



वस्त्र मंत्रालय
MINISTRY OF
TEXTILES

सत्यमेव जयते

75
Azadi Ka
Amrit Mahotsav

June 2022 Edition



NTTM Newsletter

Capturing Technical Textiles' developments & updates

National Technical Textiles Mission
MINISTRY OF TEXTILES

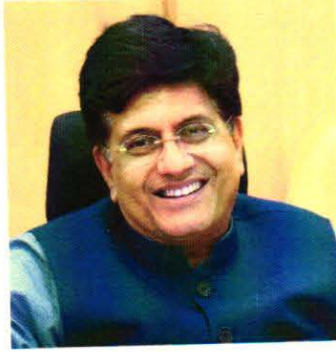
पीयूष गोयल
PIYUSH GOYAL



सत्यमेव जयते

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आज़ादी का
अमृत महोत्सव

वाणिज्य एवं उद्योग,
उपभोक्ता मामले, खाद्य और सार्वजनिक
वितरण तथा वस्त्र मंत्री, भारत सरकार
MINISTER OF COMMERCE & INDUSTRY,
CONSUMER AFFAIRS, FOOD & PUBLIC DISTRIBUTION AND
TEXTILES, GOVERNMENT OF INDIA



MESSAGE

I am delighted to learn that a periodical newsletter promoting the National Technical Textiles Mission (NTTM) is being launched in digital mode with an aim to disseminate information on the activities related to Technical Textiles in India.

Technical Textiles is rapidly gaining momentum in the country. Today, India is the 5th largest producer of Technical Textiles in the world with a market share of 8%. The market for technical textiles has increased from USD 10 billion in 2012-13 to USD 20.5 billion in 2021-22, with exports more than doubling to USD 2.2 billion during the same time period. The NTTM focuses on research, innovation, human resources development and creation of awareness about technical textiles. It has been envisioned that the domestic market size would exceed USD 40 billion with exports of USD 10 billion by 2024-25.

During the COVID-19 pandemic, India's manufacturing capability in Technical Textiles expanded tremendously as it became the world's second largest producer and exporter of Personal Protective Equipments (PPEs) and N-95 Masks in a period of six months during 2020. Initiatives like prioritisation of Technical Textiles under Technology Upgradation Fund Scheme (TUFS), introduction of Technology Mission on Technical Textiles, and launch of promotional schemes for agro-textiles and geo-textiles for North Eastern Region, etc were undertaken to provide the required impetus to the outstanding growth story of Technical Textiles.

I am sure that NTTM will be successful in achieving its desired targets and the Government is committed to work on a mission mode towards achievement of its defined objectives.


Piyush Goyal

दर्शना जरदोश
DARSHANA JARDOSH



सत्यमेव जयते
75
आज़ादी का
अमृत महोत्सव

रेल एवं वस्त्र राज्य मंत्री
भारत सरकार
MINISTER OF STATE FOR
RAILWAYS AND TEXTILES
GOVERNMENT OF INDIA

Technical Textiles is a sunrise sector which offers enormous potential for paradigm transformations in every aspect of modern world. It has a wide horizon of applications ranging from agriculture on one end to advanced space applications on the other end.

Government of India has launched the National Technical Textiles Mission with the vision of turning India into a 40 Bn USD market by 2024 and providing momentum to application-based research and strengthening India's Technical Textiles value chain. These initiatives will not only enhance India's manufacturing capabilities in Technical Textiles sector, but also helps in capturing substantial share in global trade and providing impetus to the "Atmanirbhar Bharat" & "Make In India" initiative by focusing on import substitution.

In order to capitalize on market opportunities, India needs to focus on capital investments, skill upgradation, technology transfer as well as development of innovative products, process and applications on regular basis.

I believes the NTTM Newsletter will prove to be a unique platform in that direction, for innovative solutions, identification of new business opportunities and creating of congenial environment for growth of Technical Textiles sector.

Government of India has ambitious plans and programmes to develop India as one of the leading centres of technical textiles globally and set up a robust manufacturing base in India. I foresee NTTM newsletter as a concerted effort in that direction.

I wish the team all the success in their endeavour.

Darshana Jardosh
(DARSHANA JARDOSH)

From Secretary's Corner



Shri U P Singh

With the commencement of functioning of a separate Mission Directorate from October 2021, we have been making good progress in taking the National Technical

Textiles Mission forward. A dedicated team is now in place to look after various aspects of the Mission. The level of involvement with stakeholders have substantially improved. The international level conference on Technical Textiles held in March 2022 has generated good amount of interest, enthusiasm and awareness in the latest development in the field and regular conferences/seminars are being planned in future. The long-awaited Baseline Study and Survey has now been published, depicting an overall position of the Technical Textiles in India including the parameters and metrics to go forward further.

We will shortly call for Expression of Interest from Higher Educational Institutes for their capacity enhancement towards strengthening Technical Textiles academic activities in the country. Along with, we will also activate the institutional mechanism for fast-track disposal of the pending research proposals. A special outreach programme has been undergoing on disseminating information regarding expanding the scope of Technical Textiles research amongst premier technical institutes in the country. So far, 22 institutes with 120+ participation have been covered and interaction with more institutes will be taken up in the coming days.

The newsletter is an attempt to disseminate activities and generate higher awareness

amongst stakeholders and beneficiaries. I wish it all the success.

Preface

Technical Textiles sector has emerged as one of driving sunrise sector for India. The segment holds tremendous opportunities for India, both in domestic and international market.

In this sunrise sector of technology, India has already placed itself well by being the 5th largest market with USD 20 Billion size and an annual average growth rate of 8%. With rapid industrialization, fast growth in infrastructure, increasing automobile production, rising demand from healthcare sector, increasing interest towards sports and fitness activities, healthy awareness towards personal hygiene and sanitation; the growth of Technical Textiles in India is expected to remain sustained level for next decade, at least.

The sector holds tremendous opportunities across various flagship missions and schemes of the Government of India including Jal Jivan Mission, Mission for Integrated Developed of Horticulture, National Health Mission, National Investment Pipeline and Strategic Sectors such as Defence, Space and Paramilitary.

Through consistent efforts and engagements, India's market and penetration of technical textiles is envisioned to grow strongly in the coming years. Going forward, NTTM is going to be instrumental in this effort.

Shri Rajeev Saxena
Mission Coordinator
National Technical Textiles Mission

NTTM in the news

- **Govt clears 20 strategic projects under National Technical Textiles Mission:** The textiles ministry on Monday cleared 20 strategic projects worth Rs 30 crore in the areas of specialty fibres and geo-textiles under the National Technical Textiles Mission.

The projects were approved at a meeting chaired by Textiles Minister Piyush Goyal. The 16 projects of specialty fibres approved include five in healthcare, four in industrial and protective, three projects each in energy storage and textile waste recycling, and one project in agriculture, apart from four projects in geo-textiles (infrastructure). [Read More](#)

- **Ministry of Textiles organizes International Conference on Technical Textiles:** Minister of State of Textiles Darshana Jardosh has said, technical textiles has enormous scope to grow and capture the global market with the backing of National Technical Textiles Mission, Production Linked Incentive Scheme and PM MITRA schemes.



The Ministry of Textiles in partnership with Confederation of Indian Industries organized an International Conference on Technical Textiles with the theme-Creating the Winning Leap in Technical Textiles. [Read More](#)

NTTM inviting High-value Strategic Research Projects: Ministry of Textiles, under the National Technical Textiles (NTTM), is inviting proposals for Research Projects from reputed government institutes and research organizations. [Read More](#)

- **NTTM conducted a session on Broadening application areas of Geotextiles with User ministries and Manufacturers on 24th March 2022:** A meeting was chaired by Hon'ble Minister of Textiles on enhancing the penetration of Geotextiles in India by identifying infrastructural & policy bottlenecks and recommending mitigating measures.
- **Skill Development and Training Course on Applications of Geosynthetics in Infrastructure Projects:** The pilot project on skilling of design/commissioning technical personnel associated with application of geotextiles in infrastructure projects (roads, highways, railways, water resources) was launched by the Ministry of Textiles under NTTM. It was conducted concurrently by Indian Institute of Sciences Bangalore, Indian Institute of Technology (IIT) Madras; and IIT Roorkee. [Read More](#)

Global News

- **Technical Textile Market is valued at approximately USD 164.6 Billion in 2020 and is anticipated to grow with a healthy growth rate of more than 6.2% over the forecast period 2021-2027.** [Read More](#)
- **Gurit strengthens its position in the wind-energy market:** Gurit has divested its aerospace business and has acquired a 60% share of Fiberline Composites A/S, which manufactures pultruded carbon and glass fibre-reinforced products for use in the production. [Read More](#)
- **Technical Fibre Products shows latest developments at JEC World:** Lightweight polyimide and basalt veils for high-temperature applications, and nonwovens that are made from recycled carbon fibres, are to be launched by Technical Fibre Products (TFP). [Read More](#)
- **PFNonwovens invests in US nonwovens line:** PFNonwovens has commissioned a

line for the production of high-loft, soft and textured nonwovens at its facility in Hazleton, Pennsylvania, USA. [Read More](#)

- **Klopman looks to recycle workwear:** European producer of fabrics for workwear, Klopman International, plans to establish agreements with its customers through which it will receive and recycle their end-of-life garments. [Read More](#)
- **Lightweight nonwoven is made from recycled carbon fibres:** A nonwoven that is made from recycled carbon fibre and has an areal density of 60 g.m⁻² will be launched by Gen 2 Carbon at JEC World. [Read More](#)
- **AstenJohnson to build nonwovens plant in Texas:** A plant for the production of needle punched nonwovens is to be built in Waco, Texas, USA, by AstenJohnson. [Read More](#)
- **Effective crop protection from Plant Armor:** Spacer fabrics that create an effective barrier to even small insects as they try to reach a plant – reducing the need for insecticides – are being developed by researchers at North Carolina State. [Read More](#)
- **Avient enters into agreement to buy DSM Protective Materials:** Avient Corp is to purchase DSM Protective Materials (including the Dyneema brand of ultra-high-molecular-weight polyethylene (UHMWPE) fibre products) from Royal DSM for US\$1.485 billion. [Read More](#)
- **Collect-and-recycle scheme gives second life to face masks:** A scheme through which used face masks are collected, recycled and the resulting material employed to manufacture such as oil-absorption fabrics has been launched by Grabher. [Read More](#)
- **Partnership to develop flax-fibre non-crimp fabrics:** Manufacturer of reinforcement for composites, Saertex, and supplier of flax fibres, Terre de Lin, have

entered into a partnership to produce flax-based non-crimp fabrics for the marine, and sports. [Read More](#)

India Updates

- **India aims to raise exports of technical textiles from \$2 bn to \$10 bn in 3 years:** Union commerce and textiles minister Piyush Goyal on Friday said the time has come to target five times increase in export of technical textiles to \$10 billion in three years, an official statement said. [Read More](#)
- **GNDU to train students in field of technical textiles:** GNDU Department of Apparel and Textile Technology Head Prof Sukhprit Singh said technical textiles are a futuristic and attractive segment of textiles that are used for a variety of applications ranging from agriculture (to improve crop yield and quality), roads (to increase the life of road), sportswear (to improve the comfort of sportspersons) etc. [Read More](#)
- **Government Considering Setting Up of a Separate Council for Technical Textiles:** Darshana Jardosh at CMAI FAB Show Inauguration [Read More](#)
- **Road to recovery- Textile industry pegged to grow 300% over next 2 years despite COVID impact, says report:** Government initiatives to bolster the sector have raised hopes of the sector growing to \$300 billion by 2025-26, a growth of 300% in the next 2 years, according to a report by ratings firm Infomerics Valuation and Rating. [Read More](#)
- **Now is the time to maximize investments in textile industry:** Minister of State for Textiles Darshana Vikram Jardosh said that it is the right time to maximise investment, employment, and women's participation in the textiles industry. [Read More](#)
- **The Next Textile Sector Unicorn Should Come from The Institute Of Chemical**

Technology, Says Piyush Goyal: Addressing the e-Summit 2022 of the Institute of Chemical Technology, Mumbai on Atmanirbhar Renaissance, he called upon the ICT students to take the leadership in Tex-preneurship, the Textiles sector entrepreneurship. [Read More](#)

- **Focus on sustainable technologies for technical textiles from more than 40 member companies:** In the run-up to Techtexsil, taking place from June 21-24 in Frankfurt, nine exhibiting VDMA textile machinery division member companies presented their highlights for the technical textiles market, with an emphasis on sustainable production, in a special webinar. [Read More](#)
- **Technical Textiles Market to Surge in the Coming Years Owing to Growing Adoption Across End-use Industries:** [Read More](#)

Technological advancements

- **Dry-powder-impregnated flax tapes:** Dry-powder-impregnated flax tapes are to be developed for the production of composites by manufacturer of natural-fibre reinforcements, Depestele Group, and Fibroline. [Read More](#)
- **Scalable methods for the manufacture of energy-harvesting textiles:** Methods commonly used in the textiles industry, such as yarn-coating, dip-coating and screen-printing, are being used by researchers in the UK and Sri Lanka to produce energy-harvesting textiles. [Read More](#)
- **Thermoplastic sidewall for aircraft interiors is reinforced with recycled carbon fibre:** The feasibility of using recycled carbon fibre (rCF) for the production of aircraft sidewall panels for the cabins of aircraft is being examined by Boeing, Mitsubishi Chemical Advanced Materials. [Read More](#)

- **Biteam spins-off manufacturer of woven gusset-fillers:** A company that specialises in the production of three-dimensionally (3D) woven gusset fillers (so-called noodles) has been established by Biteam AB of Stockholm, Sweden. [Read More](#)
- **Shima Seiki to show latest innovations at JEC World:** A compact computer numerical control (CNC) cutting machine and a prototype weft-knitting machine capable of multiaxial yarn insertion are to be showcased by Shima Seiki of Wakayama, Japan. [Read More](#)
- **Creating iridescent designs on textiles using nanocellulose:** Nanocellulose is being used to produce items of clothing with iridescent features that resemble the rainbow-hued shimmer seen on fish scales, bird feathers and insect bodies by researchers at North. [Read More](#)
- **Separating blended textiles using enzymes:** Researchers in the USA are working to determine whether microbial communities in anaerobic digesters (ADs) can be used to separate the cellulose and polyester (PES) elements in blended fabrics. [Read More](#)
- **Award for developer of parachute fabric for the Perseverance Rover:** Heathcoat Fabrics of Tiverton, UK, has been recognised with a Queen's Award for Enterprise for its development of a high-performance parachute fabric. [Read More](#)
- **Polyethylene fabric provides continuous cooling effect:** A T-shirt made from a polyethylene (PE) fabric that is transparent to infrared (IR) radiation – thereby keeping its wearer cooler than they would be wearing cotton clothing – has been launched. [Read More](#)
- **Polyester staple nanofibre for the efficient reinforcement of rubber:** A polyester (PES) staple nanofibre for the reinforcement of rubber products such as

tyres, hoses and belts are to be launched by Teijin Frontier Co Ltd of Osaka, Japan. [Read More](#)

Articles on Technical Textiles

- **Technical Textiles: The Future of Textiles:** By Ankita Sharma, Remya Lakshmanan & Mishika Nayyar

“India’s strengths have already been defined in traditional textiles and natural fibres globally. It is the second largest producer of polyester in the world and is now emerging as a key player in technical textiles industry contributing to a market size of \$ 19 Bn.”

[Read More](#)

- **India To Grow Faster In Technical Textiles:** By Kunwar Venkateshwar Singh

“Technical textile is the emerging area for investment in India. Though India is the 2nd largest textile economy in the world after China, its contribution in the global technical textile industry is insignificant. The market size of technical textiles was estimated to have a volume of 16.71 mn. tonnes with a value of US\$ 92.88 bn. and is expected to be 23.77 mn. tonnes with a value of US\$ 127 bn. by the year 2010. Technical textiles account for over 25 percent of all fibre consumed and almost 50 percent of the total textile activity in certain industrialized countries. Even in China technical textiles accounted for 20 percent of the total textile consumption in the year 2000. However, in India the consumption of technical textiles is insignificant.” [Read More](#)

- **Growth And Development Of Technical Textiles In India: A Comparative Analysis Of Tenth And Eleventh Five Year Plan:** By Dr. Asiya Chaudhary and Ms. Nazneen Shahid

“The paper examines the growth and development of the Technical Textile industry in India covering a decade from

2002 to 2012. Further, the researchers compare the eleventh five-year plan period performance of the Indian Technical Textile Industry with tenth five year plan period performance in order to know the progress over the years. The growth and development of the industry is measured in terms of production, export and import.” [Read More](#)

- **Technical Textiles: Emerging Opportunities and Investments:** By KPMG & FICCI

“India is emerging as key investment centric economy in the global technical textile market, with multifold growth potential, especially in high-growth sub-segments.”

[Read More](#)

Forthcoming Events

June 2022

- World of Wipes, 27–30 June 2022; Chicago, Illinois, USA
- Future Fabrics Expo, 28–29 June 2022; London, UK

July 2022

- Nanotechnology, 2–9 July 2022; Thessaloniki, Greece
- Clean Show, 30 July–2 August 2022; Atlanta, Georgia, USA

August 2022

- Feiplar Composites & Feipur, 16–18 August 2022; São Paulo, Brazil
- Intertextile Shanghai Apparel Fabrics, 29–31 August 2022; Shanghai, China
- Intertextile Shanghai Home Textiles, 29–31 August 2022; Shanghai, China
- Yarn Expo, 29–31 August 2022; Shanghai, China

September 2022

- European Geosynthetics, 4–7 September 2022; Warsaw, Poland
- CINTE Techtexil China, 6–8 September 2022; Shanghai, China
- Fibre-Reinforced Polymer Composites in Construction, 6–8 September 2022; Southampton, UK
- Nonwovens Introduction, 13 September 2022; Online
- Dornbirn Global Fiber Congress, 14–16 September 2022; Dornbirn, Austria
- International Textile Manufacturers Federation (ITMF) Annual Conference, 18–20 September 2022; Davos, Switzerland
- InnoTrans, 20–23 September 2022; Berlin, Germany
- International Composites Summit, 21–22 September 2022; London, UK
- Circular Nonwovens Forum, 22 September 2022; Brussels, Belgium and online
- 11th International Textile Coating & Laminating Congress, 22–23 September 2022; Ghent, Belgium
- FESPA Mexico, 22–24 September 2022; Mexico City, Mexico
- Nonwovens Intermediate Course, 27–29 September 2022; Brussels, Belgium
- Innovate: Textile Innovation, 28–29 September 2022; Amsterdam, The Netherlands and online

October 2022

- Textile Discovery Summit, 4–6 October 2022; Charlotte, North Carolina, USA
- The Global Digital Textile Conference, 5–6 October 2022; Como, Italy and online
- World Filtration Congress, 5–9 October 2022; San Diego, California, USA

- Turk Kompozit, 6–8 October 2022; Istanbul, Turkey
- IFAI Expo, 12 October 2022; Charlotte, North Carolina, USA
- Aachen Reinforced, 17–19 October 2022; Aachen, Germany
- Absorbent Hygiene Products, 24–27 October 2022; Online

November 2022

- Filtrex, 8–9 November 2022; Berlin, Germany
- Railway Interior Innovation Summit, 8–9 November 2022; Frankfurt am Main, Germany
- Hygienix, 14–17 November 2022; New Orleans, Louisiana, USA
- Space Tech Expo Europe, 15–17 November 2022; Bremen, Germany
- Filtrex Asia, 16–17 November 2022; Shanghai, China
- Expo Producción, 16–18 November 2022; Mexico City, Mexico
- ITMA Asia + CITME, 20–24 November 2022; Shanghai, China
- ISPO Munich, 28–30 November 2022; Munich, Germany

December 2022

- Aachen-Dresden-Denkendorf International Textile Conference, 1–2 December 2022; Aachen, Germany
- International Textile Machinery Exhibition (ITME), 8–13 December 2022; Greater Noida, India



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