Frequently Asked Questions (FAQs) on Technical Textiles

1. **Q: What is Technical Textiles?**
   
   **Ans:** Technical textiles are defined as textile materials and products used primarily for their technical performance and functional properties rather than their aesthetic or decorative characteristics. Other terms used for defining technical textiles include industrial textiles, functional textiles, performance textiles, engineering textiles, invisible textiles and hi-tech textiles.

2. **Q: How the technical textiles are being used?**
   
   **Ans:** Technical textiles are used individually or as a component/part of another product. Technical textiles are used individually to satisfy specific functions such as fire retardant fabric for uniforms of firemen and coated fabric to be used as awnings. As a component or part of another product, they are used to enhance the strength, performance or other functional properties of that product as done by the tyre cord fabrics in tyres and interlining in shirt collars. They are also used as accessories in processes to manufacture other products like filter fabric in food industry or paper maker felt in paper mills.

3. **Q: What are examples of technical textiles usage in day to day life?**
   
   **Ans:**
   
   Some examples of day-to-day use of technical textile products

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Applications</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kitchen</td>
<td>Wipes, Floor Mops, Tea Bags, Coffee Filters</td>
</tr>
<tr>
<td>2</td>
<td>Cloth</td>
<td>Collar / Cuff Interlinings, Shoulder Pads, Waddings in Jackets</td>
</tr>
<tr>
<td>3</td>
<td>Shoe</td>
<td>Lining, Insoles, Toe Stiffners, Synthetic Uppers</td>
</tr>
<tr>
<td>4</td>
<td>Car</td>
<td>Carpets, Roof-liners, Insulations, Air Filters</td>
</tr>
<tr>
<td>5</td>
<td>Civil Engineering</td>
<td>Geotextiles in Roads, Railway Tracks, Soil Erosion, Slope Stabilisation</td>
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<tr>
<td>6</td>
<td>Furnishing</td>
<td>Carpets, Vertical Blinds, Wall Coverings</td>
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<tr>
<td>7</td>
<td>Factory</td>
<td>Dust Collection Filter Bags, Liquid Filtration, Clean Air Filters of AC systems</td>
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<tr>
<td>8</td>
<td>Hospital</td>
<td>Masks, Gowns, Caps, Dressing, Bandage</td>
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<tr>
<td>9</td>
<td>Hygiene</td>
<td>Baby Diaper, Sanitary Napkin, Wet Tissues</td>
</tr>
<tr>
<td>10</td>
<td>Bed</td>
<td>Blanket, Quilts, Mattresses</td>
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</table>

4. **Q: How the technical textiles are being classified?**
   
   **Ans:** Depending on the product characteristics, functional requirements and end-use applications the highly diversified range of technical textile products have been classified into 12 segments.
5. **Q: What are the different segments in technical textiles?**

   **Ans:**
   
i. Agrotech (Agriculture, horticulture and forestry)
   
   ii. Buildtech (building and construction)
   
   iii. Clothtech (technical components of shoes and clothing)
   
   iv. Geotech (geotextiles, civil engineering)
   
   v. Hometech (components of furniture, household textiles and floor coverings)
   
   vi. Indutech (filtration, cleaning and other industrial usage)
   
   vii. Meditech (hygiene and medical)
   
   viii. Mobiltech (automobiles, shipping, railways and aerospace)
   
   ix. Oekotech (environmental protection)
   
   x. Packtech (packaging)
   
   xi. Protech (personal and property protection)
   
   xii. Sporttech (sport and leisure)

6. **Q: What is the Global market size of Technical Textile?**

   **Ans:** The Global market size of technical textiles for the year 2007 is US$ 114,630 mn and it is expected to increase to US $ 127,288 mn by 2010. (Source: DRA)

7. **Q: What is the Domestic market size of Technical Textile?**

   **Ans:** As per the estimates by the sub-group on technical textiles for XII Five Year Plan, technical textile market size is expected to grow at CAGR of 20% from Rs. 70,151 crore during the year 2012-13 to reach Rs. 1, 58,540 crores by the year 2016-17.

8. **Q: Is there any survey/report officially available pertaining to technical textile industry?**

   **Ans:** Yes,

   (i) “Report of the Expert Committee on Technical Textiles” Volume-I & II, Volume-I provides various detailed information on Overview of the technical textile industry with particular reference to global scenario, status of the domestic technical textile industry, major technical textile items, Raw materials of technical textiles, Non-woven sector of technical textiles, Policy suggestions for promotion of technical textiles etc., while Volume-II provides various Project profiles made on Technical textile products.

   (ii) The report on “Baseline survey of technical textile industry in India 2009” provides latest details on technical textiles viz, Domestic scenario and segment-wise consumption in India,
Non-woven sector of technical textiles, Competitive assessment of India vis-à-vis other countries, Raw materials for technical textiles, Products selected for focused attention, Technical textiles machinery, etc.

(iii) Studies on “Regulatory measures to promote usage of Geotech in India” and “Regulatory measures to promote the usage of Agrotech in India” were carried out.

The reports are available at [www.technotex.gov.in](http://www.technotex.gov.in)

9. **Q:** What are Schemes / benefits available for technical textile industry?

**Ans:**

**A. Technology Mission on Technical Textiles (TMTT):**

Technology Mission on Technical Textiles (TMTT) has been launched with two mini missions starting from 2010-11 to 2014-15 with a financial outlay of Rs. 200 crore. The objective of the mission is to remove the impediments hampering the production of technical textiles in the country to meet growing demand in the domestic and export market. The details are given below:

**Mini Mission I of TMTT**

(a). Setting up of four Centers of Excellence (COEs).

Four new COEs are being set up for Nonwovens, Composites, Indutech and Sportech to provide infrastructure support at one place for the convenience of manufacturers of technical textiles of these segments. The new Centre of Excellence are:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of agencies</th>
<th>Area of Centre of Excellence</th>
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<tbody>
<tr>
<td>i.</td>
<td>DKTE Society’s Textile and Engineering Institute, Ichalkaranji, Maharashtra</td>
<td>Non-Wovens</td>
</tr>
<tr>
<td>ii.</td>
<td>PSG College of Technology, Coimbatore, Tamil Nadu</td>
<td>Indutech</td>
</tr>
<tr>
<td>iii.</td>
<td>Ahmedabad Textile Industry’s Research Association (ATIRA), Ahmadabad, Gujarat.</td>
<td>Composites</td>
</tr>
<tr>
<td>iv.</td>
<td>Wool Research Association (WRA), Thane</td>
<td>Sportech</td>
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</table>

The COEs are creating following facilities for providing assistance to the industry to facilitate investment in this sector:

1. Facilities for testing and evaluation of products of identified segments of technical textiles with national / international accreditation and collaboration with foreign institutes / laboratories
2. Resource Centre with I.T. infrastructure
3. Facilities for indigenous development of prototypes
4. Facilities for training of core personnel and regular training of personnel from the technical textile industry
5. Knowledge sharing with stakeholders
6. Incubation Centre
7. Setting up of standards at par with global level

(b). Upgradation of existing four Centers of Excellence
Existing four COEs namely The Bombay Textile Research Association (BTRA), Mumbai for Geotech, South India Textile Research Association (SITRA), Coimbatore for Meditech, Northern India Textile Research Association (NITRA), Ghaziabad for protech & Synthetic & Art Silk Mills Research Association (SASMIRA), Mumbai for Agrotech are being upgraded in terms of development of incubation centre and support for development of prototypes.

Mini Mission II of TMTT

a. Support for business start-up
Technical Textiles is a new area and entrepreneurs find it difficult to invest in this field due to lack of knowledge about technology, raw material, process etc. Therefore, support for ‘business start-up’ has been provided for SME sector. The COE and other associations / institutes / independent reputed consultants are being empanelled who will prepare project reports and do the hand holding of the potential entrepreneurs till the completion of the projects, which will be eligible for service fee of 2% of the project cost for domestic projects and 3% of the project cost for FDI projects. The upper ceiling will be Rs. 5.00 lakhs for domestic projects and Rs. 6.00 lakhs for FDI projects. Six consultants have already been empanelled for Business Start-up under Technology Mission on Technical Textiles (TMTT).

Available Consultants for Business Start-up under Mini Mission - II of Technology Mission on Technical Textiles (TMTT):

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name &amp; Address of the Consultant</th>
<th>e-mail ID</th>
<th>Contact Nos.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shri Ravishankar G M/s. K's Technical &amp; Management Consultants, B2, Sandalwood Apartments 22, Pratappunj Area Opp. Rosary School P O Box No. 2083, Fatchgunj P.O. Vadodara 390002, Gujarat.</td>
<td><a href="mailto:techtex@gmail.com">techtex@gmail.com</a></td>
<td>+91 265 2782245 +91 9825244940</td>
</tr>
<tr>
<td>2</td>
<td>Mr. Amit Gugnani M/s. Technopak Advisors Pvt Ltd, 4th Floor, Tower A, DLF Building 8, DLF Cyber City, Phase - II Gurgaon - 122 002.</td>
<td><a href="mailto:amit.gugnani@technopak.com">amit.gugnani@technopak.com</a></td>
<td>+91 124 4541111 +91 9871755992</td>
</tr>
<tr>
<td>3</td>
<td>Shri A B Telasang M/s. Gherzi Eastern Ltd. Wing A, Raheja Point I, Pt. Jawaharlal Nehru Road,</td>
<td><a href="mailto:a.telsang@gherzieastern.com">a.telsang@gherzieastern.com</a></td>
<td>+91 22 67.339400 +91 9867770037</td>
</tr>
</tbody>
</table>
b. Providing fund support for organizing workshops.

Technical Textiles are still at nascent stage and its awareness level is very low. Hence awareness programmes/workshops/training programmes are being carried out.

c. Social compliance through standardization, regulatory measures

Some of the technical textile products required mandatory prescriptions for their use. Consultants are being engaged to identify the needed regulatory changes required along with international best practices and also the strategy to facilitate such changes in the Indian rules and regulations.

d. Market development Support for sale to the institutional buyers

Buyers-sellers meet are being organized wherein the indigenous manufacturers can showcase their products and institutional buyers will be invited. Seminars are also organized in these meets wherein the institutional buyers provide the information regarding the technical specifications and other quality parameters which are required for meeting their needs.

e. Market development Support for export sales

There are many reputed technical textile fairs organized abroad like TECHTEXTIL and Industrial Fabrics Exhibition, Index etc., the participation in these fairs will improve the export potential of the indigenous manufacturers. Fund support for participation in identified reputed technical textile fairs / application based fairs to the extent of 50% with a financial cap
recommended at Rs. 5.00 lakhs per visit for the participation of two persons per visit is being provided.

f. Fund support for Contract Research and Development through IITs/TRAs/Textile Institutes

Technical Textiles is high technology area where most of the high-end products are imported, there is strong need for indigenous development of products for which R&D is of prime importance. Therefore, contract research is covered under this head. Idea and detailed work plan submitted by entrepreneur and collaborating institute after peer review is being considered for grant. Contract research has to be carried out at one of the govt. approved research centers. The grant under the scheme is up to 60 percent excluding cost of land and building subject to ceiling recommended as Rs. 20.00 lakhs per project.

The complete scheme guidelines of TMTT is available at [www.technotex.gov.in](http://www.technotex.gov.in)

12th five year plan schemes:

B. Scheme for usage of Agrotextiles in North-Eastern Region:

Ministry of Textiles, Government of India has approved a Scheme for Usage of Agrotextiles in North-Eastern Region in the 12th five year plan with an outlay of Rs. 55 crore. The scheme was approved during December 2012 and operationalised during June 2013. The aim is to encourage utilization of Agrotextiles in improving the Agriculture, horticulture and floricultural produce of the N-E states through awareness programmes, Development of Agrotextile products suitably customized for use in the North-Eastern region, Creating demonstration set-up depicting the benefit of usage of Agrotextile products suitable for the region, Further under the scheme Agrotextile-Kits will be provided to farmers containing the Agrotextile material, instructions, right methods and practices when using Agrotextile products etc.

With increasing acceptability of Agrotextiles, entrepreneurs are expected to set up Agrotextiles production units in the country and particularly in NE Region. The Scheme is at initial stage.

The complete scheme guidelines is available at [www.technotex.gov.in](http://www.technotex.gov.in)

C. Technology Upgradation Fund Scheme (TUFS)

Major technical textile manufacturing machineries have been covered under Revised Restructured Technology Upgradation Fund Scheme (RRTUFS) eligible for 5% interest reimbursement. Further specified machinery for technical textile has also been made eligible for 10% capital subsidy in addition to 5% interest reimbursement. The details of the list of eligible machines are given at Annex- MC-6 & MC 13 of GR on RRTUFS.

D. Concessional Customs Duty

Major machinery for manufacture of technical textiles has been placed under the concessional basic customs duty list of 5%. The details is available at [www.technotex.gov.in](http://www.technotex.gov.in)
10. **Q**: What is Centres of Excellence (COEs) and how many COEs have been established so far?

**Ans:** In order to provide infrastructure support at one place for thrust areas of the technical textiles, govt. is in the process of setting up of eight centres of excellence. The eight centres of excellence are:

<table>
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<th>Area of Centre of Excellence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The Bombay Textile Research Association (BTRA) &amp; Ahmedabad Textile Industry's Research Association (ATIRA) with BTRA as lead partner.</td>
<td>Geotech</td>
</tr>
<tr>
<td>2.</td>
<td>Synthetic &amp; Art Silk Mills Research Association (SASMIRA) &amp; Man-made Textile Research Association (MANTRA) &amp; Navsari Agriculture University with Indian Institute of Technology (IIT), Delhi as knowledge partner with SASMIRA as lead partner.</td>
<td>Agrotech</td>
</tr>
<tr>
<td>3.</td>
<td>Northern India Textile Research Association (NITRA) &amp; Indian Institute of Technology (IIT), Delhi with NITRA as lead partner.</td>
<td>Protech</td>
</tr>
<tr>
<td>4.</td>
<td>South India Textile Research Association (SITRA) and AC College of Technology with SITRA as lead partner.</td>
<td>Meditech</td>
</tr>
<tr>
<td>5.</td>
<td>DKTE Society’s Textile and Engineering Institute, Ichalkaranji, Maharashtra</td>
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The above eight Centres of Excellence is being established as one-stop shop for needs of their respective market segments.

To know more about each Centers of Excellence (COEs) and their available services / facilities / resource centers etc. kindly go to the respective links provided in our website: [www.technotex.gov.in](http://www.technotex.gov.in)

11. **Q**: What are facilities available at COEs?

**Ans:** The COEs are creating following facilities for providing assistance to the industry to facilitate investment in this sector:

i. Facilities for testing and evaluation of products of identified segments of technical textiles with national / international accreditation and collaboration with foreign institutes / laboratories

ii. Resource Centre with I.T. infrastructure
iii. Facilities for indigenous development of prototypes
iv. Facilities for training of core personnel and regular training of personnel from the technical textile industry
v. Knowledge sharing with stakeholders
vi. Incubation Centre
vii. Setting up of standards at par with global level

12. **Q: Is there any Compendium on COEs available?**

**Ans:** Yes, there is a compendium on COEs. The compendium covers snapshots of COEs, status of established COEs and new COEs. The compendium is available in our website www.technotex.gov.in

13. **Q: Is there any Compendium on Standards for technical textile available?**

**Ans:** Yes, there is a compendium on Standards. The compendium covers necessity of standards for technical textiles, existing standards, standards committees etc. The compendium is available in our website www.technotex.gov.in

14. **Q: Is there any Committee on Standards for technical textile available?**

**Ans:** Yes, there are eight Committees on Standards, one each at all Centres of Excellence (COEs) COEs level i.e. COE: Agrotech, Geotech, Protech, Meditech, Indutech, Sportech, Composites and Nonwovens. There is also a monitoring committee on standards for monitoring the formulation of standards by Committees at COEs level and also notification of draft standards by BIS.

15. **Q: Is it mandatory to register Technical Textile unit to avail 10% Capital subsidy under TUFS?**

**Ans:** Yes. To avail 10% Capital Subsidy in addition to 5% Interest reimbursement under TUFS for Technical Textile units, it is mandatory for registering the unit with this office as per GR on TUFS.

16. **Q: What is procedure to obtain Registration from Office of the Textile Commissioner for Technical Textile Unit?**

**Ans:** The technical textile unit has to send a filled in TFR-I format (format is given in the GR on RRTUFS) to obtain registration to this office which will be examined and eligible units will be
provided Registration Number. The scanned copy of Registration letter will also be placed in our website www.technotex.gov.in

17. **Q: Who are the Manufacturers of Technical Textiles in India?**

**Ans:** There are 1209 units manufacturing technical textiles in India. The list of Manufacturers along with, Company Name & Address, Type of the unit, Product produced, Product (capacity) is available at our website: www.technotex.gov.in

18. **Q: Who are the Technical Textile Machinery Manufacturers?**

**Ans:** Some of the Technical Textile Machinery Manufacturers viz, Non Woven line, Multi phase weaving machine, etc are available in our website: www.technotex.gov.in.

19. **Q: Who are the Exporters of Technical Textiles in India?**

**Ans:** There are 680 technical textiles exporters in India. The list of exporters alongwith contact details, export segment & Product exported are available in our website: www.technotex.gov.in

20. **Q: What are the details of Importers of Technical Textiles in India?**

**Ans:** There are 369 technical textiles importers in India. The list of importers along with contact details & Product imported is available in our website: www.technotex.gov.in

21. **Q: Is there any presentations on Technical Textiles are available?**

**Ans:** Yes. Some of the presentations like Advancement of Medical Nonwovens, Hospital requirements from Medical Textile Industry, Opportunities for Nonwoven products in Medical Textiles, Presentation on Geosynthetics by CRRI, etc which are presented in the Seminars/Conferences/ Training workshop on technical textiles are available in our website: www.technotex.gov.in

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