



INDIAN TECHNICAL TEXTILE ASSOCIATION

E-BULLETIN

e-magazine for members

Issue No. 64

November-December, 2019



ITTA SUPPORTED “TECHTEXTIL INDIA” & “OSH INDIA” EVENTS

- Exchanged Knowledge by Presentation in conference by ITTA Directors
- Large numbers of ITTA members exhibited novel products



ITTA & its members contributed significantly in FORMULATION OF RECORDED NUMBER OF NEW INDIAN STANDARDS

INDIAN TECHNICAL TEXTILE ASSOCIATION

Presents

**2nd NICTT 2020
National Investors' Conclave**



**AVENUES OF DIVERSIFICATION
& INVESTMENTS IN
TECHNICAL TEXTILES**

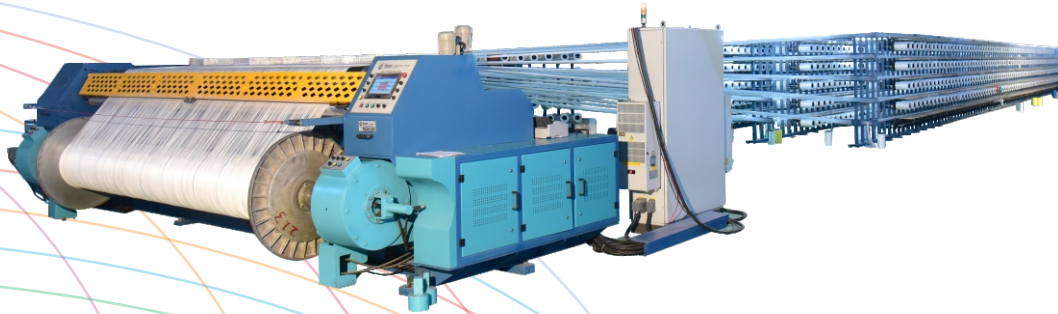
19th & 20th Feb, 2020 in Surat, India

“Meet eminent speakers to know new concept and novel projects to diversify and invest in technical textiles”

1st NICTT 2019 was a grand success in Coimbatore

excellent products
advance
technology...

Polybeamer with unwinding Creel



Unwinding Creel



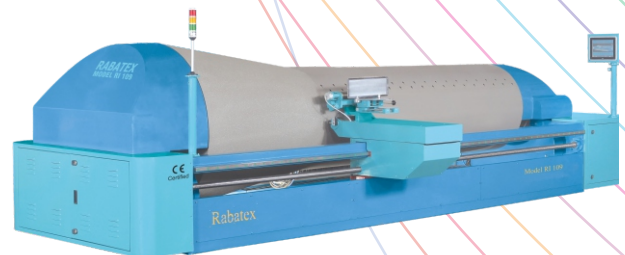
Creel for Glass Fiber



Creel for Geo Textiles



Automatic Sectional Warping Machine (for industrial Fabrics)



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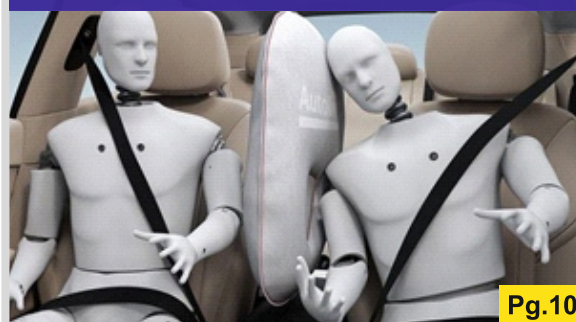
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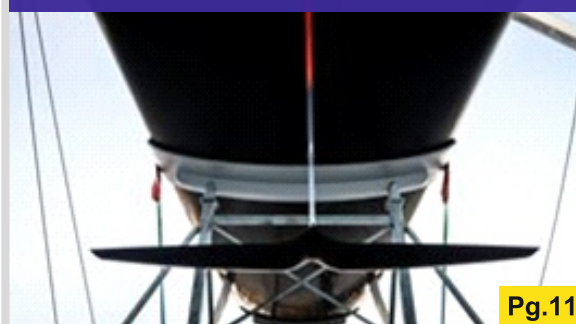
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New Front Centre Airbag for Cars



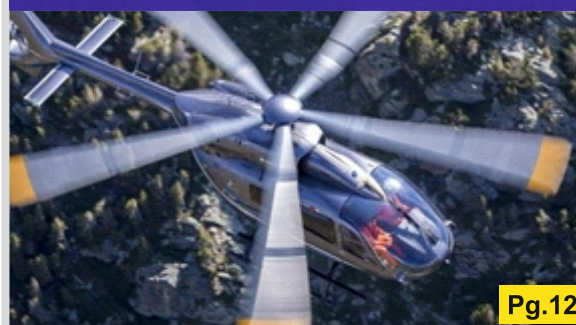
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Boat cradles manufactured with recycled carbon fibre



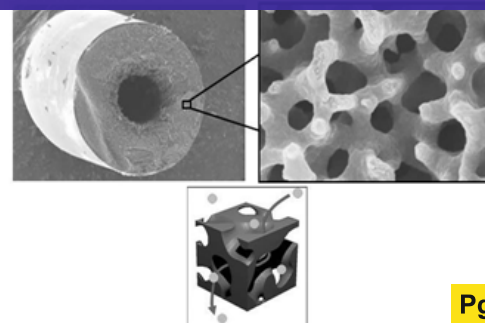
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Glass Fibre Textiles used for Airbus Helicopter rotor



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Porous carbon fiber with continuous pore structure



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INDIAN TECHNICAL TEXTILE ASSOCIATION

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SPECIAL REPORT

Techtextil India 2019 held in Mumbai

The 7th Edition of Techtextil India 2019 was organized by the Messe Frankfurt Trade Fairs India Pvt. Ltd. on 20th- 22nd November 2019 at Bombay Exhibition Center, Goregaon, Mumbai. The expo was supported by Indian Technical Textile Association (ITTA). The expo showcased the entire technical textile with its 12 application areas, nonwovens and composites value chain with a huge line up of new exhibitors, speakers, workshops, product launches and cutting-edge technologies. Techtextil had over 180 exhibitors from India & across the globe.

Indian Technical Textile Association (ITTA) had participated in the Techtextil India 2019 Exhibition. More than 160 delegates visited the stall, enquired about activities of ITTA, all industry related issues like Policy changes, product development, etc., future conference & exhibition and showed interest to become a member.

The 8th Annual Edition of Techtextil India Symposium 2019 was held on 21st November 2019 alongside the three-day Techtextil India 2019 expo. The symposium had over 15 presentations, mostly covering a wide range of technical topics including market outlook, trends, developments, opportunities and challenges of the industry which was represented by the entire cross-section of

stake-holders in the technical textiles industry, Government Regulatory and Standardization Authorities, Consultants and Certification Bodies etc.

Following topics were covered during the five Sessions of Symposium:-

Session-I: Industry Overview

Session-II: Sustainability: Significance in Technical Textiles

Session-III: Technical Textile Industry: Market Developments

Session-IV: Nonwovens and Composites: Developments

Session-V: Key User Prospects: Technical Textiles

In these five sessions of the Symposium, four papers were presented from ITTA - Dr. Sundararaman K. S., Chairman, ITTA spoke on Government Initiatives to Boost Technical Textiles Sector, Mr. Sheelam Seth, ITTA Director on Coated and Laminated Fabric Industry: Potential and Challenges, Mr. Pramod Khosla, ITTA Director on Nonwovens - Membranes V/s Nano Fibers and Dr. Anup Rakshit, Executive Director, ITTA on Growth Opportunities in Technical Textiles Through Innovations.





HACKATHON ON - "FOR BETTER URBAN LIVING"

A Hackathon was organized on 22nd November 2019 with the focused theme on finding solutions for Better Living in Urban areas. Hackathon was attended by the technical textile domain experts from Industry including ITTA members & other Research & Educational institutions (Khosla Profil, Supreme Nonwovens, Grasim, Ginni Filaments, BTRA, VJTI, etc). ED, ITTA was invited to attend the Hackathon. Various issues were discussed and few

key areas are given below-

1. Air Pollution in Urban cities :-
 - i) Short term solutions - Nasal Filters, Face Mask & Water Mist.
 - ii) Long term solutions - Prevention from Thermal Power Plant, Metal Refinery Industries, Cement Industries, Vehicles and Agricultural biomass residue or Crop Residue.

ITTA PUBLICATIONS

Name of the Publication	Price*	Type of Publication
International Conference on "Technology & Machinery Innovations for Technical Textiles" held on 19th January, 2019	₹2000	Seminar Proceedings (CD-ROM)
3 rd Defence-ITTA Joint Exhibition cum Seminar on Technical Textile held on 22 nd & 23 rd May 2017	₹2000	Seminar Proceedings (CD-ROM)
2 nd Defence-ITTA Joint Exhibition cum Seminar on Technical Textile held on 15 th & 16 th June 2016	₹1000	Seminar Proceedings (CD-ROM)
First Indian Navy-ITTA Seminar on Clothing and Footwear held on 7 th & 8 th January 2016	₹1000	Seminar Proceedings (CD-ROM)
Symposium on Medical Textile - Applications & Opportunities held on 14 th July 2015	₹1000	Seminar Proceedings (CD-ROM)
Symposium on Hi Tech Application Areas of Nonwoven held on 30 th Jan 2015	₹1000	Seminar Proceedings (CD-ROM)
Handbook on Geosynthetics case studies of ITTA Members (2013)	₹750	Handbook

* Courier charges extra

For Copies Contact

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OSH India 2019 held in Mumbai

OSH India - Occupational Safety & Health India 2019 was organized by Informa Markets, UBM India Pvt. Ltd. on 28th - 29th November 2019 at Bombay Exhibition Center, Goregaon, Mumbai. Indian Technical Textile Association supported the event. It was a two-day exhibition & conference connecting safety professionals and experts from the Industry. The objective was to provide an excellent opportunity for the professionals to discuss on the latest opportunities, new product developments,

inventions and technology, exchange knowledge and create business in the global markets.

The show brought together internationally renowned exhibitors, consultants, business experts and key government officials on an industry platform to facilitate exchanges of global best practices and seeks solutions for challenges in upholding workplace safety and health. The show witness safety professionals from across India.



The conference had a Panel Discussion on the Topic-Latest Reforms in Occupational Safety and Health Laws in India and the Way Forward: Key Challenges and their Implementation. The Panelists were Mr. Bharat Londhe, General Manager - Corporate Environment Health Safety, Piramal Group, Dr. Anup Rakshit, Executive Director, Indian Technical Textile Association (ITTA), Mr. Dhananjay Vyawahare, Head OHS- Samsung- Networks business - India, Mr. Sunil Bailwar, Vice President & Head Corporate Environment, Health & Safety at Hindalco Industries Ltd., Mr. Karan Vir Singh, General manager - Fire & Safety, Mumbai Refinery, HPCL, Mr. Gaurang Baxi, EHS Advisor DNV GL, Mr. P. S. Ganapathy, Senior Aviation Consultant, Fellow of Aeronautical Society of India, Mr. Amar Dalvi, General Manager- Safety, Health and Environment, Century Rayon and Mr. Shahzed A. Lehy, EHSF Advisory & CEO, Ceasefire Extinguishers & Systems (I) Pvt. Ltd.

Following points were discussed during the panel discussion -

- a. New Laws and legislations related to Industrial and Worker Safety have been enacted by Parliament. However, there are variations across states and challenges in monitoring their implementation.
- b. The National Policy on Health, Safety and Environment at Workplace is yet to be seriously implemented.
- c. There's a need to extend OSH coverage to all industrial sectors within India and spread awareness on OSH among key stakeholders.
- d. Efforts need to be accelerated to improve data collection and statistics on occupational health and safety incidents and also to create a safe and healthy environment.

ITTA ACTIVITIES

Meeting to discuss on National Standards of Technical Textiles items

The meeting to discuss on National Standards of Technical Textiles items was held on 19th November 2019 in New Delhi under the Chairmanship of Shri. Ravi Capoor, Secretary, Ministry of Textiles (MOT). Dr. Anup Rakshit, ED, ITTA attended the meeting. ITTA made representation to Secretary-Textiles that our Industry is facing the problem of testing critical properties of Technical Textile Products for which Sophisticated Testing Instruments and trained man-power are not available in National Laboratories in India, even after the existence of the BIS Stds, different Ministries are issuing tenders with EN & Other Standards. Also many IS standards of Technical Textile Products are yet to be developed by BIS. Following decision were taken in the meeting-

- i. BIS to expedite the process by taking the help of COEs & ITTA.
- ii. ITTA to gather information from its Members and carry out a Gap analysis on the same and submit a Report to the Textile Ministry at the earliest.
- iii. Each COE to submit a Report on the sophisticated Instruments, Man-power & Fund required for this purpose.

On this basis, we have requested ITTA members to give feedback on Non-availability of IS standards, List of Testing facility & Sophisticated Instruments that are not available in Indian labs. Replies have started coming to ITTA Office.

Stakeholders Meeting to discuss on National Textiles Policy

The Stakeholders meeting to discuss on National Textiles Policy of Technical Textiles segment was held under the Chairmanship of Shri. Nihar Ranjan Dash, Joint Secretary (R&D), Ministry of Textiles on 19th November 2019 in New Delhi. The meeting was attended by Dr. Anup Rakshit, ED, ITTA. Agenda of the meeting was to get inputs from the industry associations on the issues and recommendations on how to (i) Create robust domestic manufacturing, export growth, (ii) Identify Potential area for growth of technical textiles in India, (iii) Technology upgradation, Innovation and quality improvements.

ITTA's recommendations on behalf of the Technical Textile Industry were submitted to MOT to be addressed in the National Textile Policy. Major areas are indicated below--

- Address issues on non-availability of Specialized High-Performance Fibers, Yarns & Breathable Films At Reasonable Prices

- Potential areas for Growth of Technical Textiles in India - Domestic & Exports
- Expand Technical Textiles Product categories with allocation of new HS Codes over and above 207 items
- Strengthening R&D Infrastructure
- Skill Development In all 12 TT Sectors with Made-ups
- Standardization & Certification of TT PRODUCTS
- Investment In Technical Textiles Machinery
- Implement Sustainability/ Green concepts in Technical Textiles for future

The above points were discussed during the meeting. JS - MOT informed that they will consider them while formulating the policy.

Meeting with Industry Association on ATUFS

A meeting with Industry Association was held on 9th December 2019 to discuss issues affecting progress under the Amended Technology Upgradation Fund Scheme (A-TUFS) and possible methods to expedite resolution of claims under the Chairmanship of the Textile Commissioner in the Conference Hall of the Office of the Textile Commissioner (OTXC), Mumbai. The meeting was attended by Dr. Anup Rakshit, ED, ITTA. The feedbacks received from ITTA members were submitted to OTXC for necessary actions. Following points were addressed in the meeting -

1. Strict adherence to timelines prescribed in the guidelines.
2. Changes in timeline for JIT request and inspection.
3. List of documents kept ready by unit during physical verification.
4. Standard operating procedure (SOP) for settlement of claims.

5. Manufacturer Enlistment and Recent Developments.

Shri M. C. Chakraborty informed the Industry Association that the current status of the TUFS claims are displayed in the OTXC website on weekly basis, if they have problems may immediately contact the RoTXC for clarification, follow up with their banks and ensure sending the clarifications on time.

On ITTA's request OTXC informed that applicants who are finding it difficult to get clarification from RoTXC can contact - (i) Smt. Anusree Raha (IES), Deputy Director, 022-22001050 Ext. - 259 (For ATUFS Gujarat area), (ii) For all other States - Shri Sivakumar S, Deputy Director (Technical) 022-22001050 Ext. - 264 and (iii) For old versions of TUFS - Shri R. B. Nair, ISS, Deputy Director (Statistics) 022-22000214 & 022-22001050 Ext. - 255. MOM was also circulated to all ITTA members.



ITTA SIGNED MOU WITH THE TEXTILE INSTITUTE (TI)

Textile Institute (TI) is a unique organisation in textiles; clothing and footwear incorporated in England by a Royal Charter granted in 1925 and is a registered charity. The Institute has Individual and Corporate Members in up to 70 countries. The membership covers all sectors and all disciplines in textiles, clothing and footwear with current focus on Technical Textiles. Benefits of the MOU are:-

1. ITTA Members can become member of TI at a discounted rate of 30%
2. To jointly organise International workshop, seminar or symposium for technical textile companies.
3. To support major events of Technical Textiles Industries organized by ITTA and TI members.

DEVELOPMENT OF INDIAN STANDARDS ON TECHNICAL TEXTILES

I. Meeting of BIS Sectional Committee on Geo-Synthetics (TXD 30) and Industrial Fabrics (TXD 33)

The 23rd Meeting of Geo-Synthetics Sectional Committee, TXD 30 in joint session with 12th Meeting of Industrial Fabrics Sectional Committee, TXD 33 was held on 3rd December 2019 under the Chairmanship of Dr. A. N. Desai in the Conference Room at Bureau of Indian Standards, Andheri, Mumbai. As the member of committee, Dr. Anup Rakshit, ED, ITTA & Ms. Ruchita Gupta, Assistant Manager (Technical) attended the meeting.

Highlights of TXD 30 - Geo-synthetics:

1. Committee reviewed the present Composition of the TXD 30 and accordingly it was modified.
2. Committee reviewed the Scope of TXD30 and included all products made from "Man-made & Natural materials".
3. The committee scrutinized the 18 draft Indian standards; few modifications were done and finalized for publication as Indian Standards.
4. Further, six draft Geo-Synthetics Standards to be issued under wide circulation.

Highlights of TXD 33 - Industrial Fabrics:

1. Committee suggested to modify composition of the Committee. ITTA gave few members' names from the industry to BIS for inclusion.
2. ITTA submitted a List of New Indian Standards to be developed i.e. both for Product Specification and Test Methods which are urgently required by the Industry.
3. IS 6803:1972 - Specification for special proofed canvas and duck was transferred from Rubber and Rubber Products Sectional Committee, PCD 13 to TXD 33.
4. The committee scrutinized the list of following new Subjects related to TXD 33 for formulation of standards (Products and test methods): Paper making fabrics, Insulation felts (NVH components), Helmets, Railways

seating fabrics, Soft luggage product (TT component), Tea-bags (Woven or nonwoven), Filter fabrics for HVAC and Vacuum cleaner, Nonwoven wipes, Decatising cloth and Bolting cloth. After detailed discussions, the committee constituted a small expert panel under the convenorship of Shri V Muthukumar, PSG College of Technology, Coimbatore, as they are the CEO of Indutech, for preparing the preliminary draft on the above subjects. The members of expert panel are-

- a) Shri V Muthukumar (Convener), PSG College of Technology, Coimbatore
- b) Dr. Anup Rakshit (Co-convener 1), ITTA, Mumbai
- c) Dr. Anjan K Mukhopadhyay (Co-convener 2), BTRA, Mumbai
- d) Smt. Aswini Sudam, SASMIRA, Mumbai
- e) Shri V K Patil, BTRA, Mumbai
- f) Dr. M K Talukdar, Kusumgar Corporates, Mumbai
- g) Shri Mahesh Sharma, Reliance Industries Ltd., Mumbai
- h) Shri A R Rajesh, SRF, Chennai
- i) Representative from Entermonde Polycoaters Ltd., Nashik
- j) Shri Rajendra Ghadge, Garware Technical Fibres Ltd, Pune

II. BIS Expert Panel Meeting under Geosynthetics Sectional Committee-TXD 30

The 16th & 17th BIS Expert Panel meetings were held on 29th November & 17th December, 2019 at Conference Room, BTRA, Mumbai. Dr. Anup Rakshit, ED, ITTA was the convener.

Three working drafts were discussed & decisions taken as follows-

1. "Geosynthetics in Bitumen Layers for flexible pavements" was finalised and sent to BIS-Delhi.
2. "Specification for Geotextiles tubes" was finalised and sent to BIS-Delhi.
3. "Specification for Prefabricated Vertical Drains" was finalised and sent to BIS-Delhi.

III. Meeting of BIS Sectional Committee on Technical Textiles for Agro-Tech (TXD 35)

The 13th Meeting of Technical Textiles for Agro-Tech Sectional Committee, TXD 35 was held on 4th December 2019 under the Chairmanship of Dr. U.K. Gangopadhyay in the Conference Room at SASMIRA, Mumbai. As the member of committee, Dr. Anup Rakshit, ED, ITTA attended the meeting.

Highlights of the key points discussed & decided in the meeting-

1. Six standards- Doc TXD 35 (14875)], Doc TXD 35

(14876)], Doc TXD 35 (14877)], Doc: TXD 35 (14878)] and Doc: TXD 35 (14879)] were finalized for publication as Indian standards (IS).

2. Preliminary draft to be prepared on Plant Support Nets and HDPE laminated woven lay flat tube for rain irrigation system.
3. Committee decided not to formulate separate IS Std. on PP Nonwoven fruit cover instead the applicable requirement for fruit cover will be incorporated in existing IS 16718:2017.

New Members

WELCOME TO NEW MEMBERS

RAPID POLYMERS, UTTAR PRADESH

(Mob: 8929078177; Email Id: mail@rapidpolymers.com)

RAPID POLYMERS (Division of Rapid Eng. Co. Pvt. Ltd.) manufactures plastic master batches and cryogenically pulverised plastic powders. They have a range of small medium and high capacity twin screw extruders and a fully equipped laboratory. The production capacity of plastic master batches for coating on Interlining fabrics is 3000 MT/year.

NAVASHYA CONSUMER PRODUCTS PVT. LTD., THANE

(Mob: 9820301106; Email Id: pallavi@superbottoms.com)

Navashya Consumer Products is the manufacturer of Baby cloth diapers under Medical textiles. "Superbottoms" is a leading brand of eco-friendly reusable cloth diaper. Their products are known for their excellent quality (100% Organic Cotton), functionality, workmanship and beautiful designs. These diapers provide full functionality of a disposable diaper but in the goodness of cloth.

SOUTHERN SPINNERS AND PROCESSORS LTD., TAMILNADU

(Mob: 9443333051; Email Id: venugopalanpv@jkenner.com)

Southern Spinners and Processors is a leading fabric developer for all mechanical transmission products for rubber applicants, part of JK Fenner group, a leading corporate house in India. They are the suppliers of belting fabrics across pan India and holding around 47% market share. They deliver industrial fabric ranging from 100 GSM to 150 GSM with variety of product mix like 100% cotton/ polyester/ poly-cotton including RFL dipping to facilities for better rubber adhesive properties.

VAISHALI

(Mob: 9840057780; Email Id: vivekbhaiya@yahoo.com)

Vaishali is presently supplying fabric to exporters who are making leather products, footwear and garments. Their ranges of fabrics are from Cotton, Polyester, Prints, Coated & Laminated, Washed materials.

VISSCO REHABILITATION AIDS PVT. LTD., MUMBAI

(Mob: 7304540512; Email Id: nitin.deshpande@vissco.com)

Vissco Rehabilitation Aids manufactures narrow rigid & elastic tapes using cotton/ polyester/ nylon yarns below 30cms in width which are used for making knee caps, abdominal belt after surgery, elastic tubular anklet, orthopedic back support, etc. They have machinery such as needle looms, circular knitting machine, crochet knitting machine, warping machine, etc.

INNOVATIONS AND TECHNOLOGY

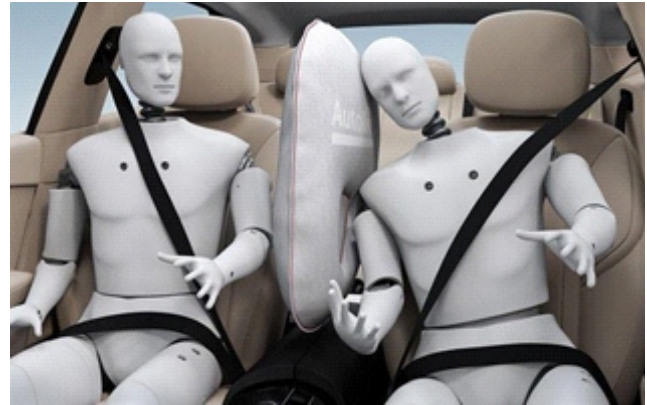
MOBILTECH - Airbag, Insulation Products & Knitted Car Seat Covers

New Front Centre Airbag for Cars

Sweden based Autoliv Inc, the global vehicle safety systems leader, announced the development of a new front centre airbag designed to save lives in side-impact crash situations. The head is one of the most frequently injured body regions in any road collision potentially resulting in devastating long-term consequences for the victim. For side collisions from the opposite side, the passenger may hit the vehicle interior or the other front seat passenger, sustaining injuries to the head and chest.

The new Autoliv Front Center Airbag helps avoid driver-to-interior and driver-to-passenger impact. The inboard seat-mounted airbag deploys in the space between the driver and the front-seat passenger, providing protection for them from colliding during a side impact and reduces risk of trauma to head, shoulder and chest.

"Research indicates that the new Front Center Airbag can reduce injuries caused by passengers colliding with each other by up to 80%. If there is no one in the front passenger seat, the airbag will offer

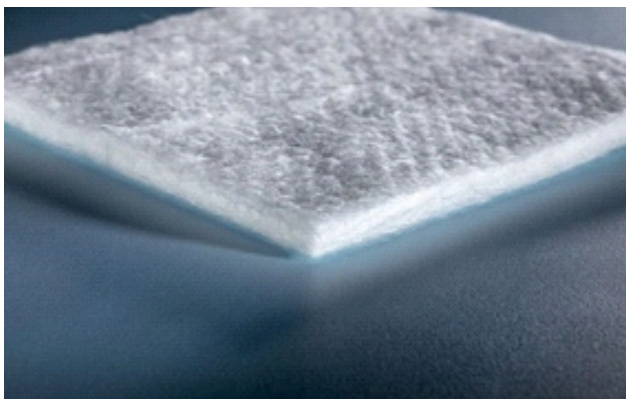


enhanced driver protection from a far-side collision. It is a technology innovation that underlines Autoliv's commitment to saving lives and preventing injuries on the roads across the world," says Mr. Scott Dershem, Vice President of Development, Autoliv. Autoliv says its front centre airbag will be introduced in 19 car models in 2020.

[Source - <https://www.autocarpro.in/news-international/autoliv-develops-frontcentre-airbag-to-prevent-passengers-from-colliding-44692>]

High-performance thermal and acoustical insulation for Automotive & Other Transport sectors

France based Porcher Industries had manufactured the complete range of high performance thermal and acoustical insulation products. The products - Techmat, SilcoSoft & ThermoShield materials, are



nonwoven textiles found in key areas of both hot and cold ends of vehicle exhaust systems. With a key strategic thrust targeting quiet and clean mobility by developing new insulation applications, Porcher Industries' range of textiles will meet the demands and requirements of the automotive, aerospace and other transport sectors by delivering unsurpassed levels of thermal and acoustical management.

Produced from 100% non-respirable fibres, the binder free nonwovens are safe to handle and can be tailored to provide application specific thermal insulation and heat shields at temperatures ranging from 650°C to 1150°C (1200°F to 2100°F). Porcher

is able to deliver its Techmat, SilcoSoft and ThermoShield materials in a wide range of formats from roll goods, flat or formed shapes through to sub-assemblies and finished parts that combine metallic layers with their insulation materials.

Porcher Industries' thermal and acoustical insulation solutions are technical textiles that blend chemistry and fibre processing technology to

produce a powerful range of nonwoven and glass mat thermoplastics (GMT) materials that can be tailored to a customer's specific acoustical and thermal insulation requirements.

[Source - <https://textile-network.com/en/Technical-Textiles/New-mobility-solutions-by-Porcher-Industries>]

3D knitting technology for seamless seat covers

Michigan based Ford Motor Company is introducing cutting-edge technology to produce seamless seat covers with 3D knitting. Employing production techniques found in the manufacture of running shoes, clothing and furniture, Ford is exploring the opportunity for customers to design their own seat covers, add bespoke touches such as pockets and padding, and use more breathable materials for summer.

The technology also enables the use of textiles with potential for built-in connectivity, able to integrate heating; controls for the doors and windows; wireless smartphone charging; and sensors to monitor the driver's health. As well as offering greater design flexibility, 3D knitting reduces production steps and creates less waste by removing the requirement to cut and sew together various fabrics and pieces. The 3D knitting machines create covers without any stitching and can use different yarns, such as polyester, wool, silk, carbon fibre, and even recycled materials.

Customers could have the option of different covers on the front and rear seats, a set featuring design for children or rear-seat covers made especially for pets. Further personalisation might include individual colour combinations and graphics, plus

seasonal and region-specific designs. The technology results in higher precision and quality than a traditional cover, enabling 3D knitted covers to be engineered for the best fit to the seat shape and reducing imperfections such as wrinkles. Any part of the interior made from material has the potential to be 3D-knitted. The dashboard and doors could feature designs that appear different depending on the angle from which they are seen. Logos and graphics might be added to the upholstery using this effect.

Ford is leading the way in developing seat covers for the comfort and convenience of customers. The new Ford Puma features the company's first ever removable seat covers, with an elegant integrated zipper system. The covers offer a high degree of personalisation, enabling customers to integrate their own images, names or logos. Being washable, as well as removable, they also make it easier to clean up after juice spills or pets, helping keep the interior feeling fresh.

[Source - <https://media.ford.com/content/fordmedia/feu/en/news/2019/11/11/3d-knitted-car-seat-covers-could-offer-infinite-personalisation-.html>]

COMPOSITES - Marine, Aerospace & Automotive Textiles

Boat cradles manufactured with recycled carbon fibre

Ineos Team UK has produced two cradles for race boat 'Britannia' using ELG recycled carbon fibre for the 36th America's Cup campaign. The cradles have

been produced under a technical partnership between UK based ELG Carbon Fibre and INEOS Team UK. The recycled carbon fibre convertor has

processed over 1.2 tonnes of the British Challengers waste materials and used these fibres to produce two cradles for race boat.

INEOS Team UK's waste comprised of pre-impregnated and cured parts from the current campaign which ELG has subsequently reprocessed into thermoset and thermoplastic compounds and non-woven mats. Britannia was officially launched last month at the INEOS Team UK's headquarters in Portsmouth. The 75ft foiling monohull is the first of its size and represents an entirely new breed of race boat. A structure of this proportion requires a strong and stable cradle to support the boat in transit.

ELG's non-woven carbon fibre mats were used to produce the curved cradles the hull sits upon. Vacuum infusion was selected as the most economic method for manufacturing these parts, although ELG materials can also be used in prepreg and liquid compression moulding processes. ELG's products were also incorporated into the hull mould, which again was made using a vacuum infusion process.

Mr. Alan Boot, Naval Architect at INEOS Team UK, comments "ELG's technology was ideal for the



cradles application. Their recycled materials are easy to handle, perform well and fitted straight into our production processes. As an America's Cup Team we hope to lead the way showing other manufacturers you can avoid putting materials in landfill, close the loop and reuse the fibres with stunning results. This is a game changing approach to marine manufacturing that we are delighted to be part of."

[Source - <http://www.elgcf.com/news/ineos-team-uk-manufactures-britannia-boat-cradles-with-elg-recycled-carbon-fibre>]

Glass Fibre Textiles used for Airbus Helicopter rotor blades

SGL Carbon, Germany has delivered two special glass fibre textiles, so-called non-crimped fabrics, to Airbus Helicopters for the new version of helicopter model H145. These materials are being used in the new, especially efficient five-blade rotor. Developed in close collaboration with Airbus Helicopters, the material has qualified for the application.



With their unidirectional fibre orientation, the fabrics are extremely resistant, providing optimal support for the new geometry of the especially long

H145 rotor blades. The fabrics are manufactured at the SGL Carbon site in Willich near Düsseldorf in a multi-stage process and delivered to Airbus Helicopters in Paris.

"The order emphasises our growing presence in the aerospace business. With the fabrics for Airbus Helicopters, we have realized, qualified, and started serial production for a material concept for primary structural components for the first time," underscores Dr. Andreas Erber, head of the Aerospace segment in the business unit Composites - Fibres and Materials at SGL Carbon. The current deliveries are part of a framework contract with Airbus Helicopters, intended to gradually intensify collaboration.

[Source - <https://www.technicaltextile.net/news/sgl-carbon-delivers-glass-fibre-textiles-to-airbus-253663.html>]

First curved carbon bumper bar for Corvette Stingray

General Motors (GM) has introduced world's first curved pultruded carbon fibre bumper beam of the new 2020 mid-engine Chevrolet Corvette Stingray which features innovative components that maximize performance and blaze new trails for parts and processes within the automotive market.

Produced by Shape Corp., Michigan with US based Vectorply Corporation's carbon non-crimp fabrics, the multi-hollow bumper beam garnered national attention of its own within the composites industry. The first production model Corvettes will be available early 2020, but development for the crucially important carbon bumper beam began many years ago. In 2014, Vectorply joined forces with Shape Corp. to begin developing specialized carbon fabrics and laminate schedules for this vital part. Initially, Vectorply's sales and engineering teams assisted Shape Corp with dialing in the ideal fabrics for the revolutionary curved pultrusion process. For this distinctive task,



Shape's team members and Vectorply's staff turned to VectorLam, Vectorply's proprietary laminate analysis software.

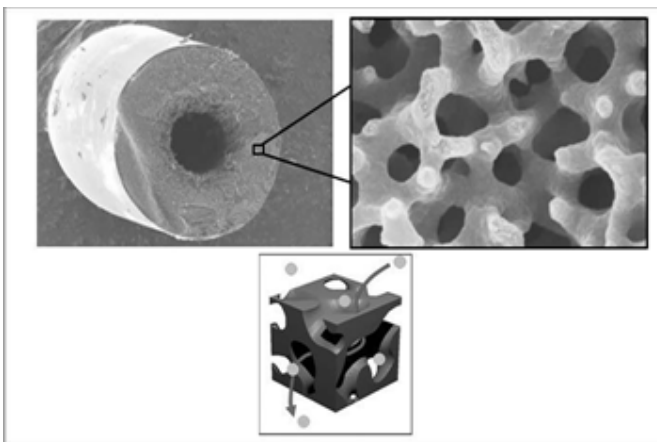
VectorLam provides a cloud-based, multi-platform compatible approach to classical laminate theory and helps customers achieve goals of stiffness, strength, weight and cost by allowing users to design the perfect laminate for their application. "We took the profile of their bumper beam and modified VectorLam to analyze their section so they could narrow in on the optimum laminate," Ms. Molly Ditzler, Vectorply Senior Composite Engineer said. "This was in the initial stages and Shape took it much further, including an FEA to verify the results." The hollow, curved bumper beam offered a unique challenge due to the complex structure dependent on multiple shear wall supports.

[Source - <http://vectorply.com/vectorply-carbon-fiber-utilized-in-historic-new-mid-engine-corvette/>]

RAW MATERIAL - Porous Carbon Fibre & Recycled PET Fibre

Porous carbon fiber with continuous pore structure

Toray Industries, Japan has created the world's first porous carbon fibre with a nano-sized continuous pore structure to enhance the performance of advanced gas separation membranes.



The fibre can be used as a support layer to make advanced membranes used in greenhouse gas separation and hydrogen production lighter and more compact. Traditional methods of gas separation result in heavy carbon dioxide emissions, so new methods employing membranes have attracted considerable attention, although, as yet, no membranes have combined satisfactory gas separation performance and durability.

Toray's new material is chemically stable because it is made of carbon and offers high levels of gas permeability. The material employs thin, flexible fibres, so when it is used to support gas membranes a module can contain many fibres and so be compact

and light. Such support makes it possible to combine a range of gas separation layers.

Toray created its new material by combining its polymer technology with its carbon fibre technologies, water treatment and other separation membrane technologies. This enabled the company

to create a porous carbon fibre with uniformly continuous pores and carbon.

[Source - <https://www.filtsep.com/filter%20media/news/toray-creates-new-porous-carbon-fibre/>]

Hybrid-Acoustics PET used for sustainable noise protection

Autoneum based in Switzerland has unveiled Hybrid-Acoustics PET - innovation for lighter, quieter and more environment-friendly vehicles. Components made of Hybrid-Acoustics PET use only PET, which is largely obtained from recycled fibres, providing environment-friendly mobility option. The innovation is based on a fibre material that acts both as insulator and absorber.

With Hybrid-Acoustics PET, Autoneum has adapted its textile interior technology Hybrid-Acoustics for use in the engine compartment. The patented innovation is based on a unique fiber material that acts as an insulator and absorber at the same time. Among others, Hybrid-Acoustics PET is used to encapsulate electric motors, thereby reducing noise directly at the source and particularly attenuating high-frequency sounds of the electric drive unit. This key technology accordingly ensures optimum noise protection in the passenger cabin and greater driving comfort.

At the same time, components made of Hybrid-Acoustics PET convince with their low weight compared to conventional insulators, they are up to 40 percent lighter and thereby contributing to a greater driving range. They are also flameproof and find application as power train-mounted insulators for combustion engines thanks to their temperature resistance of up to 180°C. The parts, which consist to a large extent of recycled PET fibers, are produced waste-free and are completely recyclable - an outstanding life cycle assessment compared to equivalent components in the engine bay. Hybrid-Acoustics PET therefore exemplifies Autoneum's commitment as part of its Advance Sustainability Strategy 2025 to continuously improve the environmental performance of its product portfolio and thus contribute to a resource-efficient mobility.

[Source - <https://www.autoneum.com/2019/11/05/hybrid-acoustics-pet-sets-new-standards-for-sustainable-noise-protection/>]



ITTA SIGNED MOU WITH TAIWAN TECHNICAL TEXTILE ASSOCIATION (TTTA)

Taiwan Technical Textiles association (TTTA) is the leading technical textile association in Taiwan, having membership consists of cross field manufacturers, distributors, industry groups, R&D units and academic experts. At present TTTA have over 200 members. The objective of MOU is:-

1. To jointly organise International workshop, seminar or symposium for technical textile companies of both the countries.
2. To jointly promote development of product testing standards
3. To support the major events on Technical Textiles/Nonwovens and related industries organized by ITTA & TTTA members.

National News

Boosting Textile Industry through Technology Upgradation

With a view to promote ease of doing business in the country and achieve the vision of generating employment and promoting exports by way of technology upgradation in textile sector through "Make in India" with "Zero effect and Zero defect" with an outlay of Rs. 17,822 crore upto 2022. Under the scheme, higher incentives have been provided to garmenting/technical textiles for reimbursement of Capital Investment Subsidy. This information was given by the Union Minister of Textiles, Smriti Zubin Irani, in written reply in the Rajya Sabha.

In pursuance to the decision of Inter Ministerial Steering Committee (IMSC) under ATUFS held on 23.03.2018, the guidelines of ATUFS have been further revised on 02.08.2018 with a view to make online portal for implementation (i-TUFS) an end to end solution. In addition, various measures have been taken to streamline the processes for effective implementation of the scheme, which are given as below-

- 1. Delegation of Powers:** Financial powers were delegated to Textiles Commissioner to approve all JIT reports and release payments upto Rs. 5 crore. All individual cases with a subsidy amount more than Rs. 5 crore, will be forwarded to the Ministry of Textiles after according approval of Textile Commissioner for obtaining concurrence of Internal Finance Wing and release to the banks/lending agencies.
- 2. Geo-tagging and digital signature:** System of geo-tagging of machinery has been implemented and digital signatures by the units/ banks/ offices of Textile Commissioner have also been introduced in the i-TUFS software.
- 3. Admissibility of Packing List for verification of serial number of imported**

machinery: IMSC in its meeting held on 27.02.2019 had decided to seek a clarification from D/o Revenue with regard to acceptability of packing list for verification of machine serial number in respect imported machinery. In view of advice of Department of Revenue, it has been clarified that Packing List in respect of imported machinery be allowed for verification of machinery serial number.

- 4. Serial Number of machineries not mentioned in the invoice, packing list or any other shipping document:** IMSC in its meeting held on 24.10.2019 decided that in case the machine serial number is not mentioned in the original invoice / shipping documents, a certificate indicating the machine serial numbers against the machines supplied through a particular invoice can be obtained from the OEM and the claim can be accepted if such machinery with specified serial number is verified by the Joint Inspection Team (JIT) at the time of physical inspection of the unit.

Ministry has also notified the Scheme for Production and Employment Linked Support for Garmenting Units (SPELSGU) under ATUFS to incentivise production and employment generation in the garmenting sector vide Resolution dated 25.07.2016. The Government has also approved reforms inter alia to boost Employment Generation and Exports in the Made-Ups Sector vide Resolution dated 10.01.2017. The additional incentive of 10% will be provided to both the garmenting and made-ups units registered under ATUFS on achievement of employment projected by them.

Details of various other actions taken by the Government to boost textile sector in the country are given below -

1. **Special Package for Textile and Apparel sector:** Rs 6000 crore package was launched in June 2016 to boost employment and export potential in the apparel and made up segments. This package consists of Remission of State Levies for garmenting and made-ups; additional production and employment linked subsidy of 10% under ATUFS for garmenting; assistance for the entire 12% employers' contribution towards EPF; fixed term employment in garmenting, increasing overtime caps; and income tax concessions under section 80JJAA for the garmenting sector.
2. **Enhanced Customs Duty to boost domestic manufacturing:** To boost indigenous production and Make in India, Government has increased Basic Customs Duty from 10% to 20% on 501 textile products.
3. **SAMARTH- The Scheme for Capacity Building in Textile Sector (SCBTS):** The scheme has been approved with an outlay of Rs 1300 crore with a target to train 10 lakh people in various segments of textile sector by March 2020.
4. **Scheme for Integrated Textile Park (SITP):** This scheme is implemented in Public Private Partnership mode to attract private investments in developing new clusters of textiles manufacturing. Government of India provides financial assistance up to 40% of the project within a ceiling of Rs. 40 crores. 19 new projects were sanctioned from 2014 onwards.
5. **North East Region Textile Promotion Scheme (NERTPS):** This scheme promotes textiles industry in the North Eastern Region by providing infrastructure, capacity building and marketing support to all segments of textile industry. The scheme has an outlay of Rs. 500 crores during 2017-18 to 2019-20.
6. **Enhancement of rates under Merchandise Exports from India Scheme (MEIS):** To further boost exports of apparel & made-up sectors, interest rates under Merchandise Exports from India Scheme (MEIS) has been enhanced from 2% to 4% for apparel, 5% to 7% for made-ups, handloom and handicrafts w.e.f. 1st November, 2017.
7. **Interest rate subvention:** Credit interest rate subvention for pre and post shipment was restored in 2015 for three years. The Government has enhanced interest equalization rate for pre and post shipment credit for the textile sector from 3% to 5 % from 02.11.2018.
8. **Market Access Initiative (MAI):** The objective of scheme is to promote India's exports on a sustained basis. The scheme is formulated on product-focus country approach to evolve specific market and specific product through market studies/survey. The following activities are eligible for financial assistance under the scheme: Marketing Projects Abroad, Capacity Building, Support for Statutory Compliances, Studies, Project Development, Developing Foreign Trade Facilitation web Portal and To support Cottage and handicrafts units

[Source - <https://pib.gov.in/newsite/PrintRelease.aspx?relid=195121>]

11.14 lakh people trained under skill development scheme

Ministry of Textiles has been implementing training and skill development in all segments of textile sector across all value chains, with a view for capacity building and employment generation in the sector. During the period 2010-2017, 11.14 lakh persons have been trained under Integrated Skill Development Scheme (ISDS) in various segments of

textiles covering textiles and apparel, jute, spinning, weaving, technical textiles, sericulture, handloom and handicrafts, out of which 8.43 lakh have been employed.

Further, the Government has approved a new skill development scheme titled Samarth-Scheme for

Capacity Building in Textile Sector covering the entire value chain of the textile sector, excluding Spinning & Weaving in the organized sector, for a period of three years from 2017-18 to 2019-20 with an outlay of Rs.1300 crore to train 10.00 lakh persons.

The ministry has already partnered with 21 government agencies from 18 states and sectoral organisations covering nearly 4 lakh persons, for entry level training and job creation in both

traditional and organized segments of textiles value chain. The training in ISDS also covered 33 states and Union Territories of the country, widely covering all sections of the society such as women (71.27%), Scheduled Caste (20.82%), Schedule Tribes (6.9%) and Divyang Jan (0.28%). This information was given by the Union Minister of Textiles, Smriti Zubin Irani, in written reply in the Lok Sabha.

[Source - <https://pib.gov.in/Pressreleaseshare.aspx?PRID=1595237>]

Diab Group & Skaps India Collaborate to Produce Pet Foam

Diab Group based in Sweden and Skaps India are collaborating to produce PET foam to support the



growing demand for core material in the wind industry in India. The two have signed a partnership agreement under which they will make joint investment in a PET foam production plant in Ahmedabad. The production plant will produce Diab's Divinycell PET range of products.

Driven by the increased demand of PET core material in the wind energy sector in India, the

production plant will produce Diab's Divinycell PET range of products. Providing high shear strain and an optimum resin uptake, the material is developed to meet blade designs in an optimal way with the aim to reduce the cost in wind blade manufacturing.

"We carefully selected Skaps to be our partner, based on their strong management, proven manufacturing experience, high level of quality and excellent company culture that links strongly to Diab's own values," says Mr. Tobias Hahn, CEO at Diab Group. "The plan is to start supplying the local Indian market already in first quarter 2021."

[Source-<https://www.composites.media/diab-group-and-skaps-india-enter-wind-industry-pet-foam-partnership/>]

Sustainable Oil Absorbent wipes from Cotton

Texas Tech University material scientist, Dr. Seshadri Ramkumar who proved that raw cotton works best to clean spilled oil in 2017, has now successfully turned the idea into a product - Towelie. The product has been used in a real-life situation when there was a minor oil spill in a National Thermal Energy Corporation plant in Vallur, Chennai.

In 2017, after determining that raw cotton was the best sorbent, Mr. Ramkumar knew it needed to be



made into a form that was commercially usable - and for that, he needed a collaborator who could create

the physical product. He partnered with WellGro United in Chennai, which had a machine at its collaborator's factory that could form raw cotton into a flat, planar structure.

The product's final form is a mat, wipe or roll. There currently are two versions – one that is 100 per cent cotton, and one with a cotton core inside a very thin packaging material, which is 85-90 per cent cotton."I needed to use their wisdom in getting this structure and then work in multiple iterations, because it took a couple of years to come up with the optimum thickness and structure and, more

importantly, cost," Mr. Ramkumar said.

One application in which Mr. Ramkumar wanted the product to be usable was for marine oil spills – that meant it needed to be able to absorb oil without absorbing water. Towelie fulfils this goal. The biggest difference between Towelie product and any other product is that, they have a biodegradable product that produces no microplastics.

[Source - <https://www.lubbockonline.com/business/20191124/texas-tech-professors-idea-brought-to-fruiton-proven-in-marketplace>]

Assessment on Man-Made Fibres

The Group of Secretaries (GoS) comprising Secretary, Textiles, Commerce, Financial Services, Chemicals & Petrochemicals and Revenue has done the assessment for the growth of Man Made Fibre (MMF) sector and entire value chain. The recommendations of GoS are as under:

- I. The Group of Secretaries noted the decision of the GST Council to allow input tax credit at MMF fabric stage. While this decision would remove the bottleneck in the growth of this segment, there is a need to reduce the dependence of import of the raw material, MMF and Filament. Department of Chemicals & Petrochemicals should take steps to rationalize the duty structure and prepare an incentive scheme (in 3 months) for fast tracking the growth in the domestic production of MMF and Filament in coming five years.

- ii. Ministry of Textiles should monitor the impact of increasing import duty from 10% to 20% in respect of all MMF items on actual reduction in import and, if need be, should take corrective steps in terms of increasing/decreasing import duty to increase indigenous production and decrease import to the possible extent.

There is no separate head for MMF and therefore no fund has been allocated during 2019-20 and also there has been no target fixed. This information was given by the Union Minister of Textiles, Smriti Zubin Irani, in written reply in the Rajya Sabha.

[Source - <https://pib.gov.in/PressReleasePage.aspx?PRID=1596107>]

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EXPORT-IMPORT PERFORMANCE OF TECHNICAL TEXTILE PRODUCTS OF OCTOBER-2019

The data on export and import of 207 technical textile products/items is published as an indicator of foreign trade performance of technical textile industry in India.

EXPORT PERFORMANCE

(Value in INR Cr.)

Sr. No	Segments	Oct 2018	Oct 2019	% Growth	Apr-Oct 2018	Apr-Oct 2019	% Growth
1	Agrotech	59	43	-28%	343	340	-1%
2	Buildtech	57	52	-9%	385	410	6%
3	Clothtech	22	17	-23%	118	120	1%
4	Geotech	67	86	28%	487	548	12%
5	Homotech	7	15	109%	44	82	84%
6	Indutech	141	154	9%	907	1112	23%
7	Meditech	75	87	15%	537	610	14%
8	Mobiltech	134	115	-14%	861	817	-5%
9	Packtech	513	446	-13%	3301	3159	-4%
10	Protech	49	43	-12%	264	317	20%
11	Sportech	15	18	24%	110	134	23%
12	Nonwoven	96	86	-10%	619	586	-5%
	GRAND TOTAL	1235	1162	-6%	7976	8235	3%

Data Source: ITTA Analysis on Ministry of Commerce and Industry (at 8 digit level of HSN Codes)

ITTA Analysis on data (Apr-Oct'18 vs. Apr-Oct'19) of Top Three Growth Sectors -

- Homotech (+84%)** - Key Products: Fabrics covered with textile flocks, Painted canvas, Tabular knitted gas mantle fabrics and Imitation Leather cloth laminated with Polyurethane.
- Indutech (+23%)** - Key Products: Woven felts, Conveyor belts reinforced with textile materials, Glass rovings, Fibre Belt Conveyor and Cotton twine, cordage & rope.
- Sportech (+23%)** - Key Products: Parachute fabrics, Tents and Mattress Supports - cushions & pillows.

IMPORT PERFORMANCE*(Value in INR Cr.)*

Sr. No	Segments	Oct 2018	Oct 2019	% Growth	Apr-Oct 2018	Apr-Oct 2019	% Growth
1	Agrotech	31	24	-22%	164	216	32%
2	Buildtech	146	156	7%	1216	1122	-8%
3	Clothtech	26	27	5%	132	172	30%
4	Geotech	141	116	-18%	1011	958	-5%
5	Hometech	39	50	28%	298	353	19%
6	Indutech	245	199	-18%	1657	1509	-9%
7	Meditech	95	65	-32%	487	360	-26%
8	Mobiltech	475	371	-22%	3101	2905	-6%
9	Packtech	25	45	79%	179	304	70%
10	Protech	50	33	-34%	245	291	19%
11	Sportech	12	12	3%	64	71	10%
12	Nonwoven	168	186	10%	1127	1101	-2%
	GRAND TOTAL	1453	1284	-12%	9681	9362	-3%

Data Source: ITTA Analysis on Ministry of Commerce and Industry (at 8 digit level of HSN Codes)

ITTA Analysis on data (Apr-Oct'18 vs. Apr-Oct'19) of Top Three Growth Sectors -

- a) Packtech (+70%)** - Key Products: Unbleached Jute Sacking fabrics and Hessian fabrics.
- b) Agrotech (+32%)** - Key Products: Fishing nets, Twine, Cordage & Ropes of Synthetic Fibres and Warp knit fabrics.
- c) Clothtech (+30%)** - Key Products: Dyed Umbrella Cloth, Knitted/Crocheted fabrics - width < 30 cm and Nylon Taffeta.

UPCOMING EVENTS

NOVEMBER 2019

A + A 2019

5-8 November 2019 in Dusseldorf, Germany

Web: <https://www.aplusa-online.com/>

Hygienix

11-14 November 2019, Houston, Texas, USA

Web: <https://www.hygienix.org>

EurAsian Geosynthetics Symposium

18-19 November 2019, Beijing, China

Web: <https://www.edana.org/education-events/conferences-and-symposia/event-de>

Techtextil India 2019

20-22 November, 2019 at Bombay Exhibition Centre, Goregaon, Mumbai

Web: <https://techtextil-india.in.messefrankfurt.com>

8th OSH India (Mumbai) 2019

28-29 November 2019 at Bombay Exhibition Centre, Goregaon, Mumbai

Web: www.oshindia.com

DECEMBER 2019

Textile Machinery and Accessories Exhibition (ITMACH India)

5-8 December 2019, Ahmedabad, India

Web: <https://www.itmach.com>

JANUARY 2020

Heimtextil

7-10 January 2020, Frankfurt, Germany

Web: <http://www.heimtextil.messefrankfurt.com>

MARCH 2020

Geosynthetics Conference 2020: Case Studies

8-10 March 2020 at Charleston, SC USA

Web: www.ifai.com

Gartex Texprocess India

19-21 March 2020 at Bombay Exhibition Centre, Goregaon, Mumbai

Web: <https://www.gartexindia.com>

INDEX™20 - world's leading nonwovens exhibition

31 March - 3 April 2020, Palexpo, Geneva

Web: <https://www.indexnonwovens.com>

APRIL 2020

WORLD CONFERENCE ON 3D FABRICS AND THEIR APPLICATIONS

2-3 April 2020 in Zhengzhou, China

Web: <https://texeng.net/3dfabrics-9th/en/>

Techtextil Russia

21-23 April 2020, Expocentre, Moscow, Russia

Web: <https://techtextil-russia.ru.messefrankfurt.com>

MAY 2020

Techtextil North America

12-14 May 2020, Atlanta, Georgia

Web: <https://techtextil-north-america.us.messefrankfurt.com>

Texprocess North America, Atlanta

12-14 May 2020 at Georgia World Congress Center, Atlanta, USA

Web: <https://texprocess-america.us.messefrankfurt.com>

9th European Conference On Protective Clothing

18-20 May 2020 in Stuttgart, Germany

Web: <https://www.hohenstein.com/en/events/>

JIAM 2020 Osaka (Japan International Apparel Machinery & Textile Industry Trade Show)

20-23 May 2020, INTEX OSAKA, JAPAN.

Web: <https://texprocess-america.us.messefrankfurt.com>

JUNE 2020

WORLD OF WIPES (WOW) - INTERNATIONAL CONFERENCE

22-25 June 2020 at Minneapolis, Minnesota, USA

Web: <http://www.worldofwipes.org>

SEPTEMBER 2020

CINTE TECHTEXTIL CHINA

2-4 September 2020 in Shanghai, China

Web: <https://cinte-techtextil-china.hk.messefrankfurt.com>

NOVEMBER 2020

HYGIENIX

16-19 November 2020 in New Orleans, Louisiana, USA

Web: <https://www.hygienix.org>

DECEMBER 2020

INTERNATIONAL TEXTILE MACHINERY EXHIBITION (ITME)

10-15 December 2020 in Greater Noida, India

Web: <http://india-itme.com>