

NEWS OF THE GLOBAL TRANSPORT TEXTILES INDUSTRY

— AUTOMOTIVE, AEROSPACE, RAILCAR, MARINE —

Airbag recycling facility in Poland

AN EU-backed project that recycles post-industrial technical textile waste, initially from airbags, into high-quality polyamide (PA) 6.6 grades has announced the development of an industrial-scale facility in Gorzów, Poland, which will become operational in 2016.

Solvay's Move4earth project is one of several of the company's initiatives supported by the European Commission as part of its LIFE+ programme.

The project is focused on designing, implementing and validating an innovative recycling process designed to process technical textile waste into PA 6.6 grades with reduced environmental impacts to complement Solvay Engineering Plastics' Technyl Force range of engineer-

ing polymers.

"The demand for cost-efficient yet high-performance recycled plastics is growing across all European markets, as processors and [original equipment manufacturers] are seeking to reduce their dependency on fossil resources, whose prices are rather volatile and constantly rising," said Peter Browning, Solvay Engineering Plastics general manager.

"In addition, a revision of the waste legislation will be released by the European Commission by the end of 2015.

"As part of the Circular Economy Communication, new legislative initiatives on eco-design and recycling are anticipated by major customers in all PA6.6

continued on page 4

Trend collection for balanced bus interiors

AT last month's Busworld in Kortrijk, Belgium, Lantal Textiles showed a wide range of all-inone solutions for soft interiors, as well as new collections, innovative products and impressive visualisation techniques.

According to the company, a harmonious and functional interior ambience is essential for making bus and coach trips as pleasant as possible for passengers.

It not only contributes to passenger well-being, but also enhances the travel experience, be it on a long-haul trip in a tour coach or the daily commute in a



city bus

Lantal offers bus operators and coachbuilders tasteful textile products and proactive assis-

continued on page 5

CST Composites secures funding

Advanced carbon fibre filament winder and pultruder CST Composites has secured a A\$1.4m (US\$1m) grant from the Australian government as part of a A\$5.7m (US\$4.1m) project investment to increase production capacity, continue development of its filament winding process technology and to enter new markets.

The grant was a part of the government's A\$50m (US\$36m) Manufacturing Transition Programme to help manufacturers move or expand into higher value or niche manufacturing activities.

www.cstcomposites.com

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Protection for cabin interior components

Custom Aircraft Cabinets (CAC) of Arkansas, USA, and Texas, USA-based Onsite Fire Protection Services International (OFPSI) have partnered to protect aircraft cabin interior components for the completions and refurbishment market.

AeroProtect, their first offering, is a range of patented water-based "cover and protect" products designed to shield interior components, such as furniture, carpet, fabrics and plating, from damage during production, shipping and installation in the aircraft cabin.

The product is available as a spray-on or roll-on liquid application that protects components such as cabinets, tables, panelling and plating from damage, and as a film coating that protects carpets and fabrics from foot traffic, spills, abrasions, dirt and even ink.

CAC manufactures cabinetry and upholstered products for aircraft interiors, while OFPSI develops techniques and methods for improving the quality, efficiency and profitability of aircraft interior work.

www.customaircraftcabinets.com www.ofpsi.com

Automotive Nonwovens (1st edition) ORDER NOW at www.textilemedia.com

DS Automobiles on display in London

BUILDING on 60 years of heritage in avant-garde design, the distinctive style of DS Automobiles draws upon expertise far removed from that of the automotive industry, including haute couture fashion, leather making and jewellery.

These diverse sources of inspiration are reflected at the DS Automobiles display currently in Westfield London, Shepherd's Bush, UK.

The company is exhibiting its latest models that include finely chiselled jewel-like monogrammes inside the headlights of the latest DS 3 Dark Light Limited Edition, to the watchstrap upholstery design of the new DS 5.

Positioned at the entrance to The Village, Westfield's luxury shopping hub that has more than 30 premium and luxury global brands, the DS Automobiles display aligns itself with some of the world's most luxurious names in fashion, including Louis Vuitton, Gucci and Burberry, as well as up-and-coming new designers, such as Anya Hindmarch.

Mark Blundell, UK marketing

director of the DS Brand, commented: "Westfield is one of the world's premier shopping destinations, making it the perfect backdrop for DS.

"Visitors to Westfield London will have an exclusive opportunity to explore the world of DS Automobiles in a relaxing environment, surrounded by the very best in premium retailing."

Officially founded in June 2014, the DS brand aims to revive the tradition of premium vehicles in the French automotive industry.

The brand perpetuates the values of innovation and distinction inherited from the first DS, launched in 1955.

Part of PSA Peugeot Citroën, the range now comprises the DS 3 (below), DS 3 Cabrio, DS 4, DS 5, DS 5LS and DS 6 (the latter two available in China only).

Distributed in Europe through DS Stores or dedicated showrooms in the Citroën network, DS has its own network of sales outlets in China.

The brand has sold more than 550,000 vehicles since launch.

www.driveds.co.uk



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Lectra wins IP battle in Germany

LECTRA, a supplier of integrated technology solutions dedicated to industries using soft materials, such as fabrics, leather, technical textiles and composite materials, has won an intellectual property battle against an unnamed "German competitor".

According to Lectra, the German company's machine was declared as infringing a patent (EP 1 321 839) regarding a solution for cutting one-piece-woven (OPW) airbags in Germany.

The July court ruling stated that the competitor's OPW airbag cutting machine makes use of the Lectra patent's "inventive technical teaching, thus legally acknowledging that the machine infringes the patent", said the French company.

The patent describes an OPW airbag cutting machine as integrating three elements: a cut-on-the-fly cutting system for cutting patterns in sheet material; a vision system for locating on-the-

fly landmarks in sheet material; and a control system that allows a pattern to be cut at the same time as the vision system locates the next landmark, while the sheet material continues to progress along the cutting table.

The German Federal High Court confirmed Lectra's patent as valid in September 2014.

The patent runs until December 2022 and covers Canada, China, the Czech Republic, France, Germany, Japan, Portugal, Spain, South Korea and the US.

Lectra said it considers that any use of an infringing machine in these countries violates its patent rights, and the company will use all legal means to have these rights respected.

Over the past 10 years, Lectra said it has invested €180m in research and development, which represents 9% of its revenues.

www.lectra.com

Magna closes interiors sale to Grupo Antolin

MAGNA International has completed the sale of substantially all of its interiors operations to Grupo Antolin, as previously announced.

The completed sale transaction does not include two joint ven-

tures in China, which are expected to close before the end of the year, pending regulatory approvals.

www.magna.com www.grupoantolin.com

IAC opens new facility in Tianjin

Automotive interiors supplier International Automotive Components (IAC) has continued its aggressive global expansion with the inauguration of a new manufacturing facility, Shanghai IAC-Songjiang Automotive Carpet and Acoustics, located in Tianjin, China.

This marks the company's 14th facility opening in seven countries over the past two years, increasing its total number of worldwide locations to 104.

The 5,200 m² facility will employ more than 180 people and will manufacture vehicle flooring and acoustics systems and headliners for Mercedes-Benz vehicles, including GLC, GLA, C-Class and E-Class models.

The facility is scheduled to expand by another 4,300 m² next year.

Tianjin is IAC's 16th new location in China since 2006, bringing the total number of Asian locations to 30, including the company's new regional headquarters in Shanghai (June 2014).

Prior to Tianjin, the company most recently opened a manufacturing facility in Hangzhou, China, in July 2015.

IAC has expanded from 11 locations in 2006 to more than 100 locations worldwide at present.

In September, the company celebrated the opening of two of its newest facilities in the UK to support the automotive industry's continued growth worldwide.

www.iacgroup.com

www.textilemedia.com

Nisshinbo to buy automotive plastics maker Nanbu

NISSHINBO Holdings is buying automotive plastics maker Nanbu Plastics for around ¥10bn yen (US\$83m), with an eye on the automotive business in Asia and beyond.

The Japanese company planned to purchase all shares by 19 October, including those held by an investment vehicle of Nippon Mirai Capital.

Nanbu Plastics, based in Shizuoka Prefecture, generates ¥35bn (US\$290m) in annual sales, more than half from automotive plastics, such as headlight covers and wire harness components.

The company has about 2,500

employees and operates six plants in Japan, as well as sites in Indonesia, the Philippines and China.

Nisshinbo's overseas plants are in China, Thailand and India, so acquiring Nanbu will strengthen its Asian supply base.

With automobile demand in South East Asia seen growing over the mid to long term, the company seeks to focus on Asia, as automotive engineers are increasingly replacing traditional metal parts with plastics to make vehicles lighter.

Nisshinbo, which began as a textile business, has grown by

developing other areas, such as wireless communications equipment and brake pads, as its original business declined.

For the current year ending March 2016, textiles are expected to account for just 11.9% of sales.

Founded in 1981, Nanbu Plastics was delisted from the stock market in 2009 via a management buyout and investment by Nippon Mirai Capital, the operator of corporate rehabilitation funds, whose investors include NTT Data and the government-backed Development Bank of Japan.

www.nisshinbo.co.jp www.nanbu.co.jp

Solvay to open airbag recycling facility in 2016

continued from page 1

markets.

"Most of them are already targeting recycle contents in their products over 20% by 2020," he emphasised.

"Move4earth underscores our efforts aimed at reducing the environmental footprint of our activities and those of our customers, and it confirms our dedicated reliance on European industrial assets."

The project also addresses a need for more effective recycling solutions to help minimise large volumes of valuable engineering plastic waste.

"More than 70% of all automotive airbags in Europe are made of silicone-coated nylon fabrics, mostly based on PA 6.6," explained Richard Bourdon, Move4-earth project director at Solvay.

"While regulations, such as directive 2000/53/EC, are setting high targets for end-of-life recycling and reuse of materials in vehicles, there is no sustainable solution in place for post-consumer airbag waste in Europe.

"Our mid-term objective is to establish an efficient and sustainable way of re-using these resources and provide pure highgrade PA 6.6 recycle compounds with stable properties near those of virgin Technyl resins for a wide range of eco-designed applications."

To achieve these aims, Solvay has developed a proprietary recycling technology for separating the airbag fabrics from the coating

The process delivers a PA 6.6 premium recycle with no significant loss in material properties, including stable viscosity and robust mechanical performance.

The next steps in the Move4earth project are to bring the new facility fully on-stream to ensure a continuous target throughput under stable process conditions, and to validate value-creating options for the silicone coating by-product separated from the airbag fabrics, which can amount to 15% of the material flow. "The new recycle grades will be manufactured to the same high standards of quality as all Technyl resins," added Browning.

"We can guarantee a grade with up to 100% recycle matrix and secure supply."

www.solvay.com

Price increase for speciality nonwovens

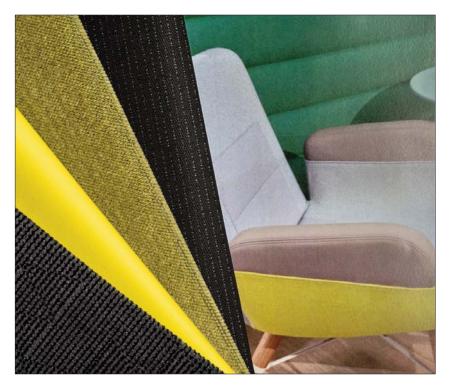
HIGH-performance fibre-based materials producer Ahlstrom has announced price increases for the speciality nonwoven materials produced by the Building and Energy business area to ensure sustainable financial performance of the business unit.

The price increase will be 7% and will be implemented on 1 January 2016.

These products are used in a variety of applications, including automotive interiors, wallcoverings, floorings, building panels, composite reinforcements, apparel, fabric care and wound care.

www.ahlstrom.com

bus interiors



Trend collection for balanced bus interiors

continued from page 1

tance in developing coherent interior solutions.

This year, based on seminal megatrends, Lantal's design team created a new Conceptual Forecast collection for seat cover fabrics.

Tapping into three realms – Precise, Revive, and Delight – bus interior designers can put together master concepts for the modern luxury, new premium and premium light classes, while accommodating their customers' individual preferences.

The Conceptual Forecast 2015 collection reflects the current fashion by dwelling in more subtle colours and patterns and shifting the focus on material contrasts.

The resulting flat weaves and velvets can be combined with leathers, carpets and curtains to achieve "uniquely tasteful interiors, providing a coherent structure and remarkable variability for signature interiors".

Lantal now offers carpets that

can be printed with a customerselectable motif, such as logos, images or typography.

The company says this opens up new dimensions for customers who wish to showcase their corporate identity, personalise the livery of their fleets and increase brand awareness.

Meanwhile, a new weaving technique makes it possible to add a further visual element to velvet seat covers.

Linear, intaglio-like recesses in the pile outline the motif and produce attractive high/low effects that endow seat covers with a totally new texture.

To fully visualise an interior and show its impact, the interaction of seats, carpets, curtains, wallcoverings and headliners can be emphasised with Lantal's Bus App, where customers can configure walk-through interiors to expedite and simplify the decision-making process.

www.lantal.com

New vision for transport fabrics

At Busworld in Kortrijk, Camira Fabrics launched Vision, a contemporary collection of technical textiles.

This modern fabric range features lightly textured surfaces, small pattern repeats and geometric based designs.

The dark background colour enhances the delicate use of metallic highlights that create striking colour effects under moving light.

A combination of contrasting fibre types, polished and matt, create added interest and a tactile finish.

Also on show was Fusion, a high-content wool moquette fabric that is 10% lighter in weight compared with traditional pile fabrics. Comprising a variety of designs, the range offers a mixed palette of subtle trend colours and traditional brights.

www.camirafabrics.com

Busworld Russia powered by Autotrans

Busworld International and ITEMF Expo are to co-operate for the organisation of a Busworld Russia trade show in Moscow, the first edition of which will take place from 25-27 October 2016.

The event will be held every two years, alternating with the International Commercial Vehicle Auto Show Comtrans. It will be organised by ITEMF Expo, a member of Messe Frankfurt, and ITE Group.

The event plans to have more than 85 exhibitors from over 15 countries and 12,000 visitors.

www.busworldrussia.org

financial news

Hexcel reports strong Q3 results

FOR the third quarter of 2015,



composites producer Hexcel reported net sales of US\$448.8m, 0.7% lower than the US\$451.9m reported for the third quarter of 2014.

Operating income for the period was US\$78.0m compared with last year's US\$79.0m. Net income for the third quarter of 2015 was US\$53.5m compared US\$56.1m in 2014.

Chief executive officer Nick Stanage commented: "I am pleased with the strength of our operating performance as we continue to expand capacity on time and on budget to meet customer demand.

"Commercial Aerospace sales increased 7.4% in constant currency as new commercial aircraft programmes continue to increase production as expected. Space & Defense sales decreased 9.9% and Industrial sales decreased 6.3% in constant currency, muting the strength of Commercial Aerospace."

For the third quarter of 2015, Commercial Aerospace sales of US\$314.5m increased 6.1% (7.4% in constant currency) compared with the third quarter of 2014.

Revenues attributed to new aircraft programmes (B787, A350 XWB, A320neo and B737 MAX) remain on track and increased more than 50% versus the same period last year, with A350 XWB shipments leading the growth as it will continue to do for the next several years.

Sales related to Airbus and Boeing legacy aircraft programmes were 8% lower compared with the third quarter of 2014, driven primarily by lower sales to the A380, A330 and the B747-8.

Sales to Other Commercial Aerospace, which include regional and business aircraft customers, were 20% lower compared with the third quarter of 2014 on a constant currency basis.

For the first nine months of 2015, sales were about the same as the comparable period in 2014 on a constant currency basis, in line with the January guidance.

Hexcel's revised full year sales outlook is US\$1.84-1.86bn. Previously, the company had decreased its January guidance of US\$1.9-2.0bn to US\$1.85-1.9bn due primarily to the continued strengthening dollar on its euro and pound sterling denominated sales.

Hexcel now expects its 2015 constant currency sales to be an increase of about 3%, compared with the 5% increase (midpoint) of its initial guidance in January due primarily to lower Space and Defense sales.

www.hexcel.com

Autoliv's net sales down 1.1% in Q3

AUTOLIV'S net sales for the third quarter of 2015 were down 1.1% to Autoliv SEK2.19bn (US\$257m)



compared with SEK2.20bn (US\$259m) in the same period

The automotive safety systems supplier reported that quarterly organic sales grew by 8.4% and the adjusted operating margin was 9.4%.

The expectation at the beginning of the quarter was for organic sales growth of "more than 7%" and an adjusted operating margin of "around 9%".

For the fourth quarter of 2015,

the company expects organic sales to increase by around 9% and an adjusted operating margin of around 10.5%.

The expectation for the full year is for organic sales growth of around 7% and an adjusted operating margin of around 9.5%.

Jan Carlson, chairman, president and chief executive officer, said: "Our strong growth outperformed the light vehicle production in all regions. We saw double-digit growth in Europe, Japan and the Rest of Asia, which combined account for around half of Autoliv's total sales.

"In Europe, active safety and sales of passive safety products to volume manufacturers were the strongest growth drivers.

"In China, we performed better than the light vehicle production. However, given the current uncertainty, we continue to implement short-term measures, including adjusting manufacturing capacity to mitigate the margin effect from fluctuating volumes.

"At the same time we continue to prepare for a more normalised growth situation by strengthening our engineering capabilities."

www.autoliv.com

Gurit reports 7.4% increase in sales

COMPOSITES producer Gurit re- Gurit ported net sales of CHF269.2m for the first nine months of 2015, an increase of 7.4% in reported Swiss francs on net sales of CHF250.7m.

According to the company, its Composite Materials business unit benefited from sound demand in the wind energy industry and the company's position in the global core material value

Net sales for advanced composite materials increased by 6.1% in reported Swiss francs to CHF205.3m in the first nine months of 2015 compared with

financial news

CHF193.6m in the same period last year.

Net sales to the wind energy industry amounted to CHF116.3m in the first nine months of 2015, an increase of 17.4%.

Sales to other material markets (marine, aerospace, industrial, automotive materials and ballistics) totalled CHF89m, 5.8% less than in the first nine months of 2014.

The Composite Components business unit, including automotive components, bus parts and structural engineering, reported sales of CHF20.8m for the first nine months of 2015 compared with CHF21.1m in the same period of 2014. This represents a decrease of 1.7% in reported Swiss francs.

Reduced sales volumes in the third quarter of 2015 compared with the first two quarters are related to the timing of the phaseout of some programmes and new programmes not yet fully deployed, Gurit said.

For the full year 2015, Gurit expects to generate net sales of around CHF350m and an operating profit margin within the company's reported mid-term target of 8-10%.

www.gurit.com

TenCate sees growing volumes in aerospace

TENCATE recorded sales of €297m for the third quarter of 2015 (2014 Q3: €277m, organic growth 2%), with sales especially driven by the strong growth of TenCate Grass.

The net result was affected by exceptional charges of €4.4m, related to expenses connected to

the public offer for TenCate and a provision for bad debt.

For the full year 2015, TenCate continues to expect organic sales growth similar to 2014. Earnings before interest, taxation, depreciation and amortisation (EBITDA) before exceptional items is expected to come in at around €95m (2014: €85m).

Sales of TenCate Advanced Composites reflected the trend of growing volumes in aerospace (structural parts and radomes), with increasing interest in thermoplastic composites from large aircraft manufacturers.

In the fourth quarter of 2015, TenCate expects to start a new qualification process for extended use of its thermoplastic composites in the manufacturing of parts for future generations of commercial aircraft.

www.tencate.com

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www.automotive-lightweight-interiors-2015.com

materials & processes

Fibertex Nonwovens makes acquisition

Fibertex Nonwovens, owned by Danish industrial conglomerate Schouw & Co, has acquired the nonwoven activities of Ribatek based in Cerkezkoy in western Turkey, 100 km northwest of Istanbul.

The transaction provides
Fibertex Nonwovens with a
strong production platform
within the spunlacing
(hydroentanglement)
technology and also an
expansion of its production
capacity and improved access to
the growing Turkish market.

Chief executive officer Jørgen Bech Madsen said: "We see a large potential in developing the company further and expanding our sales in an easterly direction.

"The spunlacing products are softer and have better uniformity than our traditional nonwoven textiles, and are therefore much more applicable for advanced usage in the automobile industry, for industrial purposes and for production of wet wipes and other hygiene products."

Founded in 2006, Ribatek operates two relatively new production lines with a total annual capacity of 8,000 tonnes.

The acquisition is expected to take effect from 2 November and will not have significant impact on the 2015 earnings forecast

In 2016, the acquisition is expected to increase the revenue of Fibertex Nonwovens by DKK50–100m.

www.fibertex.com www.schouw.dk www.ribatek.com.tr

Engine covers reduce weight, noise

AUTONEUM is supplementing its range of acoustic and thermal management solutions for vehicles with multifunctional engine covers made of the lightweight fibre-foam material Theta-Fiber-Cell.

This product innovation for the engine bay is said to reduce vehicle weight and at the same time prevent engine noise from entering the passenger compartment.

The Theta-FiberCell technology takes into account customerspecific product requirements, such as optimum noise protection and integrated thermal insulation. says Autoneum.

The handy and easy-to-install engine covers feature an innovative textile surface that is able to carry a visual design that can be determined individually by vehicle manufacturers.

They can also be combined with Autoneum's engine encapsulations that are likewise based on Theta-FiberCell and were introduced to the market in 2012.

Driven by demand, engine covers currently manufactured in Europe will be produced in series in Asia and the US in future.

www.autoneum.com



materials & processes



Energy-saving sails for cargo ships

GH Craft, the Teijin Group's composite structure design development and evaluation unit, has been taking part in the Wind Challenger Project, an industry-university joint research project, since October 2009.

The project, jointly launched by the University of Tokyo and leading Japanese shipping companies, is promoting the development of rigid but retractable sails that will harness windpower to enable cargo ships to reduce their fuel consumption and carbon dioxide emissions.

The sails envisioned for actual use are expected to measure 50 m x 20 m, or 1,000 m² in area.

GH Craft is designing and producing such sails for ships currently under development for the Wind Challenger Project.

The company provided small-

scale sails measuring 20 m x 8 m for on-land testing in Nagasaki, Japan, beginning in January 2014.

The small-scale sails are made of a foamed core material sandwiched between glass fibre reinforced plastics. The test vessel will have five 15 m-high retractable sails.

Since its foundation in 1970, GH Craft has been dedicated to developing advanced composite large-scale structures, including sails for America's Cup yachts and wind power generation.

In future, the company will increasingly focus on innovative transportation solutions for the automotive, marine, rail and aerospace fields.

www.ghcraft.com www.teijin.co.jp www.wind.k.u-tokyo.ac.jp

TFP opens new production line

Technical Fibre Products (TFP) has formally opened its third manufacturing line in Kendal, Cumbria, UK, in response to increasing demand for the company's nonwovens across all markets.

The new state-of-the-art line doubles TFP's production capacity and represents a significant investment in the expansion of the business.

The line is based on the current proprietary wetlaid technology, but is engineered to extend production capability beyond previous constraints by increasing production width to over 2 metres, enabling TFP to access new markets.

The company's advanced nonwovens are exported worldwide for a number of growth industries. Applications range from enabling the thermal management of the ESA satellite GAIA to playing a crucial role in facilitating the lightweighting of the latest generation of commercial and defence aircraft.

TFP has been specialising in nonwovens for highly technical and challenging applications for more than 25 years.

The flexibility of the wetlaid process and quality of fibre dispersion in the finished product enables TFP to produce a wide range of advanced nonwovens with weights as low 2 g/m².

These nonwovens are used across a wide variety of industries ranging from aerospace and defence to automotive, energy, industrial, construction and healthcare.

www.tfpglobal.com

Sandler to commence production in the US

GERMANY-based Sandler is planning to build its first overseas nonwovens plant in Perry, Georgia, USA.

The plant's production capabilities have not been quantified, although it is expected to produce nonwovens for the hygiene, automotive and filtration markets. Production is expected to begin in 2016.

The new factory will create more than 140 jobs, representing an investment of more than US\$30m.

The family-owned company is active in both durable applications, such as automotive and filtration, as well as disposable uses, including personal hygiene and wipes.

www.sandler.de

composites

40% weight reduction with carbon fibre door

Airbus Helicopters is replacing aluminium in a fitting in the aircraft door of the Airbus A350-900 with a high-modulus, carbon fibre reinforced highperformance polymer.

Made from Victrex PEEK 90HMF40, the brackets have been developed by Airbus Helicopters and are in serial production for commercial use.

The substitution of metal has resulted in a 40% reduction in weight and costs. The injection moulded polymer solution replaces the higher cost manufacture of the bracket machined from an aluminium block.

The fibre reinforced polymer structure of the A350 XWB's aircraft door uses an outer skin coupled with a bracing structure on the inside. A fitting connects the outer skin to points on the internal bracing structure.

The two components form a box-type support structure to exploit the maximum geometrical moment of inertia.

According to Victrex, joining the polyetheretherketone (PEEK) component, instead of an aluminium component, to a thermoset makes drilling much easier, while improved carbon fibre reinforced plastic drills can improve the quality of the holes compared with the previous solution.

Victrex Peek 90HMF40 can withstand the moisture that accumulates inside aircraft doors, whereas aluminium, which is prone to corrosion, needs a special surface coating to prevent corrosion.

www.airbushelicopters.com www.victrex.com

Toray to expand CF prepreg business

TORAY Industries has acquired 55% of the outstanding shares of Italian prepreg manufacturer Delta-Tech, making it and its wholly owned subsidiary Delta-Preg into Toray subsidiaries.

Delta Group is engaged in the supply of prepreg, primarily for premium automobile applications.

To date, Toray has had a cooperative relationship with the Delta Group through the supply of its Torayca carbon fibre.

The share acquisition significantly reinforces Toray's carbon fibre intermediate business in Europe along with Composite Materials (Italy) (CIT), which it established by acquiring the carbon fibre textile and prepreg business from Saati in January.

Toray says it will accelerate product development in Europe by leveraging its high-grade, high-performance prepreg technologies.

Further, having both CIT and

Delta Group under its umbrella, and expanding products that exploit their respective strengths, will enable the group to respond to more sophisticated market requirements in the carbon fibre composites industry.

It also enhances Toray's structure to offer solutions to customers at each level of its own integrated supply chain by combining Toray Carbon Fibers Europe (CFE), a French subsidiary that produces and distributes carbon fibres from precursor, as well as Euro Advanced Carbon Fiber Composites (EACC) and ACE Advanced Composite Engineering (ACE), German subsidiaries that produce and distribute carbon fibre reinforced plastic parts.

www.toray.co.jp www.delta-tech.it www.composite-materials.it www.saati.com www.soficar-carbon.com www.eacc.de www.ace-composite.de

Solvay to acquire LFT business

SOLVAY is to acquire EPIC Polymers' long fibre thermoplastics (LFT) technology to complement its range of lightweighting materials and make larger automotive semi-structural parts.

Based in Kaiserslautern, Germany, EPIC Polymers has developed a technology that can reinforce thermoplastic polymers with long glass fibres.

"Having this technology is an important step in the expansion of Solvay Specialty Polymers' broad offering of materials that are simultaneously light and ultra-performing," said Augusto Di Donfrancesco, president of Solvay's speciality polymers global business unit.

"We will be able to provide larger semi-structural parts for the automotive sector, our key market, and develop expertise to apply LFT technology to core polymers including KetaSpire PEEK and AvaSpire PAEK, providing further possibilities for metal replacement in other markets, such as transportation."

In addition to polyetheretherketone (PEEK) and polyaryletherketone (PAEK) polymers, the LFT technology will be applied to Solvay's Amodel PPA and Ryton PPS portfolio of products and Technyl polyamide 6.6 (PA 6.6) range.

> www.solvay.com www.epicpolymers.com

composites

Meggitt acquires EDAC Composites

MEGGITT, an engineering group specialising in aerospace, defence and energy markets, is to acquire the composites division of EDAC, formerly known as Parkway Aerospace & Defense, from Greenbriar Equity Group and other associated sellers for US\$340m in cash.

EDAC produces highly engineered aerospace components for jet engine and airframe applications, with more than 85% of revenues in civil aerospace composites. Key customers include GE, Snecma and United Technologies.

The company has a presence, via multi-year long-term agreements, on high-growth jet engine platforms, including the GEnx, Pratt & Whitney PurePower family and LEAP engines.

Meggitt has US sites in Erlanger (Kentucky) and Cincinnati (Ohio), and two sites, one of which is a joint venture with UTC Aerospace Systems, in Saltillo, Mexico. The joint venture site focuses on the manufacture of secondary aerospace structures. The business has a combined workforce of 579.

Combined with the existing

composite activities of Meggitt, this acquisition, and the recently announced complementary acquisition of the advanced composites businesses of Cobham, will create a "world-class franchise in high-growth niche composite components focusing on engine components, secondary structures, ice protection and radomes", said group chief executive Stephen Young.

"The combined businesses put the group in a good position to build on the increasing requirement for high-integrity composite components in aerospace markets."

EDAC will be integrated into Meggitt Polymers & Composites (MPC), a division of Meggitt.

The transaction will, subject to the completion of standard documentation, be financed by the previously announced debt facilities, which are being increased to US\$600m.

The acquisition, which is conditional on regulatory clearances, is expected to complete by the end of 2015.

www.meggitt.com www.edaccomposites.com www.cobham.com



Multiaxial reinforcements on show at Composites Engineering event

Formax, a manufacturer of engineered composite reinforcements, will be showcasing a selection of its optimised multiaxial fabrics for the automotive, aerospace, marine, sports and industrial markets at the Composites Engineering Show in Birmingham, UK, from 4-5 November.

Samples on display will include +/-45 biaxial fabrics made from intermediate modulus carbon fibre for motorsports and sporting goods applications, and carbon fibre multiaxials specifically optimised for the resin infusion process.

The company will also be highlighting the capabilities on its recently opened Innovation Centre, where current areas of focus include fabric permeability testing, process simulation, automation of composites manufacture and recycling.

www.formax.co.uk

Automotive Composites report 2nd edition now published. ORDER at www.textilemedia.com

Changes to Quickstep's management

QUICKSTEP Holdings, a manufacturer of carbon fibre composite components, has made a number of organisational changes to the company's board, executive team and management structure.

A new position of general manager, strategy & business development (aerospace and defence) has been created to focus on capitalising on a number of identified global business opportunities; Philippe Odouard has been appointed to this position.

As part of this appointment, Odouard has resigned from all board directorships.

The company has also appointed Andrew Crane as chief financial officer following the resignation of Nicole Sharman.

Most recently he was general manager finance & commercial at GWA Group and previously was chief financial officer for SCA Hygiene Australasia (now Asaleo Care).

www.quickstep.com.au

Covestro premiere at Fakuma trade fair

The first public appearance of Bayer MaterialScience under its new name, Covestro, took place at last month's Fakuma trade fair in Friedrichshafen, Germany, where the company presented innovative and sustainable material developments.

According to Dr Rainer Rettig, head of commercial operations for polycarbonates in Europe, the Middle East, Africa and Latin America: "The automotive industry and consumers are increasingly demanding materials with low weight and high functionality. Off-the-shelf solutions are passé; more individuality is wanted."

Focal points of Covestro's stand included reducing vehicle weight to cut fuel consumption and carbon dioxide emissions, and also developments for electromobility.

www.covestro.com

Smart textiles and lightweight materials

THE first Saltex – Smart Textiles and Lightweight Materials trade fair will take place from 5-6 October 2016 in Dornbirn, Austria. The focus will be on smart textiles and fibre reinforced composites as well as their industrial automation.

Intelligent textiles and fibre reinforced composites for lightweight structures are both growth sectors and of key importance for the future.

According to NanoMarkets, the smart clothing market will increase until 2021 to US\$1.8bn. Meanwhile, lightweight structures are forecast to achieve a global market size of around €140bn in 2020 with an average growth rate of 7-8% according to recent studies; the main driver of growth is the transport sector.

Patrick Malang, project management Saltex, Messe Dornbirn, said: "Stakeholders from industry and research approached us,

since Vorarlberg covers the entire value chain for the production of technologically advanced fibre reinforced composites.

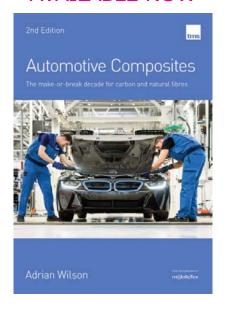
"The textile industry that is located here for several generations has undergone dramatic structural adjustments in the past two decades and has now evolved to a high-tech industry with global networking.

"In consensus with our advisory board, we are determined to bring together the various already successfully operating clusters, networks and co-operations in the area of smart textiles and industrial lightweight structures.

"Our goal is to bring them together every two years for a personal exchange between experts of both fields. We offer the platform to inspire and empower the counterparts to enhance a stronger interlinking of both value chains."

saltex.messedornbirn.at

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Automotive Composites

The make-or-break decade for carbon and natural fibres

FIBRE-based composites are becoming increasingly important in the manufacture of automotive components.

These new materials look set to continue their penetration of the automotive sector, and their large-scale use in mass-production cars, trucks and other vehicles is being widely predicted.

But there are several reasons why advanced composites have not been more widely adopted by the automotive industry.

The key stumbling block is price, while the availability and future supply of carbon fibres is another issue being addressed by fibre producers.

Many companies, from carbon fibre suppliers through to original equipment manufacturers, are now entering the market, with a wave of partnerships and joint ventures announced over recent months.

Automotive Composites: The make-or-break decade for carbon and natural fibres reviews the use of composites in the automotive sector and assesses how far these materials are from being used in mass vehicle production.

Written by Adrian Wilson, this in-depth report with around 220 pages and more than 60 tables, provides a sustainable roadmap for the automotive composites industry for the next decade and beyond, including profiles of key suppliers and users.

• This new report from TMS was published in September 2015. The publication price is £495 GBP (print or PDF format).

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ITMA 2015 Milan, Italy. Contact: MP Expositions. Tel: +65 6393 0241. Fax: +65 6296 2670. Email: info@itma.com Web: www.itma.com

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55th Dornbirn Man-Made Fibers Congress Dornbirn, Austria. Contact: Österreichisches Chemiefaser-Institut. Tel: +43 1 319 290940. Fax: +43 1 319 290931. Email: office@austrian-mfi.at Web: www.dornbirn-mfc.com

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Saltex – Smart Textiles and Lightweight Materials Dornbirn, Austria. Contact: Messe Dornbirn. Tel: +43 5572 3050. Fax: +43 5572 305335. Email: service@messedornbirn.at Web: https://saltex.messedornbirn.at

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Busworld Russia Moscow, Russia. Contact: ITEMF Expo. Tel: +7 495 649 8775. Email: s.ribchak@itemf.ru Web: www.busworldrussia.org

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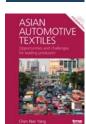
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