Extrusion Solutions

THE LATEST EXTRUDING NEWS FROM ENTEK



100% biodegradable thermoformed trays from Plantic are used for a variety of food packaging applications.



Biodegradability – the ability of a material to be 'eaten' by microbes, leaving nothing but carbon dioxide and water – is the foundation of Plantic Technologies, Ltd. of Melbourne, Australia. Founded in 2002, Plantic's materials are derived from plants and are being used to produce products such as trays for chocolates, and packaging for cookies and other products. The plastic alternative material works like plastic, but is made from renewable and sustainable resources.

Trying to manufacture this new material posed a number of challenges to Plantic. The material, made up largely of corn starch and other ingredients, is extruded into sheet for use in a variety of packaging applications. After trying as many as seven extruder suppliers to successfully compound their materials, ENTEK became Plantic's supplier of choice. A large part of this success was due to the extensive lab trials run at ENTEK's headquarters in Lebanon, Oregon.

Service and Support Make the Difference

Plantic began searching for a twin-screw extruder supplier that would helpimprove their manufacturing process as they scaled up to commercial production. Several companies were contacted, including ENTEK. According to LindaCampbell, Inside Sales Manager at ENTEK, an important part of the process was working with Plantic to trial a wide variety of formulations to optimize the material performance. "We have had many trials with Plantic that helped them refine their process," said Campbell. "On some of these trials, we ran up to 30 formulas in one day. This requires a lot of preparation before the trials; for instance, we helped Plantic source several different raw materials in small batches from around the world, and have the materials shipped in advance to our headquarters in Oregon. It was this type of effort, which we do with all customers, that showed Plantic that we were committed to partnering with them to improve their process and results."

Due to the success of the trials, Plantic decided to purchase a turnkey 53mm ENTEK extruder line. Another example of outstanding ENTEK service involved the start-up of the extruder at Plantic's headquarters in Melbourne. Although ENTEK had agreed to provide one engineer to attend the start-up, Plantic requested that a second Controls specialist from ENTEK also attend. ENTEK sent the controls specialist at its own expense to ensure a smooth start-up. "Our core values mean doing the right thing – whatever it takes," said Campbell.

One Happy Customer

Since then, Plantic has ordered a second ENTEK extruder, this time a 27mm system. They have also recommended ENTEK to other companies in Australia; in fact their recommendation to one of their partners in research, the University of Queensland, helped ENTEK secure that order. Says Brendan Morris, Chief Operating Officer of Plantic Technologies Ltd., "We have installed ENTEK extruders at our Melbourne plant. We are using them to manufacture our environmentally sustainable and biodegradable Plantic[®] material. We are delighted with the performance of our ENTEK machines and ENTEK's commitment to service and would recommend ENTEK to any potential customers."