



Jeff Bassett

Welcome to our fall issue of In-Line with Fi-*Tech.* We hope everyone had a chance to take time away from work and your daily grind to spend time with family and friends.

As I prepare for the

upcoming busy fall season of travel and conferences, I am reflecting on where Fi-Tech is today, and how we got here. Fi-Tech would not be what it is today without the tremendous risk and effort put forth by our founder, Lee Bassett, my father. With a wife and three young children, Lee left a stable job and started Fi-Tech in 1972. This was such an uncertain and risky move at an important stage in his life. Through his efforts in those early years working in the synthetic fiber industry, Lee built a supplier and customer base, one by one, building on each success with a reputation of making and delivering on promises. Personal attention, and face to face contact was a hallmark of his approach to business; and it remains today as an integral part of Fi-Tech's approach.

Dad, who will be 81 this fall, often reflects on the customer and supplier relationships he fostered during his career, recalling details and events. This reminds me of how important our personal connection to each of our customers and suppliers remains in our daily effort to deliver on our promises. As part of this, we look forward to, and appreciate opportunities to see you at the upcoming industry events this fall or as part of our regular visits.



Enka Tecnica Expands Heinsberg Facility

In July, Enka Tecnica completed construction of a 10,000 square foot expansion of their Heinsberg facility. The expanded space will allow for additional high-capacity drilling machines for long spin plates and meltblown die tips to meet the growing demand for Enka Tecnica products worldwide. It will also allow for a more efficient material flow through the production facility, reducing the amount of handling and movement of material during the manufacturing process. Enka Tecnica will also use the additional space for assembly of their growing line of MB Smart Meltblown Dies. The Enka Tecnica MB Smart provides a modular and cost-efficient design with Reicofil's proven and tested technology inside.



Jeff, Lee, and Todd Bassett

Fibers and Polymers

TechnipFMC – Zimmer[®] Polymers Technology

TechnipFMC is a world class leader in design, engineering, procurement and construction of process plants for the oil, gas and petrochemical industries. They are a global leader in oil and gas projects, technologies, and services providing clients vast expertise in subsea, onshore/offshore and surface projects. With 37,000 employees, TechnipFMC operates in 48 countries around the world.



"Gloria" Lab Plant by Technip Zimmer

Technip Zimmer GmbH in Germany provides technology, engineering, project management and procurement services for polyester and polyamide production plants. Technologies include PA6, PA6.6, high performance polyamides, PET, PTT, PBAT, PBS as well as specialties such as thermoplastic elastomers (TPEE). Polymers can be used for various applications such as bottles, film, carpet, packaging, textiles and engineering plastics.

Technip Zimmer has a fully equipped research and development center with analytical equipment and pilot plant facilities used for polymer development for themselves or together with clients. The new lab plant, "Gloria", is being used for further polymer development.

Recent developments are bio-based, biodegradable polymers such as PBAT and PBS, as well as other high performance polyamides.

In addition, upgrades of existing Zimmer®

Ambersil Propellant Change

In accordance with European legislation, Ambersil, manufacturer of Formula 1/HT Spinneret Spray, has discontinued the use of HFC-134a. This propellant is used in many of their aerosol product lines, including Formula 1/HT. HFC-134a carries a Global Warming Potential (GWP) of 1430. In comparison, Carbon Dioxide's (CO2) GWP = 1.



In their commitment to reducing the amount of greenhouse gas emitted into the atmosphere, Ambersil has extensively researched alternatives that will lower the GWP of their product line without affecting product performance. Formula 1/HT's new propellant, HFO-1234ze, is an eco-friendly, energy efficient, safe and proven alternative to HFC-134a and has a GWP = 6.

If you have any questions on specific product information please reach out to us at 804-794-9615 or sales@fitech.com.

For Fi-Tech After Hours Service Call 804-794-9615

You'll receive instructions on how to contact a Fi-Tech Team Member who is on call to assist you.

processes are available. For the PA6 process, we have developed an Inline Compounding System where additives like TiO2 can be added after the final reactor into the melt. This development enables high product flexibility, quick and direct switching to different products and various concentrations.

Technip Zimmer has over 60 years of experience designing and developing more than 900 plants.

Please contact Fi-Tech for additional information and details.

Fibers and Polymers

Techtextil 2019 Raleigh



Please make plans to join us February in for Techtextil 2019. Next year's venue, in Raleigh, NC, is conveniently located near many of the Textile Industry Leaders' headquarters.

The event will be held from February 26th to the 28th at the Raleigh Convention Center, Halls A&B, 500 S. Salisbury Street, Raleigh, NC 27601.

Fi-Tech Team members will be in attendance. Please visit us at Booth #1806. We will be representing many of our Principals in the Synthetic Fiber, Nonwovens, and Textile Markets.



I would like to recognize two members of our team who had significant service anniversaries in 2018. Cathy Shaw on our accounting team reached 30 years of service, and Randy Wise on our sales team attained 20 years of service.

I greatly appreciate the time, talents and dedication they have each brought to Fi-Tech, and we congratulate them on their achievements. Jeff Bassett

We look forward to seeing you there!

Fi-Tech represents these companies to serve manufacturers of Fiber and Polymer Products

Ambersil - England Anti-Stick Silicone Spray, Spinneret Lubricants

Autefa Solutions GmbH - Germany Bale Presses, Bale Wrapping & Strapping Systems

Cason Textile Machinery - Italy Bobbin Strippers, Semi-Manual and Automatic POY/FDY Spinning Plants

DM&E Corp. - USA Fiber Cutters, Tension Stands, Cutter Reels, Crimper Repairs

Enka Tecnica GmbH - Germany Spinnerets, Extrusion Dies, Spinpacks, Breaker Plates

EuroSpares - USA Spare Parts Service for European Machinery

filtertechnik.Europe GmbH & Co. Kg - Germany Filter Screens for Spin Packs, Filters for Screen Changers, Filter Belts

Galan Textile Machinery- Spain Mini Twisters, Heavy Duty Twisters, Specialty Twisters

Heberlein - Switzerland Air Interlacing Jets, Air Texturing Jets, Aspirators, Splicers, Suction Cut Units

MOVEngineering Srl - Italy Hypox® Spinneret & Pack Cleaning Units, Hypox® Polymer Filter Systems, Auxiliary Cleaning Equipment Mozart AG - Germany Staple Cutting Blades, Film Slitting Blades

Reifenhäuser REICOFIL[®] GmbH & Co. KG - Germany Extruders, REICOFIL Spinbonding Plants, Melt Blowing Plants

Saurer Fibrevision - United Kingdom On Line Monitoring Systems, Sensors, Lab and At Line Monitoring Systems

Saurer Technologies GmbH & Co. KG - Germany Texturing Units, PU Friction Discs, Air Entangling Jets for BCF, Industrial & Glass Fibers, Separator Rollers, Guide Rollers,

Schill+Seilacher GmbH - Germany Spin Finishes, Fiber Auxiliary Chemicals

Sikoplast Recycling Technology GmbH - Germany Recycling Plants for PET, PA, PP and PE Waste

Technip Zimmer GmbH - Germany

Complete Engineered Staple Fiber $\bar{\&}$ Filament Plants, Plants for Engineered Plastics, Polymerization & Solid State Polycondensation Plant

Tokuden Co., Ltd. - Japan Induction Heated Rolls®

Special Bearings

Zentes Unitex GmbH - Germany

Promik Spinneret Inspection Devices, Melt Pump Tester, Spin Finish Pump Tester, Specialty Chemicals

Nonwovens

Tokuden Air Cooled Hybrid Roll

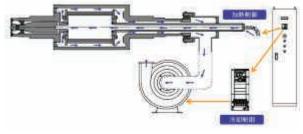
Tokuden is proud to announce their most recent technical development - the "Air-Cooled Hybrid Roll" which was released at the beginning of 2018.

The history of the cooling roll system began in 1986 with circulation cooling which circulates water in a water channel through the thick portion of the roll shell. However, there was a problem in terms of cost, water leakage and the temperature range that the roll could be operated.

In 2009, Tokuden developed a mist cooled hybrid roll. This roll does not use a rotary joint, but has an efficient cooling ability by blowing a mist mixed with water and air between the inner circumference of the roll shell and the outer circumference of the coil.

When compared to the water circulation type roll, Tokuden was able to reduce the cost and prevent water leakage, but still had a concern regarding the insulation of the coil due to the mist. An air-cooled hybrid roll was designed in 2016.

The air-cooled hybrid roll is a system that enables the roll to be cooled to room temperature very simply by vacuuming the air through the roll without the need for water or air utilities. We are expecting the demand for this product to increase in the very near future due to the ease and simplicity of using a vacuum system utilizing the outside air pulled through the interior of the roll. Compared to other methods, this system's ability to lower temperature is excellent. The utilization of the roll can be divided into two types: rapid cooling and balanced operation.



Rapid Cooling Operation

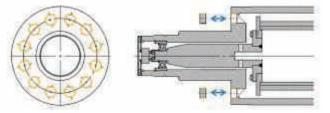
The purpose of rapid cooling is to improve the productivity of multi-product small volume production. In the daily production schedule, the

AstenJohnson Advanced Fabrics – Growth in the Nonwovens Market

Over the last year in North America, AstenJohnson Advanced Fabrics has taken further steps to grow and to enhance its market position in North America. AstenJohsnon operates two identical manufacturing facilities to support the nonwovens industry, one located in Valleyfield, Quebec, Canada and the other in Euepen, Belgium. These two highly technical facilities are capable of delivering fabrics to the nonwovens industry globally. The Valleyfield facility is the primary plant supporting the Americas.

In late 2017, Bo Elkin joined the Valleyfield team as a product manager for nonwovens. Bo brings years of spunmelt nonwoven experience to the team where Continued on next page

cooling time of the roll can be decreased rapidly allowing for quicker start up times between grade or material changes.



Balanced Cooling Operation

The purpose of balanced operation is to maintain a constant roll surface temperature. In many applications, the material temperature entering the roll will be higher than the set point temperature of the roll; thereby increasing the roll surface temperature above the set point. When this occurs, the control system will automatically switch on the air cooling, maintaining the set point temperature.

Since the release of the air-cooled hybrid rolls at the beginning of this year, Tokuden has received more than 30 orders. There is a high level of need for air-cooled type rolls without utilization of water.

Tokuden's future plans are to accumulate the basic data needed from our customers to unify a design for their Air-Cooled Hybrid Roll to meet additional applications requested by our customers.

Nonwovens

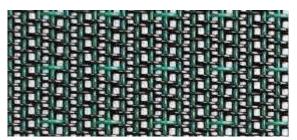
his primary responsibilities include product support, installation, training, troubleshooting, overseeing trials and supporting the Fi-Tech sales team in the North American market. He's a valuable asset on our team.

AstenJohnson continues a long line of innovative products for spunbond producers. WebTec N12C with GripTec coating continues to be a solid performer providing a good balance of durability, fiber support and coating longevity.

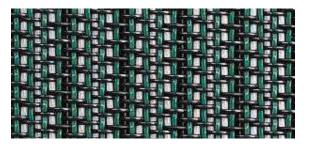
In the last year, AstenJohnson has rolled out the WebMaster N860C GWS development. The key features of this style is added fiber support and the introduction of "grip" yarns in both the warp and weft.

Having the grip feature woven into the structure of the belt and not as a coating, gives this fabric uniform grip performance throughout its lifetime even after cleaning. Performance in the field is proving this to be a significant advantage in many spunbond applications. In addition to these two designs, AstenJohnson has a complete portfolio of fabric styles to optimize performance on spunbond, meltblown, carding and hydroentangling lines.

Let us help you improve your performance with AstenJohnson Advanced Fabrics.



WebTec N12C



WebMaster N860C GWS

Fi-Tech represents these companies to serve manufacturers of Nonwoven Products

AstenJohnson Advanced Fabrics - USA

Woven Plastic & Metal Wire Belts, Forming Fabrics, Dryer Fabrics, Transport Belts

Brückner Textile Technologies - Germany

Thru Air Dryers and Heat Setters, Stenters, Heat Recovery and Air Purification Systems, Laminating Equipment

Enka Tecnica GmbH - Germany Spinnerets, Extrusion Dies, Jet Strips, Die Tips, Repairs

EuroSpares - USA Spare Parts Service for European Machinery

filtertechnik.Europe GmbH & Co. Kg - Germany Filter Screens for Spin Packs, Filters for Screen Changers, Filter Belts

Hastem Transportbänder GmbH - Germany Slat Aprons, Spiked/Needle Aprons, Spare Parts

Idrosistem Srl - Italy Water Filtration Systems for Spun Lace Production

Industrial Machine Mfg., Inc. - USA Spin Pack Components, Precision Custom-made Machine Parts

MOVEngineering Srl - Italy Hypox® Spinneret & Pack Cleaning Units, Hypox® Polymer Filter Systems, Auxiliary Cleaning Equipment

Mahlo America, Inc. - USA On Line Monitoring Systems for: Basis Weight, Coat Weight, Thickness, Moisture **Reifenhäuser REICOFIL® GMBH & CO. KG - Germany** Turnkey Plants for Spun Bond, Meltblown, Composite, Laminated Fabrics, Bicomponent, Maintenance Products, Spare Parts

Saurer Technologies GmbH & Co. KG - Germany Guide Rollers, Separator Rollers, Special Rollers and Bearings for High Speed Applications

Schill+Seilacher GmbH - Germany Surfactants, Antistats, Specialty Chemicals

Sikoplast Recycling Technology GmbH - Germany Recycling Plants for PET, PA, PP and PE Waste

Spoolex/Calemard - France PEGASE Traversing Winders & Spooling Equipment, Orion and Centaure Slitter/Rewinders

Tokuden Co., Ltd. - Japan Induction Heated Rolls[®]

UNGRICHT Roller + Engraving Technology[®] - Germany Calender Engraved & Smooth Rollers, Embossing Rollers, Engraved & Smooth Chill Rolls, Heated Non Stick Press Rolls, and Ultrasonic Anvils

WISTA GmbH - Germany

Punch Perforating Machines, Commission Perforating Services

Zentes Unitex GmbH - Germany Promik Spinneret Inspection Devices, Pocket Microscopes

Textiles/Technical Textiles

Brückner Textile Technologies Inaugurates New Production Facility



On Saturday, June 23, 2018, Mrs. Regina Brückner, CEO of Brückner, welcomed over 800 guests, consisting of employees, local politicians, dignitaries and sales agents from all over the world to the inauguration of the new facility in Tittmoning, Germany. Todd Bassett and Ian Mills represented Fi-Tech, Inc. at the event.

At an approximate cost of 40 million Euros (~\$50million), and at 250,000 sq ft., the new facility provides almost double the production floor space as the original facility.

The new facility will not only provide the capability of producing the more complex machine designs required for emerging markets in technical textiles, but will also lead to additional capacity and a significant reduction in delivery times on the more standard machines.

The enlarged facility also has increased ceiling height so they can manufacture ovens up to a height of 40 ft (12m) and the wider bays allow the assembly of ovens up to 346" (8.8 m) in width.

The investment also includes state of the art automation in sheet metal inventory and handling, CNC controlled punching machines, extremely wide bending machines, robotic welding and an automated powder coating range. In addition, the use of overhead cranes ensures maximum efficiency, reduction in non-value added component movement, and increased employee safety.

While many of the traditional European textile equipment manufacturers have transitioned to an Asian manufacturing and supply base, Brückner has continued to grow and invest in German manufacturing. With the new facility in the same town

Mayer & CIE Ranked in Top 100 Innovators

Mayer and CIE, manufacturers of circular knitting machines, based in Albstadt, Germany, have once again been ranked in the Top 100 of the most innovative companies in Germany. This is the second consecutive year that Mayer has achieved this accolade.

Although the award specifically referenced the Spinit© technology platform (spinning and knitting combined), the assessing committee also took into consideration the management of the innovation process, the development of a culture to support innovation within the organization, and the financial investment undertaken by each applicant.

All of us at Fi-Tech congratulate Mayer and CIE on attaining this prestigious award.

For additional details on the full Mayer and CIE product range or the Spinit technology, contact Ian Mills at imills@fi-tech.com.



L to R: Marcus Mayer, Sebastian Mayer, Ranga Yogeshwar (host) Benjamin Mayer

as their original manufacturing facility, Brückner has ensured that the experience and knowledge of the employees will remain intact.

If you are interested in touring the facility to see firsthand what differentiates Brückner in the textile finishing market, please contact Fred Adams at fadams@fi-tech.com or Ian Mills at imills@fi-tech.com.

Textiles/Technical Textiles

warp creel Foil or Fleece Feeding Device Laying Laying Unit Contact Foulard Dryer Ornege-Drawing Unit Longitudi-Dryer Fabric Winder SCRIM PRODUCTION CONTING DRYING FABRIC FABRIC TION WIND-INS

Fi-Tech's Newest Representation - Ontec

Fi-Tech is pleased to announce a partnership with Ontec Automation GmbH, based in Naila, Germany. Ontec services the technical textile sector with a unique technology, The Turbotex, that manufactures scrim products used for re-enforcement of fabric structures used in roofing membranes, floor coverings, adhesive tapes, geo textiles and pool liners.

As compared to traditional woven scrims, the Turbotex machine has the following advantages:

- 1500% higher production rates
- 80% less energy consumed
- 30% thinner product
- 10% lower elongation

The Turbotex can utilize a wide range of base fibers such as Polyester, glass fiber or carbon fiber, aramids and polyamides. Similarly, the yarns can range from 340 to 2200 dtex, and the warp threads running off of sectional warps or creels.

The standard machine is available in 2.6m/102" or 3.6m/142" widths.

The yarns are bonded together using an inline coating/ curing process using a PVC dispersion or similar. The machine can also be configured for inline lamination of the scrim to another fabric/substrate.

For additional information on this innovative technology, contact Ian Mills at <u>imills@fi-tech.com</u>.

Fi-Tech represents these companies to serve manufacturers of Textile/Technical Textile Products

Brazzoli S.p.A. - Italy

High Temperature Jet Dyeing, Lab Scale Jet Dye Equipment

Brückner Textile Technologies GmbH & Co.KG - Germany Tenter Frames, Thru Air Dryers, Compactors, Relax Dryers, Coating Systems, Heat Recovery and Air Purification

Corino S.p.A. - Italy

Hydro Extraction, Rope Openers, Die Twisters, Tubular Slitters, Web/Edge Guidance Systems, Padders, Batching Stations, Fabric Inspection Machines

Erbatech GmbH - Germany

Open Width Bleaching and Washing Ranges, Tubular Bleaching and Washing Ranges, Padders/Foulards, Vacuum Extraction, Cold Pad Batch

Idrosistem Srl - Italy

Water Treatment and Recovery Plants for Textiles

KKA GmbH - Germany

Coating, Roto-Gravure, Printing/Lacquering, Calendering, Laminating, Embossing, Slitter/Re-Winders

Mario Crosta S.r.l. - Italy

Single/Double Drum Raising/Napping, Sueding, Shearing, Lamination

Mayer & Cie. GmbH & Co. - Germany

Circular Knitting Machines for Jersey, Interlock, Rib, Jacquard and Elastomeric Plaiting

Ontec Automation GmbH - Germany

Scrim Products for Reinforcement of Fabric Structures used in Roofing Membranes, Floor Coverings, Adhesive Tapes, Geo Textiles and Pool Liners

Pindarus S.r.l. - Italy

Raising Fillet Wire, Cleaning Brush Wire, Felt and Rubber Backing

Tecnorama S.R.L.

Automatic Powder and Liquid Dyestuff Dispensing, Bulk and Lab Scale Systems Automatic Powder and Liquid Dyestuff Dispensing, Bulk and Lab Scale Systems



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RISE

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OUTLOOK 2018 October 17-19, 2018 Dubrovnik, Croatia www.edana.org

HYGIENIX 2018 November 5-8, 2018 Austin, TX www.inda.org

Techtextil North America February 26-28, 2019 Raleigh, NC www.techtextil-north-america. us.messefrankfurt.com

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