Extrusion Solutions

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BIOREGION TECHNOLOGY CHOOSES ENTEK

Innovative Start-up Using ENTEK for Production of 100% Natural Additives for Plastics

The bioplastics industry continues to grow, as new and innovative natural additives and materials are continually being brought to market. As a pioneer in bioplastics production, ENTEK has worked with customers since the 1990's to develop and refine new biodegradable and bio-based formulations for use in a wide variety of applications.

This work continues today and has become more important than ever, as the plastics industry responds to challenges to make products that are more environmentally friendly. With the bioplastics market predicted to grow as much as 25% over the next five years, it also makes good business sense for material suppliers and compounders to explore this market.

New Applications for Agricultural By-Products Show Great Promise

A new entry in the bioplastics market is BioRegion Technology (BRT). This Pacific Northwest start-up has developed an innovative way to process agricultural by-products for use as additives for a variety of plastics part applications. The material is proprietary,

but early results show that these 100% natural and biodegradable materials have great promise as additives for packaging, housewares, and numerous other plastic part applications.

Phil Brunner, Vice President of Product Development at BRT, had a history of working with ENTEK as he previously worked at Interfacial Consultants (IFC) of Prescott, WI (IFC was recently acquired by Nagase Holdings America). "I had a lot of experience with ENTEK so when I moved to the Northwest to start work on this new venture, they were one of the first companies I called," he said. "They have always been great to work with on new materials development and their technical support is outstanding."

BRT works with ENTEK directly in Oregon and runs lab trials on materials. For production runs, they use IFC. "IFC is set up with ENTEK machinery and they do a great job for us," said Dave Dowling, General Manager of BRT. "They've been instrumental in helping us refine our process and bringing our products to market."

Success with Renew™ Cellulose

BRT's first product is already seeing great results. BRT's Renew™ cellulose was developed as a drop-in replacement for other commercially available cellulose products. BRT currently has extensive capacity for Renew™ and that's growing, according to Dave Dowling.

"We have great confidence in this product," said Dowling. "We have ample infrastructure and feedstock for Renew and it is showing excellent results as a reinforcement agent for plastic parts."

In addition to being 100% natural and biodegradable, Renew provides numerous advantages including excellent dispersion of cellulose fibers in the plastic part, which are often hard to disentangle, according to Brunner. Benefits include lightweighting and reinforcement properties.

BRT is nearing commercialization on several consumer items including a product molded out of PP that uses 20% Renew cellulose, designed for pets. Marketed as a biocomposite product that utilizes renewable materials, this product has been successfully molded by Tailor Made of Hartland, WI. Other applications for Renew include automotive parts, eating utensils, and more.

Future BioRegion Technology Products in Development

BRT has a number of new products in development. While they can't disclose specifics at this time, they are working on new additives that they refer to as 'biocarbon' that are still in test mode. "We are not ready to promote these yet, but we are excited about the potential of these products," said Brunner. "They could be game-changing for the plastics industry."

One thing BRT is happy to disclose is their close working relationship with ENTEK. "Our business is growing," said Dowling, "and as we continue to grow, I'm very confident we will be growing with ENTEK."

For further information on BioRegion Technology and its products, contact Dave Dowling at david.dowling@bioregiontech.com or Phil Brunner at phil.brunner@bioregiontech.com.