



Recueils Technologiques

Centre Technique Du Textile

Année 1, n° 1

Graniteville Specialty Fabrics Announces State-Of-The-Art Thermal Oxidizer Upgrade

GRANITEVILLE, S.C. — April 18, 2019 — Graniteville Specialty Fabrics, a producer of specialty coatings and coated fabrics, has installed a state-of-the-art Regenerative Thermal Oxidizer (RTO) replacing its older units. “This new thermally efficient unit is based on the latest regenerative oxidizing technology,” explained Doug Johnson, executive vice president, development and technical services, about the \$1.7 million investment. “The RTO uses a regenerative ceramic bed and an air exchange system to achieve 95 percent thermal efficiency thus reducing

natural gas consumption.”

Acquired from Tann Corp. last year and installed on March 11, this new RTO is capable of reducing the plant’s CO2 emissions by 10,000,000 pounds per year while continuing to meet the EPA’s regulation for emissions. By working closely with Tann engineers, a single Regenerative Thermal Oxidizer was developed to replace three smaller existing recuperative thermal oxidizer units. The new RTO will allow for low maintenance and consistent reliability while maintaining 99 percent VOC removal efficiency.

Jim Egan, CEO, emphasized the company’s commitment to environmental stewardship: “This new enlightened approach to environmental control will allow for lower emissions for the next 30-40 years and enable Graniteville Specialty Fabrics to significantly reduce its carbon footprint”.

<https://www.textileworld.com/textile-world/nonwovens-technical-textiles/2019/04/graniteville-specialty-fabrics-announces-state-of-the-art-thermal-oxidizer-upgrade/>

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Novel Technology To Produce Everyday Enzymes

PHILADELPHIA — April 19, 2019 — From jeans to orange juice to laundry detergent: None would be possible without the activity of enzymes. Currently, enzymes used in industry are produced

through an expensive, laborious fermentation process, requiring cold storage. However, an innovative new approach, ushered in by Penn Dental Medicine biochemist Dr. Henry Daniell’s re-

search, is opening up a whole new way of making these valuable proteins.

<https://tinyurl.com/y5w5bvsv>

Innovations in Long Tube Dyeing From FONG'S Europe

At ITMA 2019 in Barcelona FONG'S Europe, a member of CHTC FONG'S International Group, will be providing details of its new THEN Supratec LTM hydraulic long-tube dyeing machine.

This year, FONG'S Europe, which is based in Schwäbisch Hall, Germany, is celebrating the 100th anniversary of its flagship THEN brand for advanced dyeing technology.

The company will introduce the new THEN Smartflow TSF hydraulic high

temperature dyeing machine in Barcelona. This is distinguished by a range of patented new features and designed to achieve the lowest possible energy and water consumption rates available on the market for jet dyeing.

This machine is distinguished by the ability to vary the angle of the Then Flexkier for either dry (jet) or wet (overflow) mode dyeing, in order to optimise the dye liquor ratio – from 1:15 down to 1:4 – depending on the materials being dyed.

This translates into considerable savings in auxiliaries, water and energy.

<http://www.eurotextileneews.com/en/innovations-in-long-tube-dyeing-from-fongs-europe/>



New Itema machines on stage at ITMA 2019

Itema, a leading Italian provider of weaving solutions, will exhibit at the upcoming ITMA trade show that takes place from 20-26 June in Barcelona. The company recently launched Itematech – the new division dedicated to technical textiles born as a result of the agreement signed with PTMT – and will feature three stands and 11 weaving machines.

Among the seven machines displayed – along with special products highlights – are two new market

launches, a never-before-seen weaving insertion concept and a series of weaving novelties.

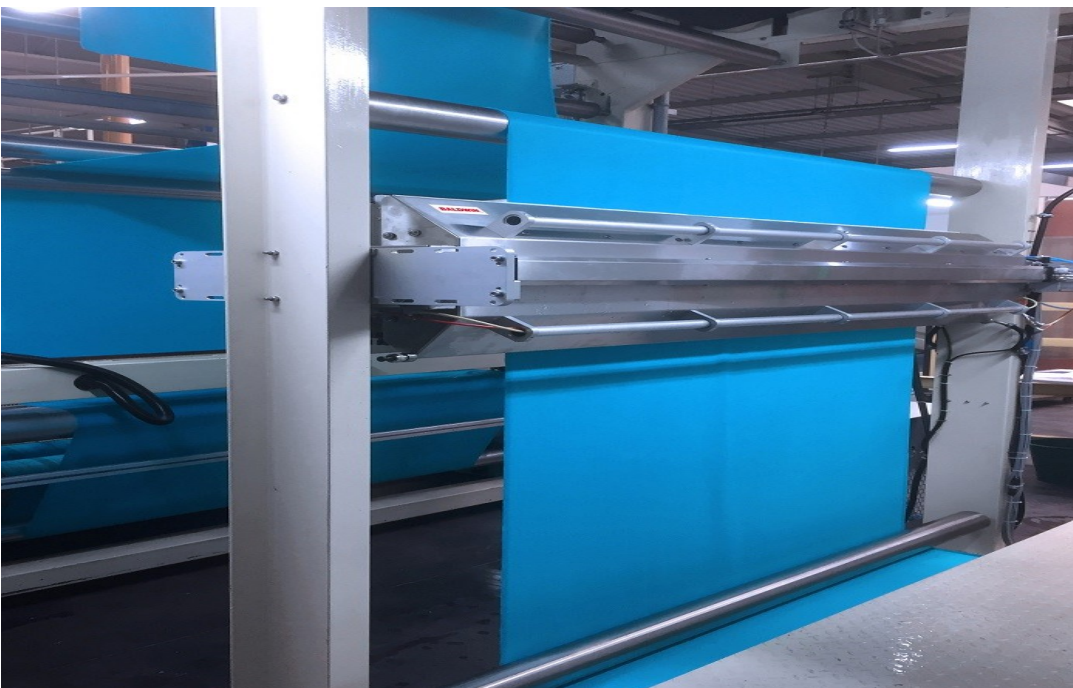
<https://www.innovationintextiles.com/technology-machinery-equipment/new-itema-machines-on-stage-at-itma-2019/>

Baldwin's non-contact spray technology in motion

Baldwin Technology, a member of TMAS, the Swedish textile machinery association has released a new animation of the TexCoat G4 system it will showcase at next week's ITMA 2019 trade show. The non-contact spray technology brings numerous advantages compared to conventional methods of applying finishing chemistry. The chemistry is uniformly distributed across the textile surface and is applied only where it is required – on one or both sides of the fabric. This is highly beneficial e.g. when applying water repellants on laminated fabrics, as it eliminates the problem of chemistry affecting the quality of the adhesion layer. Furthermore, the non-contact technology eliminates chemistry dilution in wet-on-wet processes, allowing full control of maintaining consistent chemistry coverage rates. Additionally, with no bath contamination during the finishing process, there is zero downtime during colour or fabric changeovers.

The TexCoat G4 significantly improves sustainability, leading to increased profitability. 100% of the over sprayed chemistry is recycled and 0% chemistry is wasted during changeovers of chemistry, colour or fabric. As only the necessary amount of chemistry is applied to the fabric, a reduced wet pick-up level of 50% can be achieved, further leading to a 50% reduction of water and energy consumption. The low wet pick-up levels together with a single side spray application enable combined processes and can completely eliminate drying steps, e.g. for laminated fabrics and in the finishing of upholstery textiles.

<https://www.innovationintextiles.com/technology-machinery-equipment/baldwins-noncontact-spray-technology-in-motion/>



« 100% of the over sprayed chemistry is recycled and 0% chemistry is wasted during changeovers of chemistry, colour or fabric. »

Fabrics are the automotive future

Seats, airbags, hoses, head linings and foot mats prove it: fibres are an integral part of modern cars. Nevertheless, the textile industry is not sitting back. At Techtexil, suppliers present the latest material and product visions for tomorrow's (e-)car, including operating ele-

ments made of fabric, embroidered charging coils and knitted heating systems.

For example, Tübingen-based textile supplier Rökona presents two new developments, 'Interfabrics' and 'Lumi Fabrics'. The company, which makes interlaid scrims for head linings and vehicle pillars on behalf of automobile manufacturers

and suppliers, aims to introduce textile lighting effects and functions into car interiors. "Cars have lots of textiles that can be activated for interactive purposes", says Rökona CEO Arved Westerkamp. If it was up to him, the mirrors, windows and lighting of tomorrow's cars would be operated via textile surfaces.

Textile induction charging

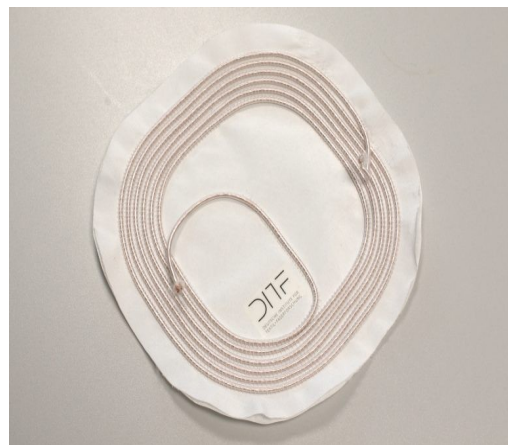
Developed together with partners, such as Daimler, BASF and Bosch, the German Institutes of Textile and Fibre Research Denkendorf (DITF) are showing embroidered induction-charging coils in Frankfurt. Although contactless induction charging is extremely important for future electric and plug-in hybrid vehicles, there is only limited space under them, which makes it very difficult to design compact induction-charging systems with high power densities. "We have developed an embroidery process to produce an inductive charging coil", says DITF researcher Sathis Kumar Selvarayan. In this way, it is possible to apply complex and exacting designs to a based fabric in a space-saving way. Using the scalable and automatable process, copper strands are fixed with polyester fibres with the embroidered coil subsequently being cast like a fibre composite in plastic.

Knitted heating systems for

electric vehicles

A knitted heating system for electric-vehicle interiors is being shown by Balingen-based Roma-Strickstoff-Fabrik Rolf Mayer at Techtex. Fitted in doors, seats and foot mats, the new system heats electric cars more efficiently and, therefore, with less drain on the battery. The results of a preliminary study by the Research Institute of Automotive Engineering and Vehicle Engines Stuttgart (FKFS) are encouraging. With the knitted heating system, the energy consumption of a vehicle can be cut by a kilowatt (approx. 45 percent) with no loss of comfort. This is equivalent to increasing the range of a two-seat electric car by 19 percent (CADC rural driving cycle) in comparison to a conventional fan heating system. Although the project from 2012 never really took off due to a lack of funding, "We have registered a significant increase in interest in textile heating elements in the wake of recent upheavals in the automobile sector", says Jürgen Reichart, the Head of Roma's Technical Textiles Division. Accordingly, he is showing the current state-of-the art in terms of fibre heating at Techtex. After all, "Engineers from automobile manufacturers and suppliers are regular attendees of the fair."

<https://tinyurl.com/yxszzta2>



Le Centre Technique du Textile (CETTEX) est un établissement d'intérêt économique public, sous tutelle du Ministère de l'Industrie, de l'Energie et des Mines. Créée depuis 1991, le Centre assure une mission de conseil et d'expertise auprès des industriels du secteur textile et habillement et des pouvoirs publics. Le CETTEX propose aux opérateurs une gamme complète de services. Il accompagne et soutient les entreprises dans leur développement technique, managérial et organisationnel et leur offre un appui constant dans leur démarche de croissance et d'innovation.

Centre Technique Du Textile

Téléphone : +216 71 38 11 33
Télécopie : +2016 71 38 25 58

Avenu des Industries, Zone Industrielle Bir El
Kassaa 2013 Ben Arous BP 279 Tunisie

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