

Plastic Engineering Associates Licensing Inc., which develops and manufactures screws for foam extrusion, has signed its second Turbo-Screws license for PLA foam production, this one going to one of the world's largest food packaging companies, according to Bill Fogarty, VP of the firm. Fogarty declined to name the licensee but described it as "a multibillion dollar food packaging player" in North America.

"The fact that this giant food packaging company has entered into a license for our Turbo-Screws technology is validation of our technology for foaming PLA," Fogarty said.

The firm's technology is not necessarily new, with a patent for Turbo-Screws foam extrusion screw technology granted to the company in August 2003, giving it exclusive rights to make, manufacture, and use any type of aper-

ture in the flights of a thermoplastic foam extrusion screw except for a perfectly round hole. According to the company, Turbo-Screws have helped processors increase the output of polystyrene foam sheet-extrusion systems by an average of 42.5% and that of PS foam insulation board and plank extrusion systems by an average of 62.5%.

New is that the firm increasingly is being tasked to develop and manufacture the screws for foam extrusion of polylactic acid (PLA), a plastic based on plant starch. Recalls David Fogarty, president at the family-owned firm, "Three years ago, NatureWorks [a leading PLA supplier] came to us with a new biopolymer, PLA, and wanted us to try it. We had some initial success with it, but that started us on a three-year journey to develop successive screw designs and test them on a fami-

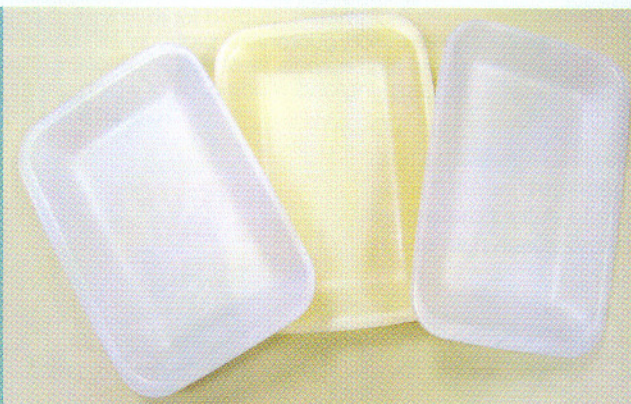
ly of NatureWorks' biopolymers including amorphous, semicrystalline, and some high-crystalline PLA." The firm now has commercially viable screws for foaming of amorphous and semicrystalline PLA and has licensed two North American food container processors to use the technology.

David Fogarty predicts this will prove a green alternative to, for example, PS foam meat trays, with the properties of PS and PLA foamed trays being "almost identical" to each other. "Both of our licensees are launching products. Sometime in the first quarter of 2008 there will be a rollout of specialty containers, with the primary driver for this coming from the consuming public and the large supermarket chains," he says.

Plastic Engineering Associates Licensing Inc., Boca Raton, FL, U.S.A.; +1 561-998-4140; [www.turboscrews.com](http://www.turboscrews.com)



Turbo-Screws are ready for foaming...



... of these PLA trays, coming soon to a supermarket near you.

### INJECTION MOLDING

## Exhibiting at next month's Medtec tradeshow in Stuttgart, Germany

Exhibiting at next month's Medtec trade show in Stuttgart, Germany (organized by MPW parent company Canon Communications) will be, for the first time, Swiss injection molding machine manufacturer Netstal, presenting one of its Elion 800 all-electric presses. The unit will mold polypropylene insulin needles in an 8-cavity mold at 12-second cycle times.

Netstal, Näfels, Switzerland; +41 55-618-6111; [www.netstal.com](http://www.netstal.com)



Netstal makes its debut at Medtec with its Elion 800 press.