

# IN-LINE WITH **fi-tech**<sup>INC</sup>

**FALL  
2022**

**Fibrevision FibreTQS**  
for Interlace Monitoring

**Hansa Mixer Various-  
Mix** for Latex Application in  
Carpet Production

**Spoollex Calemar  
Orion Slitter Demo Unit**  
Commissioned at NWI

**K-Show Dusseldorf  
2022**

**SuperTestaRossa**

Why should a fabric  
manufacturer set aside  
traditional inspection in favor  
of a new working philosophy?

**50**  
YEARS

**WORKPLACE  
SUSTAINABILITY**

**WORKFLOW  
DIGITALIZATION**



**W**elcome to our fall 2022 issue of *In-Line with Fi-Tech*. It has been a busy year thus far, to include numerous in person events thus far. The action will not slow down in the coming months with key upcoming events such as RISE 2022 in Raleigh, World Filtration Conference in San Diego, K 2022 in Düsseldorf, and Hygienix in New Orleans. It has been really positive to be back in front of our customers at these events, as well as the on site visits. These in person conversations are more productive and fruitful. This leads to better identification of issues and solutions, as well as building solid relationships.

I am pleased to announce the formation of the Fi-Tech Sustainability Team. Our board of directors and management team have charged this group to guide our sustainability efforts by looking at all aspects of our operations. In addition, Fi-Tech has initiated a project to install a solar power generation system; which will generate during the course of a year 100% of our annual electricity demand. This comes on the heels of two additional solar generation investments at our manufacturing facilities in Sheffield and Liverpool, England.

In closing, I would like to congratulate three members of the Fi-Tech Team for milestone service anniversaries in 2022 : Sherry Whitney with 5 years, Traci Woodfin with 20 years and Rick Williamson with 25 years. We greatly appreciate their loyalty and dedication to Fi-Tech. Congratulations Sherry, Traci and Rick!

*Jeffrey G. Bassett*  
Managing Director

## WORKPLACE SUSTAINABILITY

Fi-Tech has recently recruited a team of employees to establish a more formal sustainability policy within the organization. It is the objective of this group to evaluate current practices; and establish new initiatives to maintain a positive impact within the community and environment. Efforts are focused on reduce/reuse/recycle, waste reduction, paper reduction and energy conservation. We will also audit our recycling streams to insure recycling and make adjustments as needed.

As a group, we have also initiated solar energy generation projects across our global footprint. Before year end, we will complete solar installations at our office/warehouse locations

in Richmond, VA and San Luis Potosi, Mexico. Each of these systems will annually generate the total energy consumed so Fi-Tech will be on 100% renewable energy for 2023. We have also initiated solar projects at two of our UK manufacturing facilities allowing each to generate a sizeable portion of their annual consumption.

We look forward to our Team guiding our efforts and keeping our customers and principals aware of our progress.



### Fi-Tech Service Anniversaries



*Traci Woodfin, Rick Williamson and Sherry Whitney*  
20 years      25 years      5 years

# WORKFLOW DIGITALIZATION

On 7/12/22 UAT (User Acceptance Testing) of the Papersave software began for our Sale Assistants, Accounting and Warehouse Teams. These three teams are the core functionality of Fi-Tech and are the primary focus and users of this new process.

During UAT, the teams will have the opportunity to experience and troubleshoot processing sales orders from order entry,

accounts receivable and payable through the warehouse process. This pre-training serves to:

- 1) actively involve everyone whose core job functionality will be affected by Papersave and
- 2) provides exposure prior to official training to raise comfort levels with the change the software will affect.

UAT will continue for several weeks. The official launch of the software is estimated to occur in August.

Brian and Jessica are very excited to be at this point of the project; and are looking forward to exposing the software design to more employees in the company.

**PAPERSAVE**  
Efficiency. Simplified.

# HANSA MIXER VARIOUS-MIX FOR LATEX APPLICATION IN CARPET PRODUCTION

Hansa Mixer is one of the world's leading providers of foam mixers, aerators and in-line compounding systems for the food and non-food industries. Hansa has an extensive catalogue of different mixers and foamers that can be configured for an endless number of applications. The Hansa "Various-Mix" is particularly well suited for the mixing of latex and its auxiliary additives (and subsequent foaming if needed) for the application of latex on carpet backing after tufting.

This inline compounding system gives you the option of continuously mixing or

compounding up to 3 dry powders and up to 10 fluids. If your latex recipe calls for two dry substances like chalk and flame retardant and various liquids such as the latex and water, the Various-Mix can handle this on a continuous basis (removing the need to batch mix every day).

The Various-Mix can not only properly mix the recipe components, but it can also be delivered with a mixing head with compressed air to aerate or foam the mixture for final application.



Hansa "Various-Mix"

## Advantages of using a Hansa Various-Mix for carpet latex application are:

1) Savings on raw the material components since the system uses small filling vessels that are constantly recharged, instead of one large batch production

2) No degrading of properties over the course of the day since the materials are constantly recharged

3) Easy recipe management on a computer touchscreen for those with multiple recipes for their latex applications

4) Mixing vessel capacities of 60-100 liters reduces production overruns

5) CIP - Cleaning In Process system allows for easy cleaning and preparation for a new recipe

This system is also perfectly suited for polyurethane applications like those used in synthetic grass production.

Please contact Fi-Tech for additional information.

## YOUR SOURCE FOR THE FIBER & POLYMER AND NONWOVEN INDUSTRIES

### Ambersil

- Anti-Stick Spinneret Silicone Spray

### AstenJohnson Advanced Fabrics

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

### Autefa Solutions GmbH

- Bale Presses, Bale Wrapping & Strapping Systems

### Brückner Textile Technologies

- Thru Air Dryers & Heat Setters

### Cason Textile Machinery

- Bobbin Strippers

### filtertechnik.Europe GmbH & Co. Kg

- Filter Screens for Spin Packs & Screen Changers, Filter Belts

### Galan Textile Machinery

- Ring Twisters for Fiber, Rope & Twine, Winders, Kiss Roll Devices, Creels

### HANSA MIXER

- In Line Mixers and Foamers

### Hastem Transportbänder GmbH

- Slat & Spiked/Needle Aprons

### Heberlein

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

### Idrosistem Srl

- Water Filtration Systems for Spun Lace Production

### MOVEngineering Srl

- Hypox® Spinneret & Pack Cleaning Units

# FIBREVISION FIBRETQS FOR INTERLACE MONITORING

FibreVision FibreTQS monitoring enables faults to be eliminated that would result in downgrades in downstream processing. This provides both substantial quality benefits and process cost reduction. Used in many applications ranging from POY, FDY, DTY and ACY where monitoring of interlace is important.

## The FibreTQS system consists of several components:

### Optical Sensors

These are normally located in the winding area and are used to identify interlace level, interlace distance and interlace intensity.

Identify broken filament and slub problems.

### Electronics

The sensors connect to distributed electronics and carry out all high-speed data acquisition and signal processing as well as providing a range of I/O functions.

### PC Software

A simple intuitive user interface with a mimic display of the machine provides the current status of the machine at a glance.

### Plant Integration

Provides facilities for data export and control of multiple FibreTQS machines from a single PC.

## FibreTQS Grading and Reporting

FibreTQS continuously monitors data from the sensors and identifies all quality events.

The packages are subsequently graded based on the limits and criteria defined in the merge setpoints and appropriate actions are then taken, such as output activation to cut the end or illumination of a warning lamp.

## The key grading limits available in the merge setpoints are:

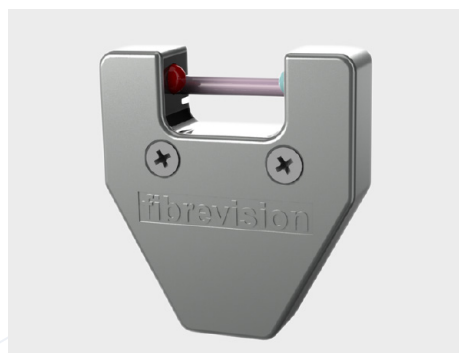
### Mean Variation - Interlace - Minimum Nodes/m

Maximum distance between nodes, maximum CV of distance between nodes.

### Slubs and Broken Filaments

Grading is based on the number of slub events, and/or the total number of broken filaments per package.

On the basis of the faults identified, FibreTQS automatically assigns a quality grade to the packages (grade 1, 2, 3, 4 or reject). This quality grade is displayed at the machine PC and can be transmitted to any automatic handling / packing system immediately when the package is doffed.



FibreTQS Interlace Sensor



FibreTQS ATY Sensor

# SPOOLEX CALEMARD ORION SLITTER DEMO UNIT

## COMMISSIONED AT NWI

For over 40 years Spoolex, through its well-known Calemard brand, has been the expert in manufacturing slitter-rewinders and spooling lines. With the widest range of spooling machines in the world offering smart, adapted, and customized solutions; Spoolex is recognized by major non-woven converters as an expert in tension control. Spoolex has earned their reputation as a leader with their high productive jumbo spooling lines Pegase.

Spoolex is constantly improving and adapting to the higher demands of the nonwovens market. With ever-changing materials, increase demands in production speed, quality, and introduction of cellulose natural fibers, going bulkier and fluffier or thinner, lighter, and narrower, as a result, requires more tension sensitive lines for materials.

To further expand their capabilities and offerings, The Nonwovens Institute at North

Carolina State University, recently took possession of a Spoolex/Calemard Orion Shear Cutting Slitter Rewinder. This slitter rewriter was designed to handle a variety of nonwoven materials to support their ongoing research and development efforts including Spunbond, Meltblown and Carded/Needle Punched Staple Fibers.

This custom designed machine was built to handle an input of up to 1.8m wide with a diameter of 1.2m running at 200m/min and can slit product (material dependent) down to 20mm wide. Given the wide variety of products that could be run, the key to being so versatile is in the expertise found at Spoolex in precision tension control, thereby allowing for the highest product quality and versatility.

For additional information regarding Spoolex or the recently commissioned slitter rewriter at NCSU, please contact your Fi-Tech representative.



### Mozart AG

- Staple Cutting Blades, Film Slitting Blades

### Reifenhäuser Enka Tecnica GmbH

- Spinnerets, Jet Strips, Die Tips, Repairs, Complete Meltdown Die Bodies

### Reifenhäuser REICOFIL® GmbH & Co. KG

- Turnkey Plants for Spun Bond, Meltdown, Composite, Laminated Fabrics, Bicomponent

### Rieter Components & GmbH, TEMCO

- Texturing Units, PU Friction Discs, Air Entangling Jets, Industrial & Glass Fibers, Separator Rollers, Guide Rollers

### Saueressig Surfaces

- Engraved & Smooth Rollers, Embossing Rollers, Ultrasonic Anvils, MPS Microporous Shells

### Saurer Fibrevision

- On Line & Lab Fiber Monitoring/Testing Systems

### Schill+Seilacher GmbH

- Spin Finishes, Surfactants & Fiber Auxiliary Chemicals

### Sikoplast Recycling Technology GmbH

- Recycling Plants for PET, PA, PP and PE Waste

### Spoolex/Calemard

- PEGASE Traversing Winders & Spooling Equipment, Slitter/Rewinders

### T.EN Zimmer GmbH

- Spare Parts Service for Zimmer® Plants

### Tokuden Co., Ltd.

- Induction Heated Rolls, Air Cooled Hybrid Rolls, UPSS Super Heated Steam Generator

### Zentes Unitex GmbH

- Spinned Inspection Devices, European Spare Parts

# K-SHOW DUSSELDORF

GERMANY, OCTOBER 19-26, 2022

This fall brings again the tri-annual K-Show to Dusseldorf, Germany, October 16-26, 2022. The K is the largest trade show in the world related to the plastics industry. Fi-Tech will have representatives in attendance from our Richmond, Mexico, and UK offices to support our customers visiting the seven principals we have exhibiting at the show. See [www.k-online.com](http://www.k-online.com).



## Galan Textile Machinery, S.L. – Hall 3, Booth D33

Spinning, Twisting and Winding Machinery for all types of Natural and Synthetic Fibers

## Herrmann Ultrasonics – Hall 11, Booth F28

Ultrasonic Welding Machines, Generators and Sonotrodes

## KKA GmbH – Hall 3, Booth D05

Coating, Printing/Lacquering, Calendering, Laminating, Embossing, Slitting/Rewinding Systems and Equipment

## MOZART AG – Hall 11, Booth E75

Technical Blades for Cutting Foils, Films, and Deburring Plastics

## Reifenhäuser Group – Hall 17, Booth C22

The main booth showcases the Reifenhäuser Blown Film, Cast Sheet Coating and Reicofil® Business Units. Other booths include:

### Reifenhäuser Extrusion Systems - Hall 11, Booth C16

Screws, Barrels and Extruders Synthetic Fibers

### Reifenhäuser Extrusion Systems - Hall 11, Booth D91

Spinnerets, Nozzles, Flat Dies, and Co-Extrusion Blocks

### Circular Economy Forum – CE 07

R-Cycle

## Saueressig Surfaces - Hall 4, Booth C07

Calendering and Embossing Rolls, Roll Re-Engraving and Refurbishing Services

## Spolex SAS Spolex Group – Hall 3, Booth E51

Slitting/Rewinding, Ultrasonic Cutting and Sealing Equipment, Technical Rollers and Automated Handling/Robot Systems



# SUPERTESTAROSSA

For 50 years Testa Group (Zanica, Italy) has been recognized as a premier supplier of textile equipment for the inspection, wrapping and packaging of fabric rolls.

In recent years, Testa Group has been developing and refining automated fabric inspection, replacing traditional operators and using optimized software to realize the following benefits:

- Reduction in labor
- Increase % of first quality and reducing second quality
- Removal of bottlenecks in inspection departments
- Increases in throughput reduces overall capital investment in equipment

The first step in the process is to generate a roll map showing all defects, via inspection of the fabric. With current technology, this is best produced using camera inspection systems such as **Shelton Vision** (or others), that are placed inline on a tenter frame, finishing range or coater.

After inspection the digital roll map is accessed by the Testa optimization software and the yield optimization process initiated.

A good optimization process will consider all the end users' quality parameters and will generate a cutting solution that is as close as possible to maximize first quality, whilst ensuring that all necessary defective fabric is removed. The system also has the flexibility to alter certain quality parameters, such as minimum piece length or increase minimum acceptable defect size to generate alternative cutting plans that may improve first pass yield.

An excellent optimization process must also rely on the design, engineering and the functionality of the cutting machine and this is where Testa's experience and know how in developing the **SuperTestaRossa** allows for differentiation from competitors.

The **SuperTestaRossa**, is an automatic cutting machine that is synchronized to the roll map and is capable of winding the fabric up to 300 m/min. The machine is able to automatically cut the fabric (without an operator) at defined roll lengths, remove the defective fabric either rolled on to a cardboard core or discarded on to a conveyor, prepare the fabric QA samples, label the roll and pack it with plastic film. Operators are only required to supply materials to the machine, such as cores, labels, film etc.

For additional information on Testa's complete range of equipment, please contact Jessica Ethridge at Fi-Tech ([jethridge@fi-tech.com](mailto:jethridge@fi-tech.com))



## YOUR SOURCE FOR THE TEXTILE INDUSTRY

### Benninger

- Jet & Beam Dyeing Machines, Jiggers

### Brückner Textile Technologies

- Finishing and Coating Lines for Woven and Knitted Fabrics, Dryers, Tenter Frames & Coating Equipment

### Corino S.p.A.

- Hydro Extraction, Openers, De-Twisters, Tubular Slitters, Padders

### Erbatech GmbH

- Continuous Wet Finishing Equipment for Woven and Knitted Fabric, Bleaching & Washing Ranges, Cold Pad Batch

### Guarneri Technology S.r.l.

- Textile Calenders

### HANSA MIXER

- Foam Generators & Mixers

### Idrosistem Srl

- Dyehouse Waste Water Recovery Plants

### Mario Crosta S.r.l. - Italy

- Fabric Surface Finishing Equipment

### Mayer & Cie. GmbH & Co.

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

### Ontec Automation GmbH

- Turbotex Scrim Fabric Machine

### Pindarus S.r.l.

- Raising Fillet Wire, Cleaning Brush Wire

### Shelton Vision Ltd.

- Vision Inspection & Defect Classification Systems

### Tecnorama S.R.L.

- Automatic Dispensing Systems for Powder and Liquid Dye stuff & Auxiliaries

### Testa S.r.l.

- Automated Inspection and Packaging Systems



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## EVENTS CALENDAR

### RISE

September 27-28, 2022  
Raleigh, NC  
[www.riseconf.net](http://www.riseconf.net)

### World Filtration Congress

October 5-9, 2022  
San Diego, CA  
[www.wfc13.com](http://www.wfc13.com)

### K 2022

October 19-26, 2022  
Düsseldorf, Germany  
[www.k-online.com](http://www.k-online.com)

### Synthetic Yarn and Fabric Association Fall Conference

November 3-4, 2022  
Charlotte, NC  
[www.thesyfa.org](http://www.thesyfa.org)

### HYGIENIX 2022

November 14-17, 2022  
New Orleans, LA  
[www.hygienix.org](http://www.hygienix.org)

### INDEX 23

April 18 – 21, 2023  
Geneva, Switzerland  
[www.edana.org](http://www.edana.org)

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*In-Line with Fi-Tech*, a Fi-Tech, Inc. publication, is designed to assist Engineering, Management, Purchasing and Plant Personnel by providing an avenue of communication between fiber producers and the best machinery manufacturers in the world. Fi-Tech, Inc. is the premiere representative for Nonwovens, Synthetic Fiber, and Textile machinery and components.

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