



Extrusion Solutions

THE LATEST EXTRUDING NEWS FROM ENTEK



Chooses



Global Leading
Compounder Relies
on ENTEK Extruders,
Parts, and Service to
Get the Job Done



Teknor Apex Company is a leading international custom compounder of advanced polymer materials. Founded in 1924, the company is headquartered in Pawtucket, Rhode Island and has eight manufacturing locations in the USA, and one each in Singapore, China, Belgium, and the United Kingdom.

One of Teknor Apex's eight business units is Thermoplastic Elastomers (TPE), and this division is one of the world's largest TPE compounders. Part of their success is attributable to the service and support they've received from ENTEK Extruders. Since 1997, ENTEK has worked to supply Teknor Apex with replacement wear parts including screws, barrels, and gearboxes for their non-ENTEK brand twin-screw extruders.

Establishing a TPE Quality Standard

According to Paul Burke, Vice President of Manufacturing at Teknor Apex's plant in St. Albans, Vermont, ENTEK has done more than supply extruder parts; their support has actually helped Teknor Apex establish its TPE quality standards worldwide.

"We have worked together with ENTEK for many years to establish our TPE technologies in the USA, Asia, and Europe," he said. "Their support has helped us tremendously. We have no worries of scale-up or equivalent quality from any of our production plants around the world."

Non-ENTEK Machine Support? No Problem!

The story of how ENTEK began working with Teknor Apex is not unlike many other ENTEK customer stories – Teknor Apex approached them out of frustration, as the company needed replacement parts for their non-ENTEK twin-screw extruders.

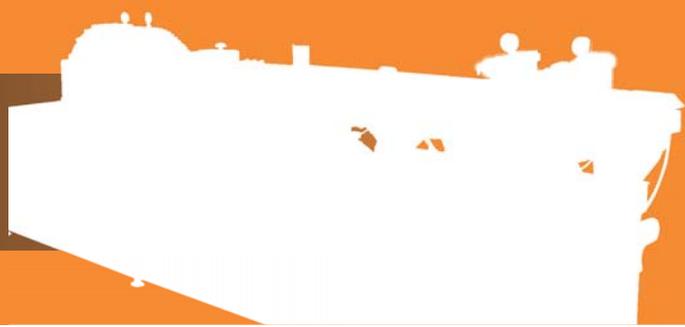
"They were having trouble getting the parts they needed from their OEM to keep their twin-screw extruders up and running," said Bill Petrozelli, ENTEK's Regional Sales Manager. "We were able to machine and deliver replacement parts that worked better than their originals. On top of that, we provided valuable processing advice. Once we were able to do that, we had a loyal customer."

A Custom Machine

Since 1997, ENTEK has provided numerous retrofits to Teknor Apex for their non-ENTEK machines, and has worked tirelessly with them to help improve their processing. Besides providing replacement screws, barrels, and even gearboxes for the twin-screw extruders, ENTEK even built Teknor Apex a non-standard sized twin-screw extruder in 2010 at the company's request. That machine was shipped to Singapore and continues to run flawlessly today at that plant.

"ENTEK has always been there for us when we needed support for our twin-screw extruders," said Paul Burke. "It is the type of customer service a global player like Teknor Apex needs to ensure the highest quality standards. We consider ENTEK a valued partner."





ENTEK Turnkey Capabilities



ENTEK will be better able to provide customers with the manpower and know-how to respond to most any turnkey or plant services project.



Welcome to the latest issue of Extrusion Solutions. I hope you enjoy catching up on what's new here at ENTEK as much as we enjoy bringing this news to you.

It's been a very busy time here at ENTEK, as the company works hard to keep up with customer demand. As you can see in the story on p. 3, a huge new production facility has sprung up next door, and we at ENTEK have been the general contractor, managing its design and build every step of the way. This summer, an all-new 300' long production line for lead-acid battery separators will be up and running, providing ENTEK International with the added capacity it needs.

Our turnkey/plant services business is strong, not only for expanding our own ENTEK businesses but our customer businesses as well. We have numerous success stories of working with customers to improve their operations and increase capacity. Some of these required extruder retrofits and upgrades; some required all-new extrusion systems; and others required entirely new plants. In all cases, ENTEK delivered, on-time and on-budget.

If you need support or another set of eyes to help you improve your twin-screw extrusion operations, give us a call – we're ready to help!

The ENTEK Family of Companies

I'd like to explain some more about ENTEK's company structure. ENTEK consists of three companies:

- **ENTEK International LLC** – RhinoHide® brand battery separators for lead-acid batteries
- **ENTEK Membranes LLC** – Teklon® brand battery separators for rechargeable Lithium-Ion battery systems
- **ENTEK Extruders** – twin-screw extruders, replacement wear parts, and complete extrusion systems for the plastics industry

The three ENTEK companies are all headquartered here at our company's campus in Lebanon, Oregon. While the companies have always worked together, we are in the process of more closely aligning the companies to make better use of our combined resources.

As we work to bring the three companies more closely together under one banner, the only thing that you, our customers, will notice will be an even better ability on ENTEK's part to respond to your project needs. By combining our resources, ENTEK will be better able to provide customers with the manpower and know-how to respond to most any turnkey or plant services project. Stay tuned for more news in future issues of Extrusion Solutions on how ENTEK can better serve you and help you improve your operations.

As always, I encourage you to contact me anytime at khanawalt@entek.com.

Sincerely,

Dr. Kirk Hanawalt
President, ENTEK Manufacturing, LLC





ENTEK Turnkey/ Plant Services



An ENTEK specialty is providing the know-how and the manpower to design and produce turnkey manufacturing plants, often from the ground up. These services include:

- project management
- engineering support-processing technology analysis and improvement
- plant operation audits
- complete plant-wide operations support

The Building Next Door

For evidence of some of ENTEK's finest turnkey plant work, look no further than the all-new processing plant we've built next door to ENTEK Extruders. The new plant, which will be fully operational this summer, was built from the ground up.

To get an idea of the size of this new plant see the aerial photo below, which was taken just over a year ago, in April 2012.

The new plant, designed and built for use by ENTEK International, will be used to house an all-new, high capacity 300' production line (that's a football field's length!) for lead-acid battery separator materials.

Experts in Extrusion

Considering a plant expansion? Give us a call! We have worked with numerous industry leaders to help them expand their operations. We are also experts in processing technology improvement – let us know if you're interested in putting our extrusion expertise to work for you!



ENTEK Appoints New Sales Representatives

ENTEK is pleased to announce the appointments of two new sales representatives.

Spectrum Machinery, Inc.

ENTEK has appointed Spectrum Machinery, Inc. of Whitinsville, Mass. as the company's exclusive sales representative in the northeastern USA. Spectrum will represent ENTEK in the six New England states and eastern New York.

Founded in 1987, Spectrum has a long history of representing leading plastics industry machinery manufacturers in the Extrusion, Injection Molding, Blow Molding and Thermoforming industries. The company has five salespeople that cover their territory.



Stated Technologies, Inc.

Stated Technologies of Arlington Heights, Illinois has been appointed as ENTEK's sales and technical representative for the Chicago and Upper Midwest area. Ted Niezyniecki, President of Stated Technologies, is totally focused on the extrusion industry and represents other fine lines of equipment including, among others, American Kuhne, Maag, Beta LaserMike, and Process Control.





Product Update



New Features Added to ENTEK 53mm Co-Rotating Twin-Screw Extruder

Ideal for medium lot size custom compounding (from 350 – 2,300 lbs/hour, depending on formulation), the ENTEK E-MAX 53mm twin-screw extruder is an industry workhorse. Recent improvements have been added to the extruder, as shown below. Many of these improvements were customer-driven and we thank them for their suggestions, as we work to provide the highest quality twin-screw extruders in the industry.

New and improved barrel shroud improves safety and provides easy access for cleaning, addition of vent stacks, and liquid feeding



The 'Made in USA' sticker reminds customers that ENTEK is the leading brand of co-rotating twin-screw extruders built in the USA



Gauges have been consolidated in central location for easy access and monitoring of important values



An example of a customer-driven improvement: all plug connections have been moved to one common location on the outside of the machine



Upcoming Events

It's been a busy conference and trade show year for ENTEK. ENTEK exhibited at the SPE International Polyolefins Conference in Houston, Feb. 25–26; the SPE ANTEC 2013 show and conference in Cincinnati, April 21–25; and the AMI Bioplastics Compounding and Processing conference in Miami, May 7–8. In addition, the company will exhibit at the following technical conferences later this year:



Principia Composite Decking and Railing Conference
Baltimore, October 28–29



AMI Compounding World Forum
Philadelphia, December 10–11

Mark your calendars to attend these important events, and we hope to see you there!





Why ENTEK?



Lab Notes



Dean Elliott
ENTEK Lab Manager

New Equipment

I'm happy to tell our customers that we have recently updated the ENTEK in-house lab with an all-new E-MAX 53mm twin-screw extruder. This machine is a welcome addition to our lab, and includes an Allen Bradley PLC-controlled cooling and heating system, air-actuated solenoid valves, and a host of other 'bells and whistles'. We are more prepared than ever to run lab trials on your most challenging compounding applications – bring them on!

Recent Trials

We ran a host of interesting trials in the past year. Here are a few highlights:

- The conversion of lignin to pellets;
- Compounding of recycled rubber tires with plastic to meet a customer need;
- A compounding and underwater cut pellet trial which, within the first 30 minutes, proved very successful for a customer from the Midwest.



Schedule a Lab Trial

If you would like to learn more about our in-house lab or would like to schedule a trial, please contact Stephanie March at 541-259-1068, or sbell@entek.com.



Have You Seen Our Latest Ads?

The 'Why ENTEK Extruders?' ad campaign continues with its two newest ads, featuring Tammy Straw, Business Development Coordinator, and Bill Petrozelli, Regional Sales Manager.

In these latest ads, Tammy talks about the attributes of ENTEK Plus, the replacement wear parts and services division of the company that she works for; and Bill talks about the importance of providing top-notch technical support to customers, something customers value more than anything else.

Watch for our latest ads both in print and online in leading industry publications including *Plastics News*, *Plastics Technology*, and *Compounding World*!



In His Own Words...

Check out ENTEK's YouTube channel, www.youtube.com/user/entekextruders, to view company CEO Larry Keith, talking about what he believes makes ENTEK a great company.

Many of you have seen the ENTEK print and web ads featuring Larry. The video is a follow-on to the ads, where you can see and hear more about what he has to say about the company's philosophy.

Watch for future videos on ENTEK employees explaining what it is they believe makes ENTEK, and its customers, successful.





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What Some of Our Customers Have to Say...

For several years in Extrusion Solutions, we've brought you customer success stories. And many of you have seen our latest ad campaign, where ENTEK employees tell you why ENTEK is different from other twin-screw extruder suppliers.

The secret to ENTEK's success is no secret at all – it's providing the best service and support possible to ensure our customers succeed. It's one thing to hear it from us; but see below for actual quotes from several ENTEK customers (names and identifiers have been deleted)!

"I was down at our plant this week. Beautiful installation! We're working on other things, but the extruder itself is running like a champ. I appreciate all the help getting it in and running."

"I wanted to take this opportunity to point out a few of the areas we love about Entek and what contributes to our current relationship and what inspires us to strive to strengthen that relationship.

First and foremost, your sense of teamwork and ease of working together on every project no matter how big or small. Almost each and every order that goes through your door is a project and just the way you have streamlined the process of project management into almost an art is awesome. The open concept from top to bottom pulling down the silos of departmentalism so each department, and even within departments, can utilize their resources as needed and work together to achieve is great. I wish we could have your whole team come out to our plant and present that culture to our company. In addition to the sense of teamwork is the drive for customer satisfaction. Your entire team and organization goes above and beyond to make sure we always have what we need... and more. This is certainly a value that we pride ourselves in with our customers and is yet another alignment we have between our organizations.

So, again, thank you very much for all your support and all the contributions you make to help us get in a better position to take on current and future challenges. You make our choice of who to work with when purchasing equipment very easy!"

"I think all your guys are top notch and extremely helpful. Thanks for keeping in touch."

"Just wanted to express my gratitude for arranging to send Rob back over here, we have plenty of local suppliers that wouldn't even drive across town to deal with a problem – you guys should write a book about customer service!"



ENTEK

RAISING EXPECTATIONS.
KEEPING THEM THERE.

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