



# INDIAN TECHNICAL TEXTILE ASSOCIATION

## E-BULLETIN

*e-magazine for members*

Issue No.81

November-December 2022



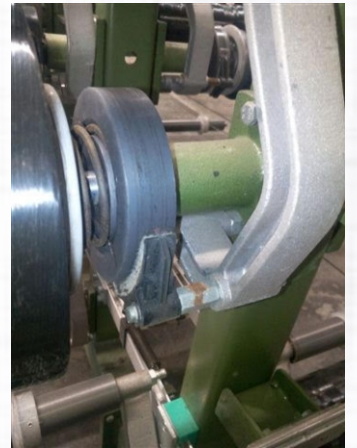
**NTTM (MOT)  
APPROVED 74 RESEARCH  
PROJECTS ON TECHNICAL  
TEXTILES WITH TOTAL  
FUND ALLOCATION OF  
RS. 231 CR.**

**TECHNICAL ARTICLE ON  
SUSTAINABLE SOLUTIONS  
FOR TECHNICAL TEXTILES**





**POLYBEAMER  
&  
UNROLLING  
CREEL**  
for P.P. & HDPE  
FLAT TAPE



## GEO FABRIC APPLICATION



### PRASHANT GROUP OF INDUSTRIES

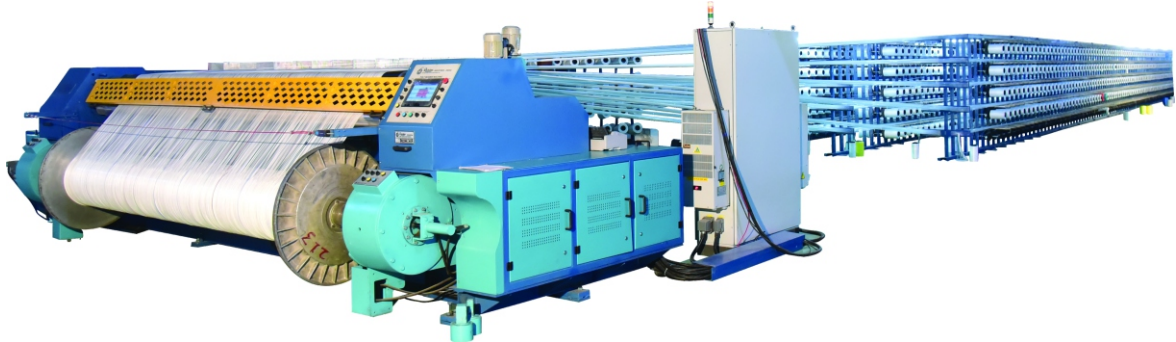
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## POLYBEAMER WITH UNWINDING CREEL



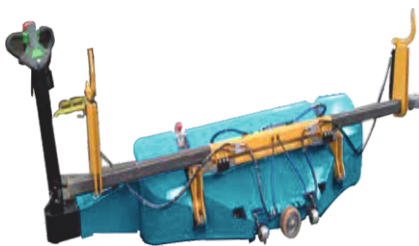
**Creel for Geo Textile**



**Creel for Glass Fiber**



**Unwinding Creel**



**Battery Operated Warp  
Beam Carrier**



**Battery Operated Warp  
Beam Carrier with Healdframe  
Support ( Beam Gaiting Trolley)**



**Battery Operated Cloth Roll  
Doffer Carrier**



# KindFit

NEL Lifecare Products (India) Private Limited is a wholly-owned subsidiary of Narendra Emporis Limited. The Promoters of the 'NARENDRA' group started its Business in Textiles in 1997. They took a prominent place in the domestic and international market in the textiles business with the brand name 'NARENDRA.' Then, the promoters and board of the Narendra Emporis Limited decided to diversify its business into the new emerging market of manufacturing of disposable hygiene products such as Adult Diapers, Adult Insert Pad, Underpad, etcetera. The increased admission in hospitals and clinics presents an opportunity for Adult Diapers, Adult Insert Pad, and Underpad. The world is poised to take advantage of this potential growth rate, with a dedicated and experienced staff, excellent order procurement, and effective management and marketing. The initial intention will be to provide hygiene products to institutions and organizations, including hospitals and wholesalers throughout India. Our marketing strategy will be based mainly on ensuring that customers know about our existence and the products we produce. This will be done by implementing a market penetration strategy to ensure that we are well known and respected in the market. In addition, we will ensure that our products' prices are favorable and that our potential customers appreciate the quality of our products. To execute the modern ideas of the Promoters, the Board of Narendra Emporis Limited has incorporated a wholly owned subsidiary, i.e., NEL Lifecare Products (India) Private Limited, in March 2021. In addition, the board has decided to introduce Adult Care Hygiene Products with the brand name "MyGuard" to our proposed customers to help them with medical issues and incontinence to lead a comfortable life.

**We are coming up with 3 products i.e,  
Adult Diaper, Advance Eco Adult Diaper, Adult Underpads.**



#### KINDFIT ADULT DIAPERS:

Design to accommodate people with moderate to heavy incontinence, especially if the patient is bed-bound. suitable for men or women to wear.

- 1) Super absorbent polymer & fluff pulp provides superior absorbency, retaining moisture and locking away wetness.
- 2) Standing leak guards provide extra protection to prevent leakage.
- 3) Refastenable frontal tapes for multiple-time applications to get a perfect fit.
- 4) Odour control polymer gel quickly locks away any unpleasant odor.



#### MYGUARD ADVANCE ECO ADULT DIAPER:

Design to accommodate people with moderate to heavy incontinence, especially if the patient is bed-bound. suitable for men or women to wear.

- 1) Super absorbent polymer & fluff pulp provides superior absorbency, retaining moisture and locking away wetness.
- 2) Standing leak guards provide extra protection to prevent leakage.
- 3) Refastenable frontal tapes for multiple-time applications to get a perfect fit.
- 4) With printed wetness indicator.
- 5) Odour control polymer gel quickly locks away any unpleasant odor.



#### KINDFIT ADULT UNDERPADS:

Designed to provide protection to not only your skin, but also your chair, your bed, your car seat and other important surfaces!

- 1) 100% natural fluff pulp and SAP provides superior absorption.
- 2) Embossed quilted pattern for fast distribution.
- 3) Waterproof back sheet.

**Our other products also include**

**KindFit Adult Pull Up Diaper, KindFit Adult Wipes, MyGuard Premium Underpad, and MyGuard Adult Wipes.**

## You are Safe & Dry with us

**Manufacturer and Marketed by:**



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**Email:** info@nellifecareproducts.com

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**Customer Care No.:** +91-77789 73500



# ITTA HANDBOOK ON “GEOSYNTHETICS CASE STUDIES OF ITTA MEMBERS”

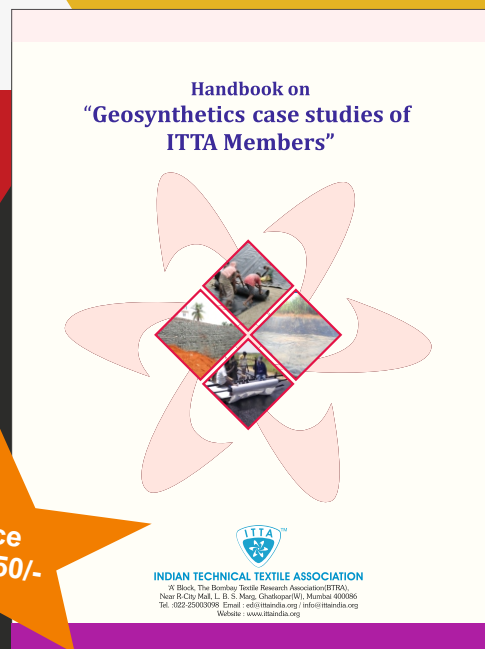


Handbook covers the details of the successful case studies of all types/ fibre base of geosynthetics in the country. It has been classified under five categories i.e. -

- Soil Stabilization - Pavement & Embankment
- RSW with Block, Panel, Gabion & Wire Cage Facing
- River Bank - Shore Protection & Erosion Control
- Canal Lining & Hydraulic Control
- Landfill

Price  
Rs. 750/-

*\*Courier charges extra*



## ITTA DEFENCE HANDBOOK INDIAN TECHNICAL TEXTILE PRODUCTS FOR DEFENCE

**- A GLOBAL REACH -**

Handbook covered major areas of Defence products with Indian Manufacturers' Names, Contact Details and Product Specifications i.e.

- *Protective Clothing & Accessories*
- *Collective Protection*
- *Load Carrying fabric*
- *Geosynthetics*

Price  
Rs. 750/-

*\*Courier charges extra*



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## National Conclave on Technical Textiles-“Protech”

The Indian Technical Textile Association (ITTA) jointly with Northern India Textile Research Association (NITRA) with the support of the Ministry of Textiles (MoT), GoI organised the One day “National Conclave on Technical Textiles - Protech” on 16th November 2022 at India Habitat Centre, New Delhi. The Chief Guest, Ms. Rachna Shah, IAS, Secretary (Textiles), MoT, GoI inaugurated the Conclave and the Exhibition of companies encompassing wide range of protective textile products. The conclave received overwhelming response and attended by more than 450 delegates from the Senior Officials & Representatives from Central Govt., Indian Defence Forces, Professional from Technical Textile Industry, COEs and Entrepreneurs especially from Protech segment.

In his brief welcome address, Dr. Arindam Basu, Director General, NITRA, apprised about the NITRA's state of art research



facilities and thrust on continuous Research & Development on Protective Textiles. He further added about the projects undertaken by NITRA in the field of technical textiles, especially Protech.



Shri. Raj Kumar Jain, Chairman, NITRA, addressed the delegates and said that the market for Technical Textiles is expanding as the products are being used

by an ever-increasing number of end users in various industries such as protective wear, agriculture, construction, amongst others. He also mentioned that, with the increase in disposable income, the consumption of technical textiles is

expected to increase more even in retail households in the near future. He appreciated MoT, GoI for launching many schemes for the growth and development of technical textiles such as PLI, NTTM, PM MITRA, etc. He further highlighted that the GoI is promoting indigenous manufacturers of technical textiles to explore the global opportunities and cater to the domestic demand as well.



In his address to delegates, Shri. Amit Agarwal, Chairman, ITTA, explained in detail about the ITTA, its benefits & services to ITTA members and its contribution towards the growth of technical textile w.r.t. Indian Stds, HSN Codes, policy matters, etc. He highlighted that Protective Textiles are not only used in cut & fire scenarios, but have wider usage in many hazardous prone activities related to energy transmission, radiation energy, chemical & biological exposures, extreme climates, etc. He stated that there exists a huge potential for protective textiles in India given increasing exposure to hazards and presence of five crore people in organized and almost equal people in unorganized sector. India should focus on enhancing the standardization for technical textiles items, he added. He also emphasized that mandation for the use of technical textiles by user industry would significantly drive the growth of technical textiles in India.

Ms. Roop Rashi, IA & AS, Textile Commissioner, MoT, GoI, in her special address mentioned that there is a need to focus



on outcome-oriented R&D in the technical textile sector, and given MoT's focus on R&D which is a major component of the NTTM, tremendous growth



is anticipated in the coming years. She apprised about the Govt. efforts on resolving issues in this sector in terms of credit support, subsidy support and facilitation of investment flow. She also said that the Technical Textiles industry will be a catalyst to fulfil India's vision of Industry 4.0.



Shri. Rajeev Saxena, IRSS, Joint Secretary, MoT, GoI, spoke on the Outlook of Protective Textiles in India under NTTM. He

talked about the Market size: World & India and its growth factors such as rising demand from new application areas, Stds & guidelines, Innovation & R&D, etc. He informed that 74 Protech Standards have been developed by BIS for Testing, Specification and Code of Practice. He emphasized on the NTTM and its components including R&D & Innovation; Skilling, Training & Education; Promotion & Market Development and Export Promotion. He highlighted the focused initiatives under this mission such as supporting R&D Projects in niche and strategic Protech areas and QCOs on 12 protech items. He stated that the Govt. will soon frame the guidelines to support & create an education ecosystem and skilled workforce in this field with the development of new courses & laboratory infrastructure.

Speaking at the event, Ms. Rachna Shah, Secretary (Textiles), highlighted that India's textile industry is a major contributor to



the Indian economy and its exports. The Technical

Textile is a sunrise industry with a robust growth rate of 10% annually. However, the sector is still small in size and there is a lot of opportunity for India to be a prominent player in the global arena. Talking about the vibrancy & energy in the Technical Textiles sector, she added that India is poised to emerge as a powerful destination for manufacturing and exports. However, it is important to focus on product diversification, design, aesthetics, as well as training for the manpower. She pointed out the concerted effort by the MoT under NTTM to develop and implement stds for the technical textile items and market quality products that are at par with international stds. She also stated that Protective textile is one of the most prominent applications of technical textiles segment. Focus should be on indigenization of technology and implementation of quality standards in niche Protech items, given the spur in global demand and usage for Protech products, she further added.

Dr. Anup Rakesh, Executive Director, ITTA, talked about the various activities and services that ITTA is



rendering to facilitate manufacturers of technical textile products i.e., HSN codes, IS stds, QCO, policy matters, etc., before proposing the formal vote of thanks.

Three Panel Discussions on the following topics were covered in detailed during the conclave --

1. Prospect of a cent-per-cent indigenisation of Protective Textile products in India.
2. Experience and Expectations of consumers towards adoption of Indian Protective Textiles.
3. Market promotion & Export opportunities of Protective Textiles in India along with Global Best Practices.



# GLIMPSES OF EVENT





# ITTA-NTTM, MOT JOINT WEBINAR ON

## “Building Industry-Academia Synergy for Enhancing Industry participation in R&D Projects of NTTM”

The Indian Technical Textile Association (ITTA) and National Technical Textile Mission (NTTM), Ministry of Textiles (MoT) jointly organized a Webinar on “Building Industry-Academia Synergy for Enhancing Industry participation in the R&D Projects of the NTTM” on 22nd December 2022 on Virtual Platform. The Webinar received the overwhelming response and attended by 80+ delegates from the Industry, R&D institutes & Academic Institutions.

The purpose of the ITTA-NTTM webinar was to provide an interactive platform for the R&D/Academia and technical textile industry fraternity to engage closely to work together and expedite submission of project proposals to the NTTM.

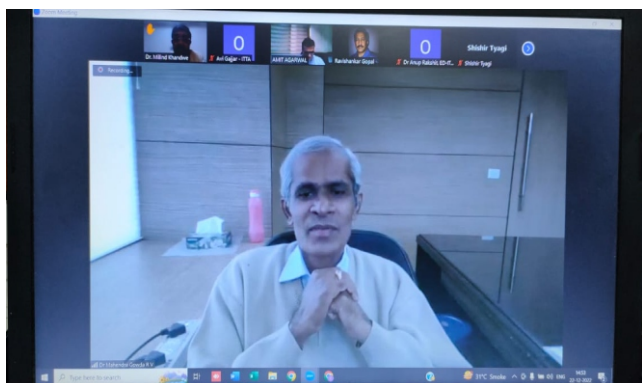
Special Address was given by Shri. Rajeev Saxena, Joint Secretary & Mission Coordinator, NTTM, MoT and Dr. Mahendra Gowda, Mission Director NTTM, MoT gave the Key Note address. Also, other senior Officials from MoT & NTTM attended the webinar. Shri. Amit Agarwal, Chairman, ITTA welcomed the Dignitaries from NTTM, MoT, ITTA members & Stakeholders from the Technical Textile industry present in the webinar.

Dr. Gowda presented on the background and Status of R&D Projects under NTTM. He pointed out that under the mission, 74 Research Projects of worth Rs. 231 crs. have been approved by Mission Steering Group (MSG). Sector wise Research Projects sanctioned are Agrotech, Geotech, Protech, Mobiltech, Indutech, Meditech, Sportech, Buildtech, Sustainable Textiles & Smart Textiles, in addition to the High Performance Fibre development. He talked about the guidelines published on NTTM website i.e., Guidelines inviting research proposals (Component I) & Indigenous Machinery/Equipment manufacturing (Component II). He explained in detail about the Guidelines for submission of research proposals & terms of funding for Design/Development & Manufacturing of Machinery/Tools/Equipment/Testing Instruments for technical textiles. Eligible organizations are a) Machinery Mfgs., b) Textile/Garment value chain Mfgs. and c) Govt. & Private Research organizations/ Academic institutes, both

b & c should have one Machinery Mfg. as project partner. Funding Arrangements for Public funded Institutions & Organizations- 80% from Govt. & 20% from Project partners, Private companies/Organizations/Institutions- 50% from Govt. & 50% from Project partners. He requested ITTA members to be part of this and submit the research proposals from manufacturing of machineries. More Details are available on the NTTM website: <https://nttm.texmin.gov.in/>. He further informed that Guidelines on PRAMAN (Promotion & Market Development), Education, Training & Skilling, Grant for Internship Support in Technical Textiles (GIST) and Start-ups will be published shortly.

Dr. Anup Rakshit, Executive Director, ITTA spoke on Capabilities of ITTA Members & its Efforts to encourage them to submit R&D proposals with COEs & R&D Institutions. He emphasized on the Vision of ITTA i.e., To build world class, state of the art, manufacturing capacities with focus on R&D and innovation to achieve a predominant global standing in manufacture & export of TT. ITTA bridge the gap between the Govt., Technical Textile Industry, R&D Institutions and International Bodies. He highlighted that at present, ITTA has nearly 400 members, consist of mainly large, medium & small dedicated TT manufacturers from all 12 TT Segments & Composites. Members are present in all major States of India & have foreign members as well. He also mentioned that after the directive from NTTM, ITTA encouraged TT industry to come out with research ideas & tried to connect them with CEOs/R&D, Academic Institutions. Similarly, COEs/R&D, Academic Institutions & CSIR Labs also came forward & submitted project ideas & ITTA facilitated to get the industry partners. Then, Research Topics, followed by project proposals were submitted to NTTM. He also discussed the key Feedback from our Industry to be addressed are that Industry is well aware of facilities available with designated COEs & also in Textile Colleges & Universities having Textile Depts. But they are not aware of Other Institutions/Collages/Labs, where there are no designated Textile Depts. exist. It is suggested to create a Consolidated document giving details on Pilot Plant & Testing facilities, availability





of Scientists, Email ID, Tel numbers, etc. Members can contact them directly or through ITTA.

### INTERACTIVE SESSION

Interactive Session with R&D/ Academia & TT Industry participants was held at the end of the technical session by ITTA & NTTM together. Major points/ views/ suggestions raised by the participants are as follow - Is Patent filing allowed after research, How the funding under mission is different than other funding agency such as DRDO, DST or various CSIR, To mention the evaluation criteria of the proposals, what are main challenges to commercially produce Aramids in India, Can NTTM work on the guidelines of Technology Development Fund scheme where the user needs are addressed - the way MoD is working in TDF, Is Bio fibers are included under the mission, etc. Officials from NTTM had answered all the queries of participants and asked the participants to submit more research projects and take full benefit of the NTTM Scheme.

Shri. Anil Kumar Vasupillai, Additional Executive Director, ITTA proposed a vote of thanks. He specially thanked the Joint Secretary, MoT and Mission Director NTTM, MoT for making excellent

presentation on the R&D projects under NTTM. He also thanked all the NTTM Officials, ITTA members, COEs, R&D & Academic Institutions who were present in the webinar.

### FEEDBACK FROM THE PARTICIPANTS

1. ARCHROMA INDIA PVT LTD. - Very informative session.
2. IIT KHARAGPUR - Very comprehensive and educative session from NTTM and ITTA. Thank you.
3. SAI SYNERGY LLP - It was Good Session...Thanks for the same.
4. LOYAL TEXTILES MILLS LTD - Thanks a Lot NTTM and ITTA team for arrange wonderful webinar
5. SITRA - Thanks NTTM and ITTA for arranging this webinar. Thanks for connecting the Industry and Academia. The discussion was comprehensive and was useful to clarify the various doubts related to industry partner in our project.
6. SHINGORA TEXTILES LTD. - Thanks to ITTA & NTTM team for such an informative session. Looking forward to more such kind of webinar.



### 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.



# OSH India 2022 held in Mumbai



The 10th Edition of OSH India - Occupational Safety & Health India 2022 was held on 24th - 25th November 2022 at Bombay Exhibition Centre, Mumbai. The event was organized by Informa Markets. The Indian Technical Textile Association (ITTA) supported the event and one Session on Advanced Technical Textile Products was powered by ITTA. Dr. Anup Rakshit, Executive Director of ITTA was one of the jury members in the OSH Award Committee and also was part of the lamp lighting ceremony and. It was a two-day exhibition & conference aimed to bring together renowned exhibitors, consultants, business experts and key government officials on a common platform to exchange global best practices and knowledge pertaining to workplace safety and health.

The inaugural ceremony was marked by the presence of notable dignitaries - Shri. M. R. Patil, Director, DISH Maharashtra; Shri. K. Srinivas, Director- DoFBISH, Govt. of Karnataka; Shri D. K. Ghosh, Dy Chief Fire Officer, Mumbai Fire Brigade; Shri Mahesh Narwekar, Chief - Disaster Management, Brihanmumbai Municipal Corporation; Shri. Mike Robinson, Chief Executive, British Safety Council; Shri. Dipesh Shah, Chairperson - Membership, SAMA; Shri. Yogesh Mudras, Managing Director and Shri. Pankaj Jain, Senior Group Director and Digital Head, Informa Markets in India.

The event celebrated its 10-year legacy of enriching the Indian industry with occupational health and safety knowledge and spreading awareness through quality safety and health product demos, along with industry-led conference sessions.

During conference, Technical Session on Advanced Technical Textile Products for Human Health and Safety was powered by ITTA on 25th November

2022. Following three papers were presented during the session- two of them were ITTA members -

1. Firefighting & Electric Arc suits/coveralls - Shri. Sudhir Thakker, MD, System 5S Pvt. Ltd.
2. Gloves for cuts, heat, fire & electric arc - Dr. Nandan Kumar, MD, High Performance Textiles Pvt. Ltd.
3. Fall Protection - Shri. Nicolas Abry, Sales Leader (Fall Protection) MEAIR Region, MSA Safety.

Three Speakers discussed the following areas during the session -



- a. Knowledge on the quality characteristics of various products which are extremely important to safety officials to make sure that human health and safety is protected with quality products.
- b. Some of the very important and advanced products such as- Fall Protection equipment which are used to protect personnel, mainly for all construction workers, from falling or in the event they do fall, to stop them without causing severe injury. Typically, fall protection is implemented when working at a height, near any edge & a pit or hole.
- c. Firefighting suits/coveralls, gloves and head gears are used to protect from burn injuries. Electrical arc flash is an electrical hazard present in the system which causes very dangerous electrical and fire accidents.
- d. Quality products manufacturers follow NFPA & OSHA requirements of arc flash hazard. Gloves play a very important role to resist cuts, heat, fire, electric arc injuries.



# EXPORT-IMPORT PERFORMANCE OF TECHNICAL TEXTILE PRODUCTS OF SEPTEMBER 2022

(ITTA Analysis on Ministry of Commerce and Industry Data)

The data on export and import of 215\* technical textile products/items is published as an indicator of foreign trade performance of technical textile industry in India.

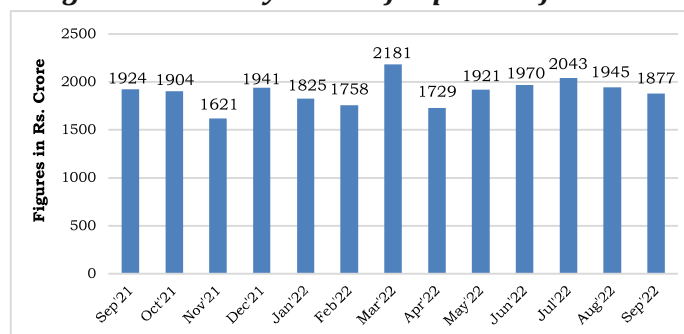
## A. EXPORT PERFORMANCE

(Value in INR Cr.)

Sr. No	Segments	Sept 2021	Sept 2022	% Growth	Apr'21-Sept'21	Apr'22-Sept'22	% Growth
1	Agrotech	59	77	31%	314	420	34%
2	Buildtech	80	75	-5%	390	476	22%
3	Clothtech	33	29	-11%	154	154	-1%
4	Geotech	195	96	-51%	1303	717	-45%
5	Homotech	21	21	3%	132	113	-14%
6	Indutech	255	269	5%	1472	1715	17%
7	Meditech	146	229	56%	728	1395	91%
8	Mobiltech	146	162	11%	835	990	19%
9	Packtech	716	644	-10%	4028	4156	3%
10	Protech	49	73	47%	262	390	49%
11	Sportech	81	89	11%	442	560	27%
12	Nonwovens	143	113	-21%	850	684	-20%
	<b>GRAND TOTAL</b>	<b>1924</b>	<b>1877</b>	<b>-2%</b>	<b>10910</b>	<b>11770</b>	<b>8%</b>

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

Figure 1 - Monthly Trend of Export Performance



above data, the import of TT products has registered a steady growth from May to July 2022, then it started decreasing from August 2022 onwards

### Top Ten Exported Products in Month of Sept. 2022 -

SR. NO.	HSN CODES	PRODUCT NAMES	VALUES (IN CR.)
1	63053200	Flexible Intermediate Bulk Containers (FIBC)	585
2	56074900	Other cordage of Polyethylene/ Polypropylene	82
3	84212300	Oil or petrol-filters for internal combustion engines	63
4	40151200	Gloves, mittens & mitts used for medical, surgical, dental or veterinary purposes	62
5	53101013	Jute Hessian fabrics	57
6	59039090	Other fabric plated, laminated, coated, impregnated with other plastics	56
7	59031090	Other Fabrics impregnated, laminated, plated, and coated with PVC	52
8	87089500	Safety airbags with inflator system	51
9	40093100	Tubes, Pipes and Hoses of Vulcanised Rubber Reinforced/ Otherwise combined only with Textile Materials without fittings	42
10	56031200	Nonwovens of MMF: Weighing > 25 gsm but not > 70 gsm	42

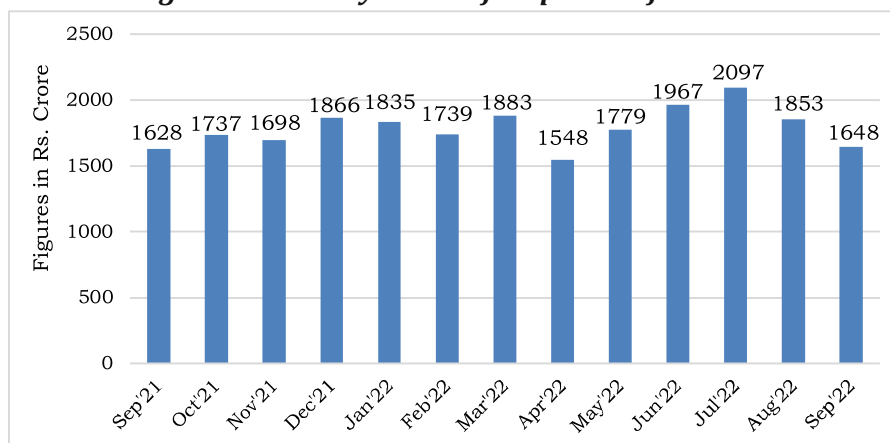
## B. IMPORT PERFORMANCE

(Value in INR Cr.)

Sr. No	Segments	Sept 2021	Sept 2022	% Growth	Apr'21-Sept'21	Apr'22-Sept'22	% Growth
1	Agrotech	42	27	-35%	222	195	-12%
2	Buildtech	134	161	20%	742	1166	57%
3	Clothtech	27	26	-1%	147	175	19%
4	Geotech	134	105	-22%	767	689	-10%
5	Homotech	26	28	9%	166	204	23%
6	Indutech	299	308	3%	1875	2134	14%
7	Meditech	96	149	55%	510	754	48%
8	Mobiltech	549	498	-9%	2994	3620	21%
9	Packtech	68	55	-19%	290	292	1%
10	Protech	60	85	41%	367	500	36%
11	Sportech	25	31	27%	142	304	114%
12	Nonwovens	168	175	4%	1050	1110	6%
	<b>GRAND TOTAL</b>	<b>1628</b>	<b>1648</b>	<b>1%</b>	<b>9272</b>	<b>11143</b>	<b>20%</b>

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

Figure 2 - Monthly Trend of Import Performance



As per above data, the import of TT products has registered a steady growth from May to July 2022, then it started decreasing from August 2022 onwards.

### Top Ten Imported Products in Month of August 2022 -

SR. NO.	HSN CODES	PRODUCT NAMES	VALUES (IN CR.)
1	87089500	Safety airbags with inflater system	133
2	59039090	Other fabric plated, laminated, coated & impregnated with other Plastics	76
3	59021090	Other Tyre cord fabric of nylon or other polyamides	75
4	59032090	Other fabrics impregnated, laminated, plated, and coated with Polyurethane	69
5	84212300	Oil or petrol-filters for internal combustion engines	66
6	59031090	Other Fabrics impregnated, laminated, plated, and coated with PVC	65
7	40151200	Gloves, mittens & mitts used for medical, surgical, dental or veterinary purposes	53
8	54022090	Other high tenacity yarn of Nylon or other Polyester (Textured Yarns)	50
9	59021010	Tyre Cord Fabric of high tenacity yarn of Nylon or other Polyamides impregnated with Rubber	47
10	54021990	Other high tenacity yarn of Nylon or other Polyester (Less than 840 Denier)	43

### \*NOTE -

1. CBIC, MoF, GOI has now incorporated Additional List of 52 Technical Textile Items - 8 existing items & 44 new items in the CUSTOMS TARIFF OF INDIA-2022 effective from 01.05.2022.
2. These 44 HSN codes have not been updated in the GST portal, so industry is not able to use it & data is also not available in MoC&I website. The above report was therefore generated based on 215 (207+8) TT items.



## Sustainable Solutions for Technical Textiles

### Introduction

Sustainability has become a major focus of the textile manufacturers since traditional textile industry were used to the unsustainable practices, such as effluent discharge, high resource consumption, waste generation, waste disposal, emission of greenhouse gases, etc. The technical textile industry is comparatively better as they use new technologies and more efficient manufacturing processes and practices. In the recent times, more and more fashion brands and Institutional buyers are driving the concepts of sustainability & recyclability. As organizations evaluate the root cause of the problem and find solutions, a growing number of manufacturing and fashion companies are set to establish supply chain transparency and adopt circular business models.

The Textile Ministry has taken an initiative to find Sustainable solutions for the textile industry, including the technical textiles. MoT has constituted FOUR working groups for recommending measures to promote sustainable technology in the Textile sector. The Textile Committee, MoT is assigned to coordinate this activity and submit a Report to MoT. Each group has been assigned to work out solutions on different areas. Dr. Anup Rakshit, ED, ITTA has been invited to be a member of the sub-group-II along with other 4 members.

The sub group-II has been assigned the recommend subject Standards, Certification, Testing, Education, Skilling, R&D, Innovations with the following areas -

- Define sustainability in terms of various level of processes in Indian context.
- Study international trends & practices.
- Identify replicable models for Indian textile sync with sustainable development goals.
- Suggest certifications/standards on sustainability.
- Study availability of R & D, institutionalization & need for enhancement, role of industry and Government.
- Any other point the sub-group desires to make part of the report.

ITTA had given inputs to the Textile Committee, MoT and the working group-II has finalized the initial

report. Some of the salient points of the report are given below -

### Definition of Sustainable Textiles & Clothing Production Process

a) Sustainability may be defined as “Meeting the needs of the present without compromising the ability of future generations to meet their needs and desires”.

b) The Sustainable Textiles involves:

- All materials and process inputs and outputs are safe for human and ecological health in all phases of the product life cycle.
- All energy, material and process inputs come from renewable or recycled sources.
- All materials are capable of returning safely to either natural systems or industrial systems.
- All stages in the product life cycle actively support the reuse or recycling of these materials at the highest possible level of quality.
- All product life cycle stages enhance social well-being.

C) The recommended Key Ares for Sustainable Technical Textiles production process:

Technical Textiles production process which uses the raw material from eco-friendly source or sustainably grown or recycled fibres or from yarn/ fibres produced from sustainable techniques (biodegradable polyester/ PLA etc), balances the production line to save energy/ manpower, uses advanced/ upgraded technology to optimize power and energy usage, uses advance techniques such as 3D moulding technology, 3D printing, or 'additive manufacturing' technology etc, runs at maximum utilization with least idle time, prevents energy losses, minimizes pollution load to protect the environment and by enhancing social well-being to enable the future generations to meet their needs and desires.”

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d) Replicable models for Technical Textiles Sector industry to achieve sustainability:

For end-of-life industrial textiles, including mainly technical textiles, recycling systems are generally

not sufficient yet. One of the reasons is that there are few fields in which it is reused. However, if they were designed to be easily recycled, such fields could resolve certain issues of recycling.

Technical textiles are characterized by new fields of application and functionality, novel products, new customers composite materials: combinations with non-textile products to enhance functionality (interior linings of vehicles, insulating materials) contamination caused during life by non-textile components, e.g., with filters, felts used in paper-making, packing materials. Some of the recommended replicable models are furnished in recommendations for sustainability of technical textile sector.

Sr. No.	Recommended Replicable models for sustainability in Technical Textiles
1	From fibre/ yarn/ fabrics derived from eco-friendly resources, such as sustainably grown fibre crops or recycled/ recyclable materials
2	Using eco-friendly materials, accessories and packing material are renewable or reusable
3	Use of eco-friendly fibres such as degradable polyester
4	Reusing old Technical Textiles
5	Reengineering/ Redesigning Technical Textiles as durable for a long time
6	Developing the concept of waste to wealth in various Technical Textiles manufacturing
7	Reducing wastage through process optimization
8	Ensuring reuse/ recycle of every textile waste, unwanted and discarded textile materials for Up-cycling
9	Adopting new technology in Spun lace processes unique combination of hydro-entanglement machine and drum dryer can reduce energy consumption.
10	Innovations such as 3D moulding technology/ continuous production process line that allows an entire Technical Textiles to be produced
11	Using of 3D printing, or 'additive manufacturing' technology
12	Promotion/ incentivise/ training to farmers: for plantation of Bamboo or Eucalyptus as they are sources are sources of raw cellulose for viscose, absorbent in sanitary products
13	Polymer waste from factories/ used clothing containing synthetic thermoplastic fibres may be used in long lasting composite applications with suitable additives. The recycling is not the best alternative as polymer waste cannot be removed completely, but only converted in some other form. However, composite have advantage as an alternative to wood or metals.



## 1. ENGAGEMENTS WITH CENTRAL & STATE GOVERNMENTS

### 1.1. Pre-Budget meeting for Union Budget 2023-24

The Pre-Budget meeting for Union Budget 2023-24 was held under the chairpersonship of Member, Tax Policy (CBIC), Department of Revenue, Ministry of Finance, Government of India on 29.11.2022 in New Delhi with trade and industry associations to discuss suggestions/ recommendations in respect of tax issues pertaining to different sectors. The meeting was attended by Shri. Anil Kumar Vasupillai, AED from ITTA Secretariat.

In this regard, ITTA had submitted the following suggestion during the meeting and recommended the same for incorporating in the Budget 2023-24 i.e., Reduction in Basic Custom Duty for the specialty fibres and yarns which will give an impetus to value addition, strengthen domestic manufacturing and exports.

### 1.2. Meeting of Working Group on Sustainable Technology in Textiles Sector

The meeting of sub-group II under the working group on Sustainable Technology in Textiles sector was held on 30.11.2022 in hybrid mode under the chairpersonship of the Joint Secretary, Ministry of Textiles to review the progress of the subgroup. Dr. Anup Rakshit attended the meeting from ITTA Secretariat. In this regard, ITTA submitted the Note on Sustainability Technology in Textile Sector

covering the subjects on Standards, Certifications, Testing, Education, Skilling and R&D, Innovations on 04.11.2022 for incorporating in the Draft Report and Recommendations on Sustainable Technology in Textiles Sector. During the meeting, ITTA further provided more points on the sustainable technology to be added in Final Report.

## 2. EVENTS SUPPORTED & CONTRIBUTED BY ITTA

### 2.1. International Conference on Technical Textiles in Chennai

CII in partnership with Ministry of Textiles (MoT) and Department of Handlooms, Handicrafts, Textiles and Khadi, Government of Tamil Nadu organized the 'International Conference on Technical Textiles' at Hotel Feathers, Chennai, Tamil Nadu held on the 25th - 26th November 2022. The conference was inaugurated by Shri. Thiru M K Stalin, Hon'ble Chief Minister of Tamil Nadu. Shri. Amit Agarwal, Chairman, ITTA was invited as a speaker in the conference.

The main objective was to create awareness on the opportunities and growth potential in the field of technical textiles, to attract investments into the State from national & international industry and promoting interest in technical textiles among the NextGen, Start-ups and MSMEs.

Shri. Amit Agarwal spoke on the topic, "Technical

Textiles in India - Current Scenario & Future Potential". He highlighted the technical textiles, its 13 segments and market size - Global vs. India & growth rate. He explained in detail about the initiatives on the mandatory use of technical textiles, HSN codes, quality control order (QCO), Indian standards (IS) and skill development. Also updated the initiatives taken by MoT, GoI i.e., PLI - 64 applications have been approved for TT sector with investment of Rs. 19798 crores, NTTM - 74 Research Projects have been approved in Speciality Fibres, Sustainable Textiles, Smart Textiles, Agrotech, Geotech, Protech, Mobiltech and Sportech worth Rs. 242.6 Crores and PM MITRA - 17 Preliminary Project Proposals have been received from State Governments. He further talked about the Export & Import trends of all TT segments for last 5 years and pointed out the top imported TT products. Technical Textile Industry is very optimistic to grow

exponentially during the next few years with the various support system in place and achieve target of USD 40 Billion and Investment in R&D & focus on product innovation for new applications and penetration in Export market will be the growth drivers.

There were Three sessions wherein many ITTA members were the eminent speakers - i) High-Powered Panel Interaction on Technical Textiles Ecosystem & Policy Landscape in India & Tamil Nadu - Dr. Sundararaman K. S., Shiva Texyarn Ltd., ii)

Advancements in Technical Textile, R&D Landscape and Potential Investment Opportunities in Tamil Nadu - Shri. G Ravishankar, KS Technical & Management Consultants, Shri. Yogesh Garg, Dilo India Pvt Ltd, Shri. Anurag Srivastava & Shri. Sanjay Gupta, Reliance Industries Ltd., and iii) Leveraging Global Trends, Innovation & Export Synergies for Inclusive Development of Technical Textiles & Overview of Meditech - Shri. Anjani Prasad, Archroma India and Dr A. Shanmugavasan, KOB Medical Textiles Pvt. Ltd.

## 2.2. Make in Odisha Conclave 2022 in Bhubaneswar

Make in Odisha Conclave 2022, the third Edition of Odisha's flagship Investors' Summit organised by the Government of Odisha with FICCI as the National Industry Partner from 30th November to 4th December 2022 in Bhubaneswar. Shri. Naveen Patnaik, Chief Minister of Odisha inaugurated the conclave.

The key focus of conclave was to highlight the states policy and regulatory framework towards investors and entrepreneurs focusing on emerging business opportunities, investments and the business ecosystem across key sectors that the State of Odisha offers. The conclave saw the launch of the Odisha Apparel and Technical Textiles Policy-2022 and Industrial Policy Resolution 2022 which focusses on making Odisha the destination of choice for industrial enterprises across the country and globally.

Shri. Amit Agarwal, Chairman, ITTA was invited as a speaker during the Sectoral Session: Textiles &



Apparels - Odisha: The Emerging Textile Hub of East held on 2nd December 2022 on the topic of CEO's Perspective on Textiles Investments in Odisha.

## 2.3. CURTAIN RAISER OF TECHNOTEX 2023

The 10th edition of the TECHNOTEX 2023 is being organized on 22nd - 24th February 2023 at Bombay Exhibition Centre, Mumbai. To mark the beginning of the Technotex 2023, a curtain Raiser was held on 05th December 2022 at Trident Hotel, Nariman Point, Mumbai in the presence of the Chief Guest, Smt. Darshana Vikram Jardosh, Hon'ble Minister of State for Textiles, GoI, Guest of Honor, Shri. Chandrakant Patil, Hon'ble Minister of Higher and Technical Education, Textile, and Parliamentary Affairs, Govt. of Maharashtra, Smt. Roop Rashi, Textile Commissioner, GoI and Shri. Rajeev Saxena, Joint Secretary, Ministry of Textiles (MoT), GoI. Shri. Avinash Misar, Vice Chairman, ITTA was invited as guest and was also a part of lamp lighting ceremony.



The event was attended by Dr. Anup Rakshit, ED, ITTA and some of the ITTA members.



# DEVELOPMENT OF INDIAN STANDARDS ON TECHNICAL TEXTILES

## 1. BIS Sectional Committee Meetings

### 1.1 Technical Textiles for Agrotech Sectional Committee (TXD 35)

The 18th Meeting of Technical Textiles for Agrotech Sectional Committee, TXD 35 was held through video conferencing on 23.11.2022. The meeting was attended by Dr. Anup Rakshit, ED, Ms. Ruchita Gupta, Manager (Technical) from ITTA Secretariat and ITTA Members from CTM Technical Textiles Ltd., Garware Technical Fibre Ltd. and Shri Ambica Polymer Pvt. Ltd.

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

- 1. Ready for Publication** - Revised Drafts of Following Indian Standards were finalized for publication- i) IS 16190: 2014 - HDPE laminated woven lay flat tube for irrigation purpose, ii) IS 16089: 2013 - Jute Agro-textile - Sapling bags for growth of seedling/ sapling and iii) IS 16513: 2016 - Insect nets for agriculture and horticulture purposes.
- 2. Wide Circulation** - Following Draft standards will be issued under wide circulation- Bird Protection Nets for Agriculture and Horticulture Purposes - Part 1 Knotted Bird Protection Nets, Part 2 Knitted Bird Protection Nets & Part 3 Extruded Bird Protection Nets, Shade nets for agriculture and horticulture purposes - Part 1 Shade nets made from tape yarns & Part 2 Shade nets made from mono filament yarns, Flexible water Storage tank for Agriculture and Horticulture Purposes and Hail Protection Nets for Agriculture and Horticulture Purposes - Part 1 Warp Knitted Hail Protection Nets & Part 2 Woven Hail Protection Nets.
- 3. Draft Preparation Stage** - Working draft on Shade nets made from combination of tape and monofilament yarn, Azola Beds, HDPE Woven fabric grow bag, Woven fabric Silage bag and HDPE woven fabric straw/jumbo bhusa bag will be prepared.

### 1.2 Technical Textiles for Buildtech Applications Sectional Committee (TXD 34)

The 8th Meeting of Technical Textiles for Buildtech Applications Sectional Committee, TXD 34 was held through video conferencing on 15.11.2022. The meeting was attended by Ms. Ruchita Gupta, Manager (Technical) from ITTA Secretariat and ITTA Members from Reliance Industries Ltd.

Following points were discussed & decided in the meeting -

- 1. Ready for Publication** - Revised Draft of Following Indian Standard was finalized for publication after editorial changes - i) IS 16481: 2022 - Synthetic micro-fibres for use in cement-based matrix

### 1.3 Geosynthetics Sectional Committee (TXD 30)

The 28th Meeting of Geosynthetics Sectional Committee, TXD 30 was held through video conferencing on 17.11.2022. The meeting was attended by Ms. Ruchita Gupta, Asst. Manager (Technical) from ITTA Secretariat and ITTA Members from Charankattu Coir Mfg. Co. (P) Ltd., Garware Technical Fibres Ltd., Geosynthetics Testing Services Pvt. Ltd., Kusumgar Corporates, Maccaferri Environmental Solutions Pvt. Ltd., Reliance Industries Ltd., Strata Geosystems (India) Pvt. Ltd., Techfab (India) Industries Ltd., Texel Industries Ltd. & Terram Geosynthetics Pvt. Ltd.

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

- 1. Ready for Publication** - Revised Drafts of Following Indian Standards were finalized for publication- i) IS 17371: 2020 - Geogrids for flexible pavements, ii) IS 17373: 2020 - Geogrids used in reinforced soil retaining structures, iii) IS 17483 (Part 1): 2020 - Geocells - Part 1 Load Bearing Application, iv) IS 17483 (Part 2): 2020 - Geocells - Part 2 Slope Erosion Protection Application, v) Amendment no.1 to IS 16653: 2017 - Needle Punched Nonwoven Geobags for Coastal And Waterways Protection, vi) Prefabricated Vertical

Drains for Quick Consolidation for Very Soft Plastic Soil [Doc. TXD 30 (19403)], vii) Geosynthetic Reinforced Soil Structures - Code of Practice [Doc TXD 30 (20465)].

**2. Wide Circulation** - Following Draft standards will be issued under wide circulation- Geotextiles used in subgrade stabilization in pavement structures &

## 2. BIS Panel Meetings -

### 2.1 Expert Panel meeting for Industrial Filter fabric

The Expert Panel meeting for preparing the working draft on the Industrial Filter fabric was held on 18.11.2022 through video conferencing under the convenorship of Dr. Manisha Mathur, Sasmira, Mumbai. The meeting was attended by Dr. Anup Rakshit, ED, Ms. Ruchita Gupta, Manager (Technical) from ITTA Secretariat and ITTA Members from Welspun India Pvt. Ltd., Masturlal Pvt. Ltd., Khosla Profil Pvt. Ltd., Ginni Filament, Pacific Harish Industries Ltd. And Venus Safety and Health Pvt. Ltd.

After deliberations, the panel recommended the following -

1. Title is to be modified as 'Non-woven Industrial Filter Fabric for Dry Dust and Hot Gases Application' & Scope is to be modified as 'This standard specifies the performance requirement of non -woven filter fabric for dry

Geotextile Tubes for Coastal and Waterways Protection.

**3. Draft Preparation Stage** - Working draft on Geotextiles for separation/filtration applications in railway and Geogrids for reinforcement / stabilization applications in railway will be prepared.

dust and hot gases application in industrial filter bags.

2. It was decided to follow Indian/Adopted Indian Std for various parameter to be referred in the draft std.
3. It was decided to include the various performance parameter in the working draft for different raw material (PPS, Co-polymer acrylic, Homo Polymer Acrylic, Meta Aramid, Polyethylene Terephthalate, PTFE, etc.).
4. Khosla Profil to share the details of quality requirement and test method with BIS on PTFE with lamination so that the same can be included in the draft std.
5. Khosla Profil & Masturlal Pvt. Ltd. to share the contact details of 2-3 users & 2-3 OEMs so that BIS may approach them for their suggestion/comments.

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Bank Name - Bank of Baroda,  
Chakala Branch, Mumbai - 400093.  
Current Account No - 04220200000491  
IFSC Code - BARBOCHAKAL

## MoT clears 20 Research Projects worth Rs 74 Crores under NTTM



Ministry of Textiles (MoT) cleared 20 strategic research projects worth around INR 74 crores in the areas of Agrotextiles, Speciality fiber, Smart textiles, Activewear textiles, Strategic application areas Protective gear and apparel, Sports textiles under the chairmanship of Shri Piyush Goyal, Minister of Commerce and Industry, Consumer Affairs, Food and Public Distribution, and Textiles on 01.11.2022. These strategic research projects fall under the Flagship Programme NTTM. Among these 20 Research projects, 5 Projects of Speciality Fibres, 6 Projects of Agro-textiles, 2 Projects from Smart Textiles, 2 from protective gear and apparel, 2 from geotextiles, 1 from activewear apparels, 1 from strategic application area, 1 from sports textiles were cleared.

Shri. Goyal provided his inputs pertaining to Technical Textiles for the meeting along with the officials from different Line Ministries. Leading Indian Institutes including IITs, Government Organizations, Research Organization and Eminent Industrialists, among others participated in the session which cleared projects strategic for the development of Indian economy and a step in the direction of Atmanirbhar Bharat, especially in the field of Geotech, Industrial and Protective, Agriculture and Infrastructure.

While addressing the esteemed group of Scientists and Technical Technologists, Shri Goyal said, "Industry and Academia linkages are essential for

the growth of research and development in the application areas of Technical Textiles in India. Building convergence with Academicians, Scientists and Researchers is the need of the hour." He emphasised on the importance of contributions of technology and segment experts, scientists and academicians to India's technical textiles future growth.

Despite the prominent usage of speciality fibres in India, indigenization of the technology has still been a major challenge which needs collaborative interventions from both industry and academia, he further added. He further emphasized on robust indigenization of machineries and equipment's for the technical textile sector to establish sustained and strong foothold in the global landscape. Revision of R&D guidelines and creation of dedicated indigenous machinery and equipment development guidelines under NTTM were discussed and recommended by the committee during the meeting. To bolster the innovation and research ecosystem in technical textiles, NTTM to support ideation and prototyping R&D projects worth upto INR 50 lakhs and 100 lakhs respectively, which have clear potential to translate into commercial products and technologies.

**[Source - <https://pib.gov.in/PressReleasePage.aspx?PRID=1872922>]**



## Encourage startups and young scientists in the niche areas like Technical Textiles: Union Minister Piyush Goyal



Union Minister of Commerce and Industry, Consumer Affairs, Food and Public Distribution and Textiles, Shri. Piyush Goyal said we must encourage startups and young scientists in the niche areas like Technical Textiles. He said this during a review meeting of Textile Research Associations (TRA) on 03.11.2022 in New Delhi.

Shri. Goyal asked TRAs to submit proposals to the Ministry for any support they require to reach world class levels of robust state-of-the-art labs, modern machinery, amongst others. He added that the Bureau of Indian Standards (BIS) could provide necessary support in modernizing the labs of TRAs. In consonance with the vision to foster innovation and drive science-centric sustainable growth, Shri Piyush Goyal suggested to create a special fund to increase the number of scientists in TRAs.

He pointed out the need to assess the projects till their last mile success and added that the projects may be sanctioned accordingly to make them commercially viable. He noted that for medical textiles the research is incomplete without the clinical trials. Therefore, costs associated with clinical trials may also be taken into account while recommending future projects in Technical Textiles. He directed the officials to Fastrack the clearance of patents filed by Govt. related bodies, in a time bound manner.

Shri Goyal asked to explore the possibilities of merging TRAs or fostering partnership among TRAs engaged in similar kind of research in order to bring synergy among these bodies. He also instructed that the quarterly engagement of TRAs with the Ministry be institutionalized.

The review meeting under the Chairmanship of Union Minister Shri Piyush Goyal was attended by Dr VK Saraswat, Member (Science and Technology), NITI Aayog, Prof. Ajay K. Sood, Principal Scientific Adviser (PSA) to the Govt. of India and representative of 8 TRAs (affiliated bodies under MoT), namely, ATIRA Ahmedabad, BTRA Mumbai, MANTRA Surat, NITRA Ghaziabad, SASMIRA Mumbai, SITRA Coimbatore, WRA, Thane, and IJIRA Kolkata.

Dr. V K Saraswat, Member (Science and Technology), NITI Aayog, said that TRAs need to work on taking their research at commercially viable level and bring the final product to the market. He highlighted that the focus is required on reducing the imports of important products and increase their indigenous production.

Prof. Ajay K. Sood, Principal Scientific Adviser (PSA) to the Government of India, highlighted the importance of having incubation centers in TRAs. He emphasized on the need to research on HEPA Filters, which has a huge potential in future. He also asked TRAs to identify the products which are mainly imported and urged them to direct their research activities to these products in order to achieve self-sustainability.

During the review meeting, presentations were made by the TRAs, highlighting their performance over the last decade which including their research projects, patents status, machinery and equipment statistics and strategies for future.

[Source - <https://pib.gov.in/PressReleasePage.aspx?PRID=1873689>]

## Shri Piyush Goyal chairs review meeting on exports with Export Promotion Councils and



Union Minister of Commerce and Industry, Consumer Affairs, Food and Public Distribution and Textiles, Shri Piyush Goyal reviewed the sectoral progress in exports with Export Promotion Council's and Industry Bodies in New Delhi on 07.11.2022.

Minister of State for Textiles, Ms. Darshana Jardosh, Secretary, Department of Commerce, Shri Sunil Bartwal, Secretary Textiles, Ms. Rachna Shah, Representatives of the Export Promotion Councils, Industry Associations and senior officials from Department of Commerce, Department for Promotion of Industry and Internal Trade (DPIIT) and other departments were present at the review meeting.

Shri. Goyal exhorted the export promotion bodies to give an active push to exports and maintain the momentum of healthy growth recorded in the previous year. He asked the various sectoral leaders to utilize the disruptions in the global trade in their favor by occupying the space yielded by some countries. He asked Indian industry to support each other to create synergies and promote growth in a spirit of nationalism.

He told industry to strive to retain export markets even if they are to make temporary changes in their pricing structure to accommodate short term challenges. He encouraged exporters to explore unique products with good export potential such as castor and instructed officials of the Ministry to act proactively to promote these products.

He also asked officials to analyze export data on the basis of sectors, commodities and markets to find out areas of opportunity for Indian exports. He called for open channels of communication between export promotion bodies and industry bodies with the government so that issues being faced may be flagged and resolved at the earliest.

Commerce Secretary, Shri Sunil Bartwal gave the opening remarks at the review meeting and elaborated upon the various steps taken by the Ministry to push exports. Director General of Foreign Trade, Shri Santosh Sarangi made a presentation on latest export trends and prospects.

[Source - <https://pib.gov.in/PressReleasePage.aspx?PRID=1874299>]

## BIS signs MoU with top engineering institutes of India for introducing Indian standards as a part of curriculum

Bureau of Indian Standards (BIS) signed Memorandum of Understanding (MoU) with top six engineering institutes of India for introducing Indian standards as an integral part of the curriculum. This initiative is towards institutionalizing engagement of BIS with the eminent institutes for securing active participation of academia.

The MoU was signed with Indian Institute of Technology BHU, Malaviya National Institute of Technology Jaipur, Indian Institute of Technology Indore, Indian Institute of Technology Patna, Indian Institute of Technology Madras and National Institute of Technology Trichy on 28th November 2022 for establishment of 'BIS Standardization Chair Professor' at these institutes.



The establishment will promote excellence and leadership in teaching and research & development in the field of science and various disciplines in the respective institutes.

Shri Pramod Kumar Tiwari, Director General, BIS during the signing said that the MoU between the premium academic institutes & BIS would strengthen and enhance the standards formulation activity by facilitating Research & Development projects, encouraging involvement of young minds in the area of standardization process and jointly organizing seminars, conferences, workshops

symposia or lectures, training and short-term education programs. He also emphasized on the need to engage with start-ups & incubation centres at Academic Institutions in formulation of new standards and compliance with the existing. It is also anticipated that technology innovation and standards development shall be interwoven seamlessly to foster development of technology-oriented products and services.

**[Source - <https://pib.gov.in/PressReleasePage.aspx?PRID=1879929>]**

## **Tamil Nadu announces many initiatives for the textile industry**



The Tamil Nadu Govt. has initiated steps to establish a textile city in Chennai. The Govt. is planning to establish a 1,500-acre textile park in the southern part of the state and a textile park in Chennai. Moreover, a design and incubation centre would be established at the cost of Rs. 10 crores. The Government is taking steps to soon formulate a new integrated textile policy for the state.

Addressing an international conference on technical textiles, organised by CII in association with textile departments of State and Union Govts, Shri. M. K. Stalin, Chief Minister of Tamil Nadu said the State's competition in the textiles sector should not only be within the country, but at global level, as well. "Tamil Nadu tops third in the country in attracting foreign investments and exports in the textile sector. The state contributes 12% of total textile exports from India," he added.

Shri. Stalin further pointed out that the state government is giving priority to the technical textiles because the future of the textile sector depends on the growth of technical textiles. The state would soon establish 'export hubs' in Karur, Tirupur and Kancheepuram to promote textile

exports. While steps are being taken to unveil an integrated textile policy, he urged domestic and international entrepreneurs to invest in the state to boost the development of the technical textiles industry.

An official source with the state textiles department said, the 'Textile City' is would come up over 100 acres on Outer Ring Road on the outskirts of the city. The facility, which is planned as the largest 'Textile City' in India, will house leading international brands from the textile industry. State Industries Minister Shri. Thangam Thennarasu said, the textile industry provides the highest number of employment opportunities after agriculture in Tamil Nadu.

Six MoUs were exchanged on the occasion with companies from the US, the Czech Republic and Japan, besides Tamil Nadu in the field of technical textile production and textile processing.

**[Source-<https://www.indiantextilemagazine.in/tn-chief-minister-announces-creation-of-new-integrated-textile-policy-and-textile-park-near-chennai/>]**

## Start-ups leveraging technologies in smart textiles



While fitness trackers and smartwatches are getting all the attention when it comes to wearable technology, there's another area that's rapidly advancing: clothing made up of smart textiles. Smart fabrics embark on a journey that will completely change the concept of 'clothing for the future', both globally and across the country.

According to Global Data forecast, the global smart clothing market worth US \$ 668 million in 2020 will expand to over US \$ 4 billion in the next 10 years. Therefore, it looks like the segment has the potential to even cross the bill mark of US \$ 30 billion by 2040 with the help of technologies such as embedded sensors that track vitals, actuators that control fabric properties like stiffness and transparency, or conductive fibres that aid in communication or power transfer medium. The possibilities for smart clothing are truly vast and endless.

India is becoming a great potential market for wearable tech companies as more of the population is now putting health first on priority. There are a number of Indian start-ups working to develop smart clothing, and some have already achieved success in overcoming the phase of initial adaptations.

1. Broadcast Wearables Pvt. Ltd., Hyderabad -- The company offers SYNGAL, a whole range of smart garments, such as Fitness T-Shirt with Navigation, that connects to a mobile app. Its other offering is the programmable T-shirt that can be controlled via a mobile app, allowing users to tap, draw or animate on the T-shirt in real-time. The Motion Capture Safety Cycling Jersey is the most popular choice for cyclists who want to be visible and safe on the road. The LED hazard lights are activated by the motion capture technology when the riders raise their arms, making them highly visible to drivers.

2. NYOKAS based in Coimbatore is into technical

textile-based wearables that have developed product lines that can be used in both defence and civilian applications. They have developed the 'ZEAL' wearable jacket, a textile-based wearable that remotely analyses physiological and biomechanical data in real-time. It is designed to protect the wearer from attacks or other life-threatening situations. The sensors detect any force applied to the wearer's body and send data to a removable piece of hardware that analyses the data to determine if the situation is dangerous. If the situation is deemed dangerous, the jacket sends SOS messages with the wearer's location to various numbers and emergency numbers, thus saving lives. Also, in collaboration with iDEX, it is working on a project for Indian Army, building a wearable monitoring T-shirt that analyses physiological and bio-mechanical data in real-time remotely to judge the health status with the help of ECHO or Bluetooth low energy and which can be displayed and analysed on Nykoas softwares.

3. Swatric, this start-up is founded by researchers from IIT Delhi's Department of Textile and Fibre Engineering, and is working to develop cutting-edge technologies to help the Indian textile and apparel industry commercialise new and competitive categories of smart and functional products. Products include textiles with nanocoating, functional yarns and smart fabrics that can change their properties such as colour, opacity or even stiffness in response to external stimuli. Applications of this technology include antibacterial fabrics, self-cleaning fabrics, UV-protective fabrics, fire-retardant fabrics, etc. Swatric is currently working to develop commercial prototypes of these products that can be used in all industries, including apparel. A more recent development involves aramid fibres, a class of heat-resistant and strong synthetic fibres. They have also collaborated with



the Flag Foundation of India to develop advanced textile solutions for National Flag.

4. BigPhi Technologies, Bengaluru is an angel-funded start-up that owns the smart menswear brand Turms. It is one of India's first technologically advanced apparel and wearables companies and was awarded with the 'Intelligent apparels & performance' fashion brand. It offers smart clothing with functional surfaces for various needs of the common man in everyday life. It has anti-stain, anti-odour, anti-fungal and cool-tech properties and can

be worn 3-4 times without washing. Considering the increasing immune deficiency, it has refined technology to add an anti-germ agent that is capable of protecting against gram-positive and gram-negative bacteria and a wide fungal spectrum. It can also protect against enveloped viruses like SARS-COV and non-enveloped viruses as well.

[Source - <https://apparelresources.com/technology-news/retail-tech/start-ups-leveraging-technologies-smart-textiles/>]

## India's SuperBottoms unveils maximum absorbent period underwear

SuperBottoms, India's leading D2C brand for baby-care products has expanded into the female wellness and hygiene segment with the launched of India's maximum absorbent period underwear, MaxAbsorb Period Underwear.

The full-coverage, stretchy, soft, breathable, and rash-free SuperBottoms' MaxAbsorb period underwear is designed to make women forget about their period woes by ensuring utmost comfort. Putting the highest quality fabric to use, period underwear, unlike sanitary pads, is fully breathable and prevents the very common period rash, and is

incomparably reusable - snug, and comfy.

The four-layered antimicrobial underwear is a blend of 60% bamboo, 35% pure cotton, and 5% lycra assuring 8-10 hours of dry comfort and zero leaks. MaxAbsorb period underwear is not just regular wear appropriate but ideal for protection from postpartum bleeding.

[Source - <https://www.apnnnews.com/superbottoms-expands-into-female-wellness-category-unveils-indias-maximum-absorbent-period-underwear/>]



### ITTA SIGNED MOU WITH SAFETY APPLIANCES MANUFACTURERS ASSOCIATION (SAMA)

Safety Appliances Manufacturers Association (SAMA) is an Association of Occupational Safety Appliances & Services – Providers, Manufacturers, Distributors & Dealers. Enhancing safety awareness and guiding the end-user for optimum usage of Safety Appliances & services, technologies, and equipment. Organizes events & campaigns for the members that boost workplace safety awareness across industries. The objective of MOU is: -

1. To promote Technical Textiles in India and abroad.
2. It will create a common platform to share knowledge and help each other to resolve various industry issues.



## *MOBILTECH - Recyclable Automotive Carpet System*

### Fully recyclable carpet from single material



Switzerland-based leading acoustic and thermal management supplier for vehicles Autoneum has created a fully recyclable carpet system that is made of 100% polyester. The carpet system is made with high content of recycled polyethylene terephthalate (PET), latex-free manufacturing process, and less energy-intensive production process.

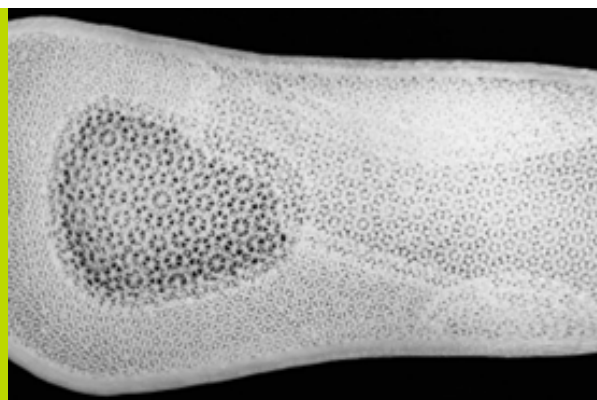
Autoneum has introduced this carpet in a bid to meet vehicle manufacturers' ambitious sustainability targets. As it is fully recyclable, this automotive carpet paves the way for an improved and more sustainable end-of-life recycling of electric vehicles. This carpet system improves the carbon footprint of Autoneum's new monomaterial needlepunch and tufted carpets.

The 100% polyester carpets build on the existing lightweight and particularly sustainable Autoneum Pure technologies: the carpet surface, for example, is made of Di-Light or Relive-1, while Hybrid-Acoustics PET is used for the decoupler. Autoneum's innovative alternative backcoating (ABC) process, which uses a thermoplastic adhesive instead of latex, the production of the new monomaterial needlepunch and tufted carpets also requires significantly less energy and no water at all.

[Source-<https://www.technicaltextile.net/news/swiss-firm-autoneum-creates-fully-recyclable-automotive-carpet-system-284392.html>]

## *SPORTECH - Orthopaedic Insoles*

### Orthopaedic Insoles with Elastollan® TPU



Germany's BASF has launched orthopaedic insoles with Elastollan, BASF's thermoplastic polyurethane (TPU). The TPU is used as a filament by the duro3D paver in the production of individual shoe insoles using 3D printing processes. In sole applications, the material is characterised above all by its excellent vibration damping and resilience.

The production of shoe soles made of TPU filaments enables complete and comprehensive recyclability. Under heavy use, when used in sports shoes, it is also the abrasion resistance that makes the sole durable and comfortable to wear. Even with fluctuating temperatures, the insert retains its

desired properties. An excellent matching of the thermoplastic material to the challenges of discontinuous extrusion in 3D printing (FDM) makes it possible to map macrostructures of different densities in a sole, which in turn are - also selectively - tailored to very individual needs. Thus, soft sole areas with lower filling density can relieve and flow smoothly into another area, which rather firmly supports and stabilises the foot with higher filling density.

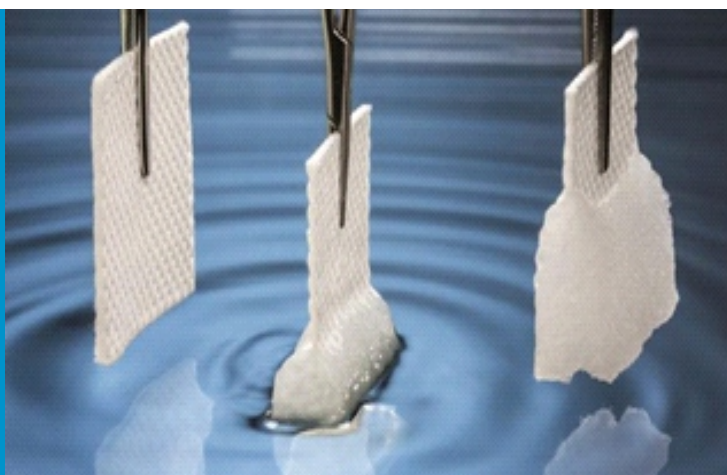
Usually, the Elastollan types of 85 Shore A (soft) and 95 Shore A (hard) are used in orthopaedic insoles to support the entire skeleton, but also in insoles for

sports shoes, where a special load cushioning or support is desirable due to increased footwork. The open grid structure of the material also makes the sole breathable. Through the so-called smoothing, by the production of flowing, linear transitions between two hardness areas of the sole, unpleasant hard edges are completely avoided, the width of the transition area is customisable. This fully demonstrates the full application flexibility of Elastollan.

[Source - <https://www.basf.com/global/en/media/news-releases/2022/11/p-22-397.html>]

## **MEDITECH - Elastic Flexible Superabsorber & Absorbent Underwear**

### **Elastic superabsorber for wound dressings**



Freudenberg Performance Materials based in Germany has launched an elastic flexible superabsorber for wound dressings which increases the comfort level for patients as well as enabling longer wear time, reducing the frequency of dressing changes. Freudenberg uses a new technology to manufacture the elastic superabsorbers. Unlike other methods, it does not perforate or slit the material, achieving a high degree of consistent elasticity. Furthermore, the technology bonds the superabsorbent fibres more uniformly with the material, enhancing the integrity of the wound dressing.

Freudenberg has also manufactured M 1714 wound pad component which consists of bio-based fibres and exhibits a smooth wound contact layer. M 1714 has been evaluated for industrial compostability

and conforms to ISO 13432. This enables certification of the product's biodegradability.

Wound dressing with silicone adhesive border - silicone coated foams, manufacturers can reduce the number of process steps, avoiding waste, saving energy and simplifying the supply chain. Compared with conventional foam dressings, the product also offers higher flexibility for optimal wound bed contouring and reduces the risk of infection by preventing exudate pooling. In addition, the variant with an extra-strong silicone border enables longer wear time, thus generating less waste.

[Source - <https://www.textiletechnology.net/nonwovens/news/freudenberg-pm-elastic-superabsorbers-for-wound-dressings-33079>]



## Launched Period/ Absorbent Underwear

Canada based Joe Fresh has launched absorbent underwear, a new addition to the brand's intimate's lineup. The quality tested and approved product is available in a pack of 2 for \$29 and in sizes XS-3X.

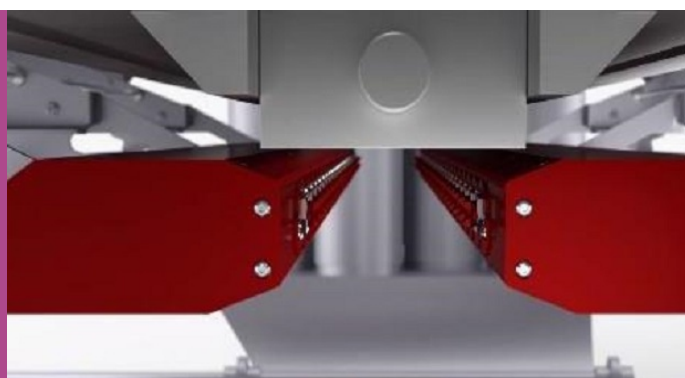
The absorbent underwear features four moisture absorbent layers to keep wearers comfortable against blood, sweat and urine and are made with

moisture-wicking, anti-microbial fabrication for odor control and freshness and available in two absorbency options, light and heavy. The product is machine washable and tested against chemicals, meaning they are safe to wear long term.

[Source - <https://www.loblaw.ca/en/joe-fresh-introduces-affordable-absorbent-underwear>]

## NONWOVEN - Technology for Charging Nonwovens

### Technology charges nonwovens for enhanced filtration efficiency



hycuTEC - technological quantum leap for filter media, is Oerlikon's new technology for charging nonwovens to increase filtration efficiency to more than 99.99% for meltblown nonwovens producers, this can mean material savings of 30% with significantly superior filter performance.

Due to its extremely low water and energy consumption, the hycuTEC is also a future-proof, sustainable technology, as the process can be used without any additional drying steps in the case of most applications. Other developments from Oerlikon include PLA-based medical oronasal

masks and spunbond materials to be used both as backing materials for filter media and as the filters themselves.

[Source - [https://www.nonwovens-industry.com/contents/view\\_breaking-news/2022-12-02/oerlikon-to-presents-hycutec-at-filtec/#:~:text=hycuTEC%20%E2%80%93%20technological%20quantum%20leap%20for,with%20significantly%20superior%20filter%20performance.](https://www.nonwovens-industry.com/contents/view_breaking-news/2022-12-02/oerlikon-to-presents-hycutec-at-filtec/#:~:text=hycuTEC%20%E2%80%93%20technological%20quantum%20leap%20for,with%20significantly%20superior%20filter%20performance.)]

## NEW MEMBERS



### ASHUTOSH AGRO TEX, GUJARAT

Ashutosh Agro Tex having Raschel Warp Knitting machine and they manufactures warp knitted fabrics - 600 MT/year (FY 2021-22) which are designed using best grade HDPE material. These knitted fabrics are majorly comprising of Agro shade net which is used in technical farming, horticulture, floriculture, etc.

# UPCOMING EVENTS

DATES	EVENTS NAME	PLACE	WEBSITE
<b>DOMESTIC EVENTS</b>			
16 <sup>th</sup> November 2022	<b>NATIONAL CONCLAVE ON TECHNICAL TEXTILE - PROTECH</b>	Delhi, India	<a href="http://ittaindia.org/">http://ittaindia.org/</a>
24-25 November 2022	<b>OSH INDIA</b>	Mumbai, India	<a href="https://www.oshindia.com/mumbai/">https://www.oshindia.com/mumbai/</a>
08-13 December 2022	<b>INDIA ITME 2022 (11<sup>th</sup> India International Textile Machinery Exhibitions)</b>	<b>Greater Noida, UP, India</b>	<a href="https://itme2022.india-itme.com">https://itme2022.india-itme.com</a>
30-31 December 2022	<b>INOS+H 2022</b>	<b>Mumbai, India</b>	<a href="https://www.md-india.com/event/inosh-expo-239.html">https://www.md-india.com/event/inosh-expo-239.html</a>
18-20 January 2023	<b>ICERP 2023 (International Conference &amp; Exhibition on Reinforced Plastics)</b>	<b>Mumbai, India</b>	<a href="https://icerpshow.com/">https://icerpshow.com/</a>
20 January 2023	<b>Incontrol! India 2023</b>	<b>New Delhi, India</b>	<a href="https://bch.in/incontrol-india/">https://bch.in/incontrol-india/</a>
02-03 February 2023	<b>FILTREX INDIA</b>	New Delhi, India	<a href="https://www.edana.org/events/filtrex/filtrex-india">https://www.edana.org/events/filtrex/filtrex-india</a>
18-19 February 2023	<b>OUTLOOK™ (Nonwoven, Personal care and Hygiene Conference)</b>	New Delhi, India	<a href="https://www.edana.org/events/outlook/outlook-india">https://www.edana.org/events/outlook/outlook-india</a>
22-24 February 2023	<b>TECHNOTEX 2023</b>	Mumbai, India	<a href="https://www.technotexindia.in/">https://www.technotexindia.in/</a>
01-04 March 2023	<b>ITMACH INDIA 2023</b>	Gujarat, India	<a href="https://www.kdclglobal.com/itmach-india-2023.html">https://www.kdclglobal.com/itmach-india-2023.html</a>
<b>INTERNATIONAL EVENTS</b>			
31 October-04 November 2022	<b>GEOASIA7 2022 (7th Asian Regional Conference on Geosynthetics)</b>	Taipei, Taiwan	<a href="http://www.geoasia7.org/">http://www.geoasia7.org/</a>
08-09 November 2022	<b>FILTREX</b>	Berlin, Germany	<a href="https://www.edana.org/events/filtrex/filtrex-europe">https://www.edana.org/events/filtrex/filtrex-europe</a>
14-17 November 2022	<b>HYGIENIX 2022</b>	Louisiana, USA	<a href="https://www.hygienix.org/">https://www.hygienix.org/</a>
16-17 November 2022	<b>FILTREX ASIA</b>	Shanghai, China	<a href="https://www.edana.org/events/filtrex/filtrex-asia">https://www.edana.org/events/filtrex/filtrex-asia</a>
20-24 November 2022	<b>ITMA ASIA + CITME</b>	Shanghai, China	<a href="https://www.itmaasia.com/">https://www.itmaasia.com/</a>
10-13 January 2023	<b>HEIMTEXTIL FRANKFURT</b>	Frankfurt, Germany	<a href="https://heimtextil.messefrankfurt.com/frankfurt/en.html">https://heimtextil.messefrankfurt.com/frankfurt/en.html</a>
05-08 February 2023	<b>GEOSYNTHETIC CONFERENCE</b>	Kansas, USA	<a href="https://geosyntheticsconference.com/">https://geosyntheticsconference.com/</a>
20-23 February 2023	<b>4<sup>th</sup> GEOAFRICA (African Regional Conference on Geosynthetics)</b>	Cairo, Egypt	<a href="https://geoafrica2023.org/">https://geoafrica2023.org/</a>

DATES	EVENTS NAME	PLACE	WEBSITE
20-23 February 2023	<b>4<sup>th</sup> GEOAFRICA (African Regional Conference on Geosynthetics)</b>	<b>Cairo, Egypt</b>	<a href="https://geoafrica2023.org/">https://geoafrica2023.org/</a>
18-21 April 2023	<b>INDEX™23</b>	<b>Palexpo, Geneva</b>	<a href="https://www.indexnonwovens.com/en/">https://www.indexnonwovens.com/en/</a>
10-12 May 2023	<b>TECHTEXTIL NORTH AMERICA</b>	Atlanta, Georgia	<a href="https://techtextil-north-america.us.messefrankfurt.com">https://techtextil-north-america.us.messefrankfurt.com</a>
08-14 June 2023	<b>ITMA 2023</b>	<b>Milan, Italy</b>	<a href="https://itma.com/">https://itma.com/</a>
17-20 July 2023	<b>WORLD OF WIPES (WOW) (International Conference)</b>	Atlanta, Georgia	<a href="https://www.worldofwipes.org/">https://www.worldofwipes.org/</a>
30 July-04 August 2023	<b>ICCM 2023 (International Conference on Composite Materials)</b>	Belfast, UK	<a href="https://iccm23.org">https://iccm23.org</a>
17-21 September 2023	<b>12<sup>th</sup> INTERNATIONAL CONFERENCE ON GEOSYNTHETICS (ICG)</b>	<b>Roma, Italy</b>	<a href="https://www.12icg-roma.org/">https://www.12icg-roma.org/</a>
10-12 October 2023	<b>FILTPO™ 2023</b>	Chicago, USA	<a href="https://www.filtppo.com">https://www.filtppo.com</a>
24-27 October 2023	<b>A+A 2023</b>	Germany	<a href="https://www.aplusa-online.com/">https://www.aplusa-online.com/</a>
13-16 November 2023	<b>HYGIENIX 2023</b>	New Orleans LA	<a href="https://www.hygienix.org">https://www.hygienix.org</a>
In 2023 (Dates yet to be announced)	<b>INTERTEXTILE SHANGHAI HOME TEXTILES</b>	Shanghai, China	<a href="https://intertextilehome.hk.messefrankfurt.com/china/en.html">https://intertextilehome.hk.messefrankfurt.com/china/en.html</a>
22-25 April 2024	<b>IDEA 2024</b>	Florida, USA	<a href="https://www.ideashow.org">https://www.ideashow.org</a>
23-26 April 2024	<b>TECHTEXTIL 2023</b>	Frankfurt, Germany	<a href="https://techtextil.messefrankfurt.com/frankfurt/en.html">https://techtextil.messefrankfurt.com/frankfurt/en.html</a>
04-08 June 2024	<b>ITM 2024 (International Textile Machinery Exhibition)</b>	Istanbul, Turkey	<a href="https://www.itmexhibition.com/itm2024">https://www.itmexhibition.com/itm2024</a>
17-20 June 2024	<b>WORLD OF WIPES (WOW) (International Conference)</b>	Minneapolis, USA	<a href="https://www.worldofwipes.org/">https://www.worldofwipes.org/</a>