KPMG

FICCI

Technical textiles: Growth engine of Indian textiles sector

8th INTERNATIONAL EXHIBITION & CONFERENCE ON TECHNICAL TEXTILES
TECHNOTEX-2019
August 29-31, 2019
Bombay Exhibition Centre, Mumbai

August 2019

home.kpmg/in



Technical Textiles - Growth Engine of Indian Textiles Sector_Print file_28 August.indd 2 8/28/2019 1:45:10 PM

Foreword - Ministry of Textiles



Smt. Smriti Zubin Irani
Hon'ble Minister of Textiles,
Ministry of Textiles,
Government of India

स्मृति जूबिन इरानी
Smriti Zubin Irani

सत्यमेव जयते

मंत्री
महिला एवं बाल विकास और वस्त्र
भारत सरकार
नई दिल्ली
Minister
Women & Child Development and Textiles
Government of India
New Delhi

MESSAGE

I am glad to learn that the Eighth Edition of TECHNOTEX India 2019, is being organized by FICCI with support from the Ministry of Textiles from 29th to 31st August 2019. I welcome all the stakeholders from across the global technical textile value chain to this three day international Exhibition-cum-Conference on Technical Textiles. TECHNOTEX would prove to be a unique platform for innovative solutions, identification of new business opportunities and creation of a congenial environment for growth of technical textile sector.

Government of India has identified technical textiles as a strategic sector and high level interventions have been made to promote the growth of this sector in India. To provide separate identity and status to this sector, 207 HS Codes have been notified by GoI as technical textiles products. We are committed to work further in this direction for growth of the industry and trade in this segment.

Government is in the process of ensuring mandatory use of key technical textiles items to promote their application in safety, health, environment and other purposes and thereby giving a boost to technical textiles market in India. There are many more initiatives in the offing that would give desired push to the growth of this sector.

I am sure TECHNOTEX would play an instrumental role in realising the true potential of this sector in India.

I wish the programme all the very best!

(SMRITI ZUBIN IRANI)

Ministry of Women & Child Development : Room No. 353, 'A' Wing, Shastri Bhawan, Dr. Rajendra Prasad Road, New Delhi-110 011, Phone : 23074052-54, Fax: 23387384
Ministry of Textiles : Room No. 129, 'D' Wing, Udyog Bhawan, New Delhi-110011, Phone : 23061385, 23063779, Fax : 23061575

Foreword - Ministry of Textiles



Sh. Ravi Capoor
Secretary,
Ministry of Textiles,
Government of India

रवि कपूर, भा.प्र.से.
सचिव
Ravi Capoor, IAS
Secretary

सत्यमेव जयते

भारत सरकार
वस्त्र मंत्रालय
उद्योग भवन, नई दिल्ली - 110 011
GOVERNMENT OF INDIA
MINISTRY OF TEXTILES
UDYOG BHAWAN, NEW DELHI - 110 011

MESSAGE

Technical textile has been a promising area for Indian Industry. The sector has wide number of applications including some in very strategic sectors.

Ministry of Textiles and FICCI have been jointly organizing TECHNOTEX for the last many years and happy to see that the 08th edition of TECHNOTEX an International Exhibition-cum-Conference on Technical Textiles which is scheduled from 29th to 31st August, 2019 in Mumbai is going to be of much larger in scale over its previous editions.

India has a lot of ground to cover in technical textiles and I am happy to share that Government is giving thrust to this sector at the highest level. Currently, the per capita consumption of technical textiles is estimated to be just one sixth of the global average. Our vision is that the sector will contribute immensely to the dream of New India of our Hon'ble Prime Minister where we are looking at better quality and ease of living for our people.

The Government is working on to bring in series of measures for technical textiles that would facilitate the segment to rise to next level. A series of important path breaking measures have already been initiated and many important steps are planned for implementation in near future. In addition, the Government is planning to encourage research and innovation in the high end of technical textiles segment and also encourage investment.

I wish organizers all the very best.

(Ravi Capoor)

Dated: 27th August, 2019

Tel. : +91-11-23061769, +91-11-23063644 Fax : +91-11-23063681 E-mail : secy-textiles@nic.in

Foreword - FICCI

At the very outset, I would like to thank Ministry of Textiles for jointly organizing the eighth edition of TECHNOTEX 2019 with FICCI, which is much bigger in size and scale than its previous editions.

Technical Textiles is set to play a crucial role in the creation of New India given their wide applications across multiple end-use industries such as automobile, construction, infrastructure, healthcare, aviation, defence, etc.

Government notified separate HS Codes for 207 technical textiles items in January 2019 which was a long pending demand of the industry. This is the most promising time for the sector in India as government at the highest level is deeply engaged to devise policies that would boost it. The technical textile industry is expected to reach Rs 2 lakh crore by 2020-21 from the current size of Rs 1.16 lakh crore with such enabling measures.

The sector has the potential to contribute significantly to the Hon'ble Prime Minister's vision to become a USD 5 trillion economy in the next few years and I am hopeful that as we move closer to achieve this milestone, the technical textiles sector would also grow accordingly.

Ministry of Textiles' concerted efforts to skill the labour force in textiles and technical textiles value chain under SAMARTH, formulating regulations for mandatory usage and standardisation will act as a catalyst to achieve the desired targets. Going forward, we are hopeful that exports will also drive its growth.

I congratulate KPMG India for bringing out this report with FICCI, highlighting current market scenario in the Technical Textile sector in India and the recommendations for policy interventions.



Dilip Chenoy
Secretary General
FICCI

Foreword - KPMG in India

Technical textile is a sub-set of the much larger textile sector, and has started gaining prominence only recently with evolving technology providing the means to enhance the functionality of textile products. With improved functionalities, these products have found applications across end user industries such as defence, railways, automobiles, healthcare, etc. Technical textile products are increasingly being used across the globe owing to these advantages. Adoption of technical textile products has been higher for economically developed countries like USA, EU, Japan, South Korea, etc. while usage of these products in industrialised countries such as China and India is consistently increasing.

Realising the importance of promoting the technical textile sector in India, the Ministry of Textiles, Government of India, has been actively working towards development of technical textiles in India. The Government has launched several programmes for supporting the sector with creation of manufacturing, testing and research infrastructure, besides providing capital and interest subsidies for setting up technical textile plants. Under Technology mission on technical textiles (TMTT), the Government has been organising Technotex summits to provide a platform for all the industry stakeholders to congregate, deliberate and promote India as a global destination for technical textiles.

We have developed a report on the technical textile sector to be unveiled during Technotex 2019. The report focuses on certain perspectives related to the development of Indian technical textile sector, including trade scenario, market opportunities, key growth drivers and way forward. The section on global scenario will highlight the market size, key international markets and major technical textile sub-segments. The section on Indian scenario will elaborate on domestic market size, growth rate, technical textiles trade analysis and growth drivers. The section on SWOT analysis gives a snapshot of the prevailing scenario in the technical textile sector, and we have highlighted the importance of JVs for setting up infrastructure for high-value functional products. The last section on way forward highlights key steps to be taken by the industry and the Government alike for achieving the true potential of Indian technical textile sector.

We are sure this report would be helpful for key industry players, prospective investors and the Government alike in understanding the current scenario of technical textile industry and the constructive role that each stakeholder needs to play to transform India into a global technical textiles hub.

We would like to thank Ministry of Textiles and FICCI for providing us an opportunity to present this report to industry stakeholders at Technotex 2019.



Mohit Bhasin
Partner
KPMG in India



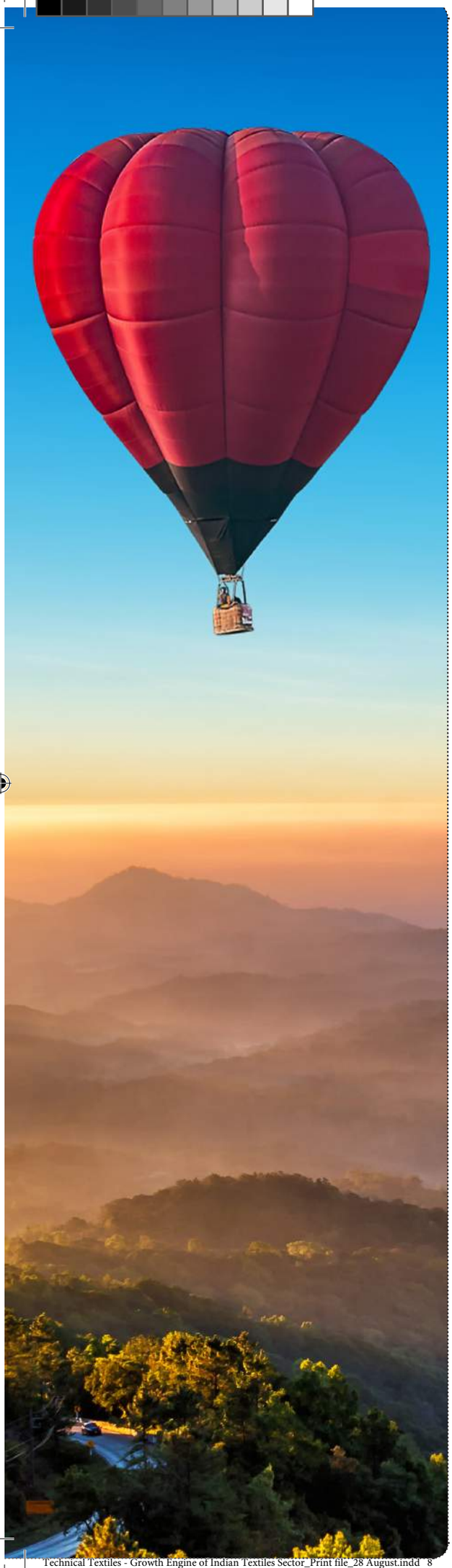


Table of contents

1. Global scenario **01**

2. India outlook **03**

- Domestic market scenario 03
- SWOT analysis 05
- Indian technical textiles trade analysis 07
- Potential growth areas in technical textiles 09
- Joint ventures in technical textiles in India 09
- Key growth drivers of technical textiles industry 10

3. Way forward **13**

01

Global scenario

Technical textiles are functional products with end use applications across multiple non-conventional textile industries such as healthcare, construction, automobile among others. Technical textile products exhibit enhanced performance over traditional textiles. Technical textile products are manufactured using natural as well as man made fibres such as Nomex, Kevlar, Spandex, Twaron etc. These fibres exhibit enhanced functional properties like higher tenacity, excellent insulation, improved thermal resistance etc. Hence, these fibers find application in varied industries and applications.

Technical textile market segmentation is done on the basis of material, technology and application.

- Segmentation as per material is done into composites and uniform materials.
- Segmentation as per technology is done into nonwoven, woven and others including braiding, knitting etc.
- Segmentation as per application is done into 12 sub-segments as mentioned below.



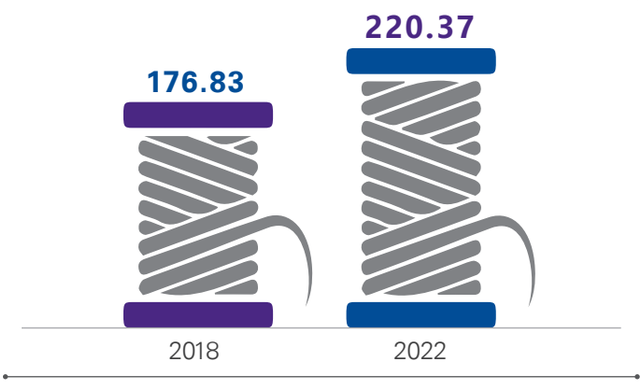
Agrotech	Shade nets, crop covers, fishing nets, etc.,
Buildtech	Scaffolding nets, awnings, canopies, wall coverings, etc.,
Clothtech	Coated laces, interlinings, zip fasteners, labels, etc.,
Geotech	Geo-grids, gabions, geo-bags, etc.,
Hometech	Fibre fill, blinds fabrics, mosquito nets, furniture fabrics, etc.,
Indutech	Conveyor belts, bolting cloth, coated abrasives, composites, etc.,
Meditech	Diapers, wipes, surgical sutures, hernia mesh, artificial ligaments, etc.,
Mobiltech	Tyre cord, seat belt webbing, airbag, insulation felts, seat covers, etc.,
Oekotech	Geo-membranes, geo-synthetic clay liners, etc.,
Packtech	Leno bags, soft luggage, jute hessian and sacks, shopping bags, etc.,
Protech	Bullet proof jackets, fire retardant apparel, chemical protective clothing, etc.,
Sportech	Sport composites, artificial turfs, parachute fabrics, sleeping bags, etc.,

Technical textile global market is anticipated to grow from USD176.83 billion in 2018 to reach USD220.37 billion by 2022 with a CAGR of 5.89 per cent.[1]

Some of the factors influencing the growth of the market are:

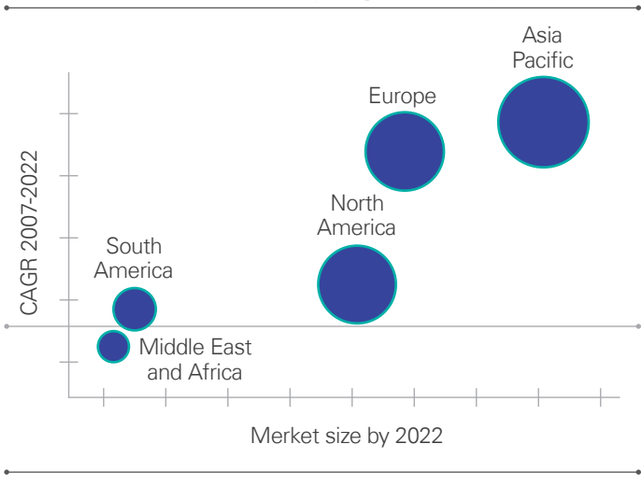
1. Rising demand from new application areas
2. Varying consumer preferences
3. Useful physical properties of technical textiles
4. Innovation and R&D
5. Government regulations
6. Climate change and global warming

Global technical textiles market (USD Bn)



In 2017, Asia Pacific region was estimated to have the largest share of technical textiles market. The region is further expected to grow at CAGR of 5.6 per cent to 5.8 per cent[2] from 2017 to 2022. Asia Pacific has dominated the technical textiles market owing to new technological advancements, increasing awareness among user population and rise in disposable income.

Technical textile market, by Region, 2022 (USD Billion)



Source: Marketsandmarkets Report – Technical Textiles Market Report – Global Forecast to 2022

In 2017, composites was among the highest growing product category and demand for composites is expected to grow further due to higher usage of reinforced composites in construction and industrial sectors, glass fiber composites in marine industry and increasing usage of composites in aircraft manufacturing sector.

The Asia-Pacific region is poised to grow highest and is expected to account for over 30 per cent of the Global market share. Industrialization and economic growth of India and China is fuelling growth of technical textiles in this region. Mobiltech, Indutech, Buildtech, Meditech, Sportech and Protech are expected to grow higher than other sub-segments of Technical Textiles.

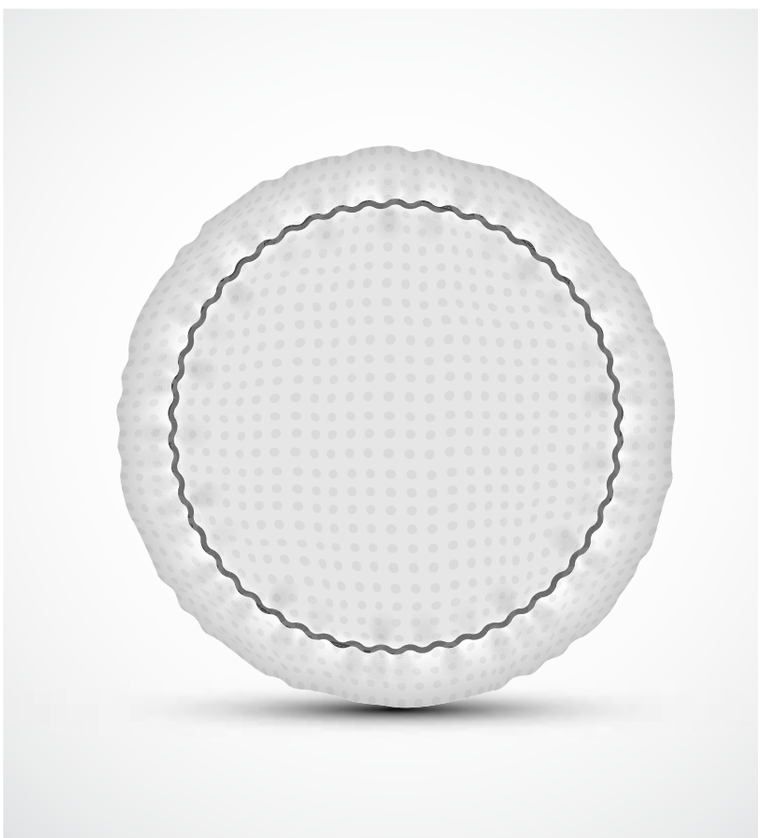
In Europe, the technical textile market is estimated to grow at impressive CAGR of 4.8 per cent to 5.2 per cent[3] during 2018 to 2022, with Indutech, Mobiltech, Buildtech, Sportech and Oekotech driving growth of technical textiles sector. In terms of markets, Germany, France and U.K. are expected to fuel growth of technical textiles in the region.

Technical textile market in North America is estimated to grow at CAGR of 3.1 per cent to 3.3 per cent[4] with Indutech, Mobiltech, Protech and Geotech driving growth of technical textiles sector.

1. Marketsandmarkets Report - Technical Textiles Market Report – Global Forecast to 2022
2. Marketsandmarkets Report - Technical Textiles Market Report – Global Forecast to 2022
3. Marketsandmarkets Report - Technical Textiles Market Report – Global Forecast to 2022
4. Marketsandmarkets Report - Technical Textiles Market Report – Global Forecast to 2022

02

India outlook



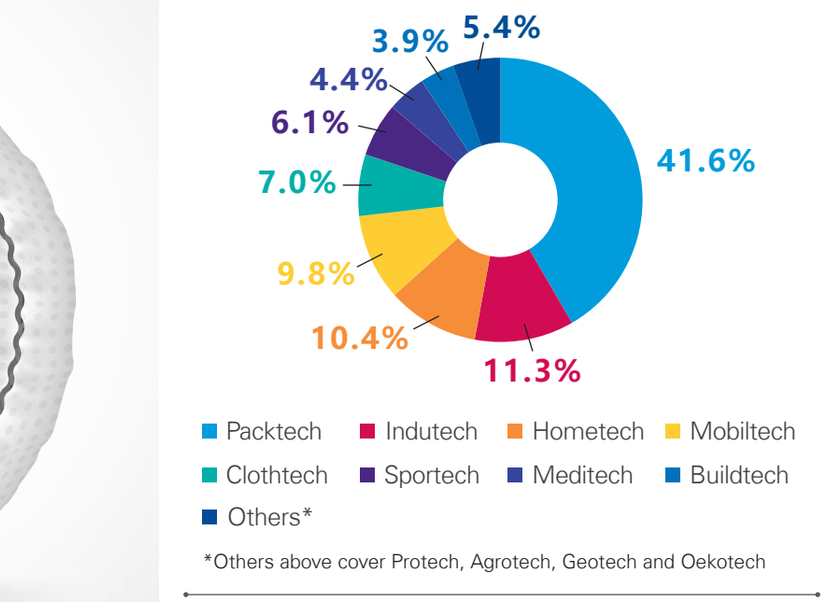
1. Domestic market scenario

Technical textiles as a segment is directly proportional to the stage of industrialisation and economic growth of any country. Developing countries undergoing large scale industrialisation fuel the demand for technical textile products. The usage may range from infrastructure, agriculture, health, defence, automobiles, aerospace, sports, protective clothing, packaging, etc.,

With transformation of the Indian economy post liberalisation in the early 1990s, the demand and consumption of technical textiles products in India has been consistently increasing. The growth of technical textiles has also helped growth and innovation of conventional textile products, owing to significant value addition across the textile value chain. All major players in India have started developing technical textiles products as they provide better margins in comparison to conventional textiles.

Despite showing impressive growth over the years, per capita consumption of technical textiles in India is very less (1.7 kgs[5]) in comparison to other developing countries (10-12 kgs[6]). This lower consumption in the Indian market is due to the fact that 41.6 per cent of the

Indian technical textiles segmentation (2018)



*Others above cover Protech, Agrotech, Geotech and Oekotech

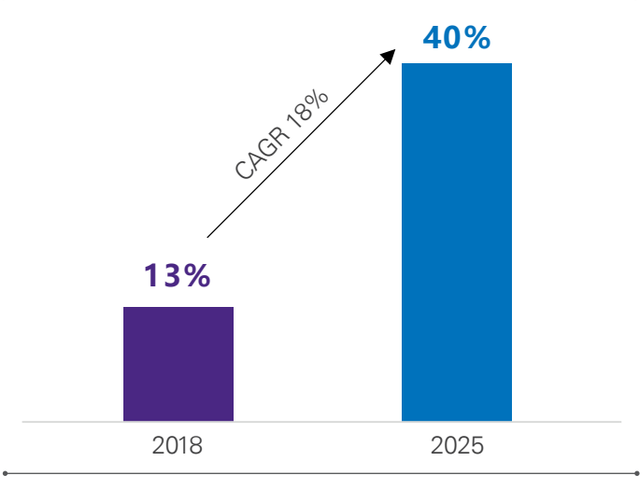
Source: Make in India Report

5. Ministry of Textiles
6. Ministry of Textiles

technical textiles in India focuses on Packtech, which is primarily low-value low-technology product. High-value product segments such as Indutech, Mobiltech, Sportech, Meditech, Buildtech, etc., have low market penetration.

Packtech segment is followed by other key high value segments such as Indutech (11.3 per cent), Hometech (10.4 per cent) and Mobiltech (9.8 per cent). The growth of these segments indicate the growth of the Indian economy and changing socio-economic needs of the population.

Share of technical textiles in Indian textile sector



Source: Make in India Report

High Indutech share indicates high usage of such products in the burgeoning Indian industrial sector. Whereas, high shares for Hometech and Mobiltech sectors indicate higher consumption of such materials by Indian population for their homes and ever growing automotive sector. Whereas, all the other segments such as Clothtech, Sportech, Meditech etc., have significant growth potential with changing demographics and consumption patterns of Indian consumers and propensity of Indian buyers to adopt technologically advanced products for their inherent advantages.

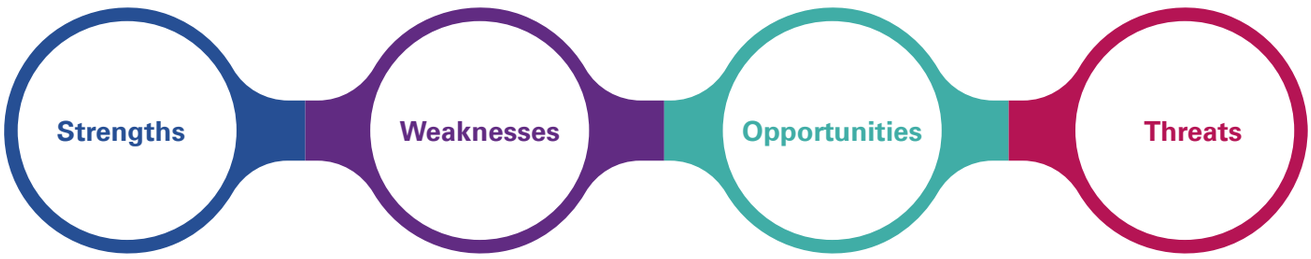
Currently, share of technical textiles in Indian textile value chain is around 13 per cent.[7] With the growth potential of various related sectors, technical textiles are poised to grow at 18 per cent CAGR during the period 2018-25.

Technical textile industry in India is import dependent. Many products like speciality fibres/yarns, medical implants, sanitary products, protective textiles, webbings for seat belts, etc. are mostly imported. However, technical textiles sector has registered impressive growth in the recent years. As per the Baseline Survey of technical textile industry by Ministry of Textiles, Indian technical textile industry is estimated to grow at a CAGR of 20 per cent to USD 28.7 Bn[8] (INR2,00,823 crore) by 2020-21 from USD16.6 Bn[8] (INR1,16,217 crore) in 2017-18.

In order to capitalise on the growth potential, technical textiles ecosystem in India needs to grow significantly with focus on research and innovation in high growth sectors such as Mobiltech, Buildtech, Indutech, Meditech, etc., to ensure sustainable growth, the sector needs to adopt global best practices and attract FDIs (100 per cent FDI is allowed under automatic route) and JVs with global technical textiles companies.

7. Ministry of Textiles
8. 1 USD = INR. 70

2. Indian technical textiles - A SWOT analysis:



- Availability of young and cheap manpower
- Strong textile value chain
- Active promotion from Government
- Availability of manufacturing infrastructure

- Import dependence for machinery
- Low awareness about technical textile products in end users
- Lack of standardisation and related regulation
- Little or no domestic manufacturing of specialty fibres

- Growing economy fuelling demand for technical textiles
- Relatively untapped domestic market
- Largely untapped domestic institutional buyers for domestic technical textile products

- Uncompetitive at global level
- Ease of availability of highly technology intensive technical textile products through imports

A. Strengths:

a. Availability of young and cheap manpower: India has one of the largest working-age population (people between 15 and 64 years of age) in the world. Based on the country's current demographics, the abundant workforce is expected to work until 2055. Abundant workforce with relatively lower average manpower costs provides India a distinct edge as key global manufacturing destination.

b. Strong textiles value chain: India is the only country in the region, other than China, with entire textile value chain in both natural and synthetic fibres. Due to availability of raw materials for technical textiles sub-segments, India is well positioned to capitalize on opportunities presented by both domestic and international markets.

c. Active promotion from Government: Ministry of Textiles, Government of India has been actively working towards development of technical textiles in India. For the purpose, Government of India has launched several programs (for investment promotion, subsidies, creation of infrastructure, stimulating consumption etc.) such as Scheme for growth and development of technical textiles (SGDTT), Technology mission on technical textiles (TMTT), Scheme for promoting usage of Agro-textiles in north east region, Scheme for promoting usage of geotechnical textiles in north east region, Technology up-gradation funds scheme (TUFS) and Scheme for integrated textile parks (SITP).

d. Availability of manufacturing infrastructure: India is a rapidly growing industrial economy with availability of key resources such as land, power, water, manpower and conducive regulatory framework for industries to thrive and grow. Technical textiles manufacturing set up can be established easily with an attractive and growing market to spur demand.

B. Weaknesses:

a. Import dependence for machinery Currently, majority of machinery used to manufacture technical textiles products is not available in India. In order to attract investments in technical textiles, Government needs to promote manufacturing of high-tech machinery to boost technical textiles sector.

b. Low awareness about technical textile products in end users In India, majority of intended end users of technical textile products are still unaware of the benefits of usage of such products, thereby leading to lack of adoption.

c. Lack of standardization and related regulations Currently, several technical textile products do not have Standard Benchmarks, resulting in availability of sub-standard cheaper products. Further, safety and other related regulations need to be enforced across industries to propel demand for technical textiles products.

d. **Little or no domestic manufacturing of specialty fibres:** Currently, majority of specialty fibres are imported in India, thus making India globally uncompetitive in high-value technical textiles products. Government needs to promote innovation and infrastructure for manufacturing high value specialty fibres.

C. Opportunities:

a. **Growing economy fuelling demand for technical textiles:** India is among the fastest growing economies in the world. This has led to higher disposable income and increased awareness among young Indian population on functional products. Further, India's economic growth has led to growth of various end user industries such as Automobiles, Healthcare, etc., resulting in increasing demand for technical textile products.

b. **Relatively untapped domestic market:** Functional products are still in nascent stage in India. However, with growing awareness among young population about the benefits of these products, market shall expand exponentially.

c. **Largely untapped domestic institutional buyers for technical textiles:** Institutional buyers such as railways, defence forces, hospitals, etc., are still heavily dependent on imports for high-value technologically intensive technical textile products. However, in the recent past, some Indian technical textile manufacturers have started working with such institutional buyers, but most of the market is yet to be tapped.

D. Threats:

a. **Uncompetitive at global level:** India is growing Wat a brisk pace in the field of technical textiles, whereas China is ahead in terms of scale and technology. In terms of Innovation and R&D, China is way ahead in comparison to India. Key Indian players need to invest in innovation and develop high-value products to position India as global hub for technical textile.

b. **Ease of availability of high-technology technical textile products through imports:** Institutional buyers such as defence have traditionally opted for import route for procurement of several technical textile products owing to ease of availability of ready product confirming to the required standards. Import substitution would only be possible, if the requisite infrastructure and technology adoption is undertaken by key players in India with Government support.

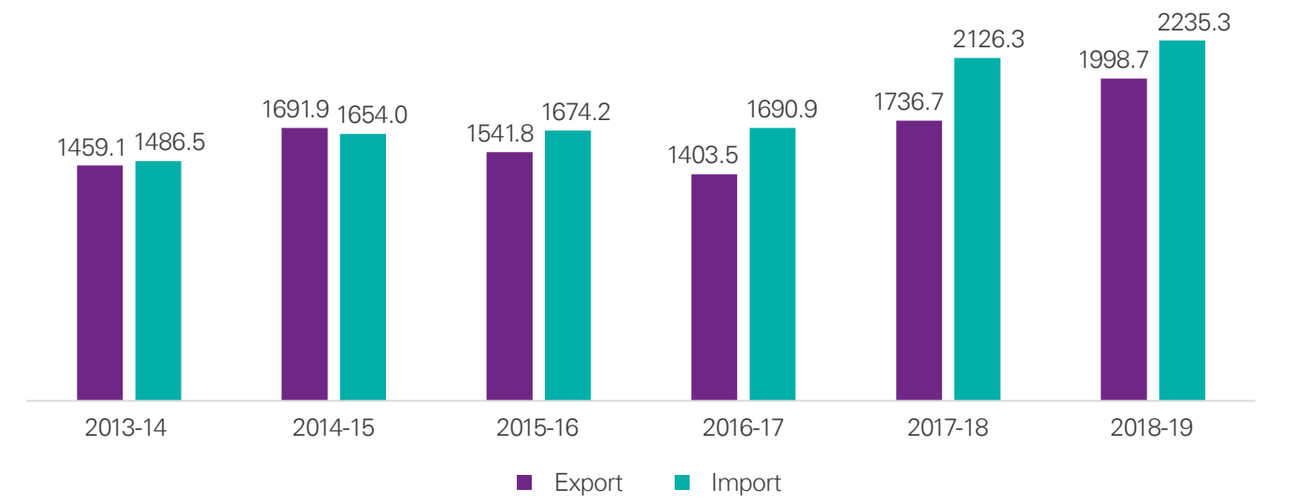


3. Indian technical textile trade analysis

Government of India has recently notified 207 HSN Codes from Technical Textiles Exports.

Below is a brief analysis of India's technical textiles imports and exports:

Indian technical textile trade in USD Mn.



Source: Department of Commerce, Government of India;

During 2014-19, India's exports have grown at a 6.5 per cent CAGR, whereas India's imports have grown at a 8.5 per cent CAGR during the same period. India is depending on imports for high-value technical textiles products.

The below listed top 10 technical textiles imported products account for approximately 50 per cent of India's technical textiles imports for the last six years:

Values in USD Mn

S. No.	ITC HS Codes (2017)	Description of Goods	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	CAGR 2014-19
Share of total technical textiles imports by India			**53%**	**51%**	**50%**	**50%**	**50%**	**49%**	
1	87089500	Parts and accessories of the motor vehicles of headings 8701 to 8705 : Other parts and accessories : Safety airbags with inflater system; parts thereof	90.8	105.8	121.8	129.9	175.6	176.6	14.2%
2	59021090	Tyre cord fabric Of nylon or other polyamides: Others	153.0	144.3	107.5	98.7	119.8	148.0	-0.7%
3	59031090	Other Fabrics Impregnated, Laminated Plated And Coated With PVC	123.3	134.1	121.7	111.4	167.6	145.1	3.3%
4	59039090	Other Fabric Plated Laminated Coated Impregnated With Other Plastics	152.5	151.6	155.2	155.8	172.2	144.5	-1.1%
5	59032090	Other Fabrics Impregnated Laminated Plated And Coated With Polyurethane	79.2	96.2	95.3	84.4	121.3	125.0	9.5%

S. No.	ITC HS Codes (2017)	Description of Goods	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	CAGR 2014-19
6	59021010	Tyre Cord Fabric Of High Tenacity Yarn Of Nylon Or Other Polyamides: Impregnated With Rubber	82.7	81.4	61.7	60.8	75.4	87.2	1.1%
7	70191200	Glass Fibres (Including Glass Wool): Rovings	12.9	20.0	43.8	52.5	58.3	77.5	43.2%
8	54022090	High Tenacity yarn of nylon or other polyester (others and Textured yarns) 206	53.0	51.4	51.0	57.7	68.5	75.0	7.2%
9	56031100	Non wovens Of Man-Made Filaments: Weighing Not More Than 25 g/sqm	17.4	43.1	55.3	49.4	67.3	58.6	27.4%
10	56039200	Non wovens Other: Weighing Between 25 g/sqm And 70 g/sqm	19.7	20.9	29.3	37.7	41.9	54.3	22.5%

Source: Department of Commerce, Government of India; KPMG Analysis

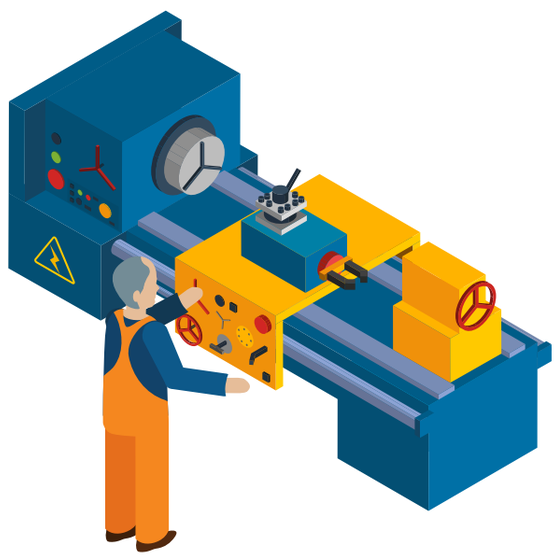
Among these 10 product categories, India has shown negative growth in only two product categories and increasingly depends on imports for the remaining eight product categories.

It is worth noting that in the above list, India is also indigenously manufacturing and exporting certain products such as air-bags for automobiles (HS Code 87089500), PVC coated fabrics (HS Code 59031090, 59039090) etc. This indicates presence of existing capacities in the country. Concrete steps need to be taken to understand the issues faced by the manufacturers of above product categories and support manufacturers in promoting import substitution, thus resulting in higher value retention within the economy.

Detailed analysis of Indian technical textiles export for the period of 2013-14 to 2018-19 indicate that Packtech sector contributes 39 per cent (FIBC primarily), followed by Indutech at 19 per cent, Hometech (carpets) at 11.63 per cent, 9 per cent contribution from Mobiltech (seat belts, air-bags, tyre cords, etc.,). In the same period, import data indicates that Indutech (coated fabrics) has accounted for 30 per cent of total imports, followed by Mobiltech (airbags and tyre cords primarily) at 24 per cent, Hometech (carpets etc.) at 16 per cent and Clothtech at 12 per cent.

In addition, the following trend has been observed based on FICCI's analysis of 207 technical textile HSN codes trade data:

- Exports from India increased by 17 per cent in Jan-June 2019 from Jan-June 2018 to USD1.02 Bn (INR7,147 crores).
- Imports to India increased by 6 per cent from Jan-June 2018 to USD1.09 Bn (INR7,671 crores) in Jan-June 2019.
- The overall trade deficit has decreased from USD157 Mn (INR1,100 crores) in Jan-June 2018 to USD75 Mn (INR523 crores) in Jan-June 2019, a decrease of about 52 per cent.
- Out of the 207 commodities, 88 have observed a positive trade balance.



4. Potential growth areas in technical textiles:

Analysis of the Indian technical textile market indicates that Packtech segment has the highest market share with primarily low-technology, low-value products such as FIBCs, woven sacks, etc. Packtech segment is followed by other high growth potential segments such as Indutech, Hometech and Mobiltech. High Indutech share indicates high usage of such products in burgeoning Indian industrial sector. Meanwhile, high growth potential of Hometech and Mobiltech indicate higher consumption of such materials by Indian population for their homes and ever increasing automotive demand.

In addition, based on analysis of import data, Mobiltech, Indutech and specialty fibres are some of the products which are currently being extensively imported into India. Import substitution through favorable policies would help in growth of these high-growth segments and ensure value retention within the economy and new employment opportunities for Indian youth.

All the other segments such as Meditech, Geotech, Sportech and Clothtech are in nascent stage and are expected to grow at higher rate in the near future.

5. Joint ventures in technical textiles in India

Technical textiles is high-tech industry with functional products requiring technologically advanced machineries for manufacturing. Technical textile manufacturing in India is still growing and is in nascent stages. Further, low budgetary allocation for research and development and innovation in India has resulted in low-value low-technology production by most of key players. The ideal approach to build high-tech industry infrastructure is to forge joint ventures with existing foreign companies with high-tech capabilities required for advanced high-value products. Joint ventures would help in technology transfer and minimizing development cost of high quality products. This arrangement can be a win-win for Indian and foreign players as it provides access to new markets and opportunities.



6. Key growth drivers for the Indian technical textile sector:

Technical textile products are finding increasing acceptance across end user industries in India. At broad-level, this growth may be attributed to certain general factors such as increasing awareness about the products, higher disposable incomes, etc., Besides these, there are certain sector specific growth drivers that have fuelled growth of these sectors.

1. General growth drivers:

A. Growth factors driving consumption of technical textiles:

Increasing disposable income with young Indian population:

India's Gross National Disposable Income (GNDI) has grown 11.2 per cent during 2017-18 and is expected to grow at a higher pace due to improving economic scenario and younger population willing to adapt to high-tech products with higher spending capacity.

Growing awareness about the benefits of technical textile products:

Owing to globalisation and social media, Indian consumers are increasingly evaluating products providing higher functionality as compared to the conventional options.

Functionality improving the product experience:

With functionality at the core, technical textiles products are improving the end product experience, thus driving consumers to adapt to new technical textile products with better quality and product lifecycle.

Hygiene/sanitation benefits of the technical textiles products:

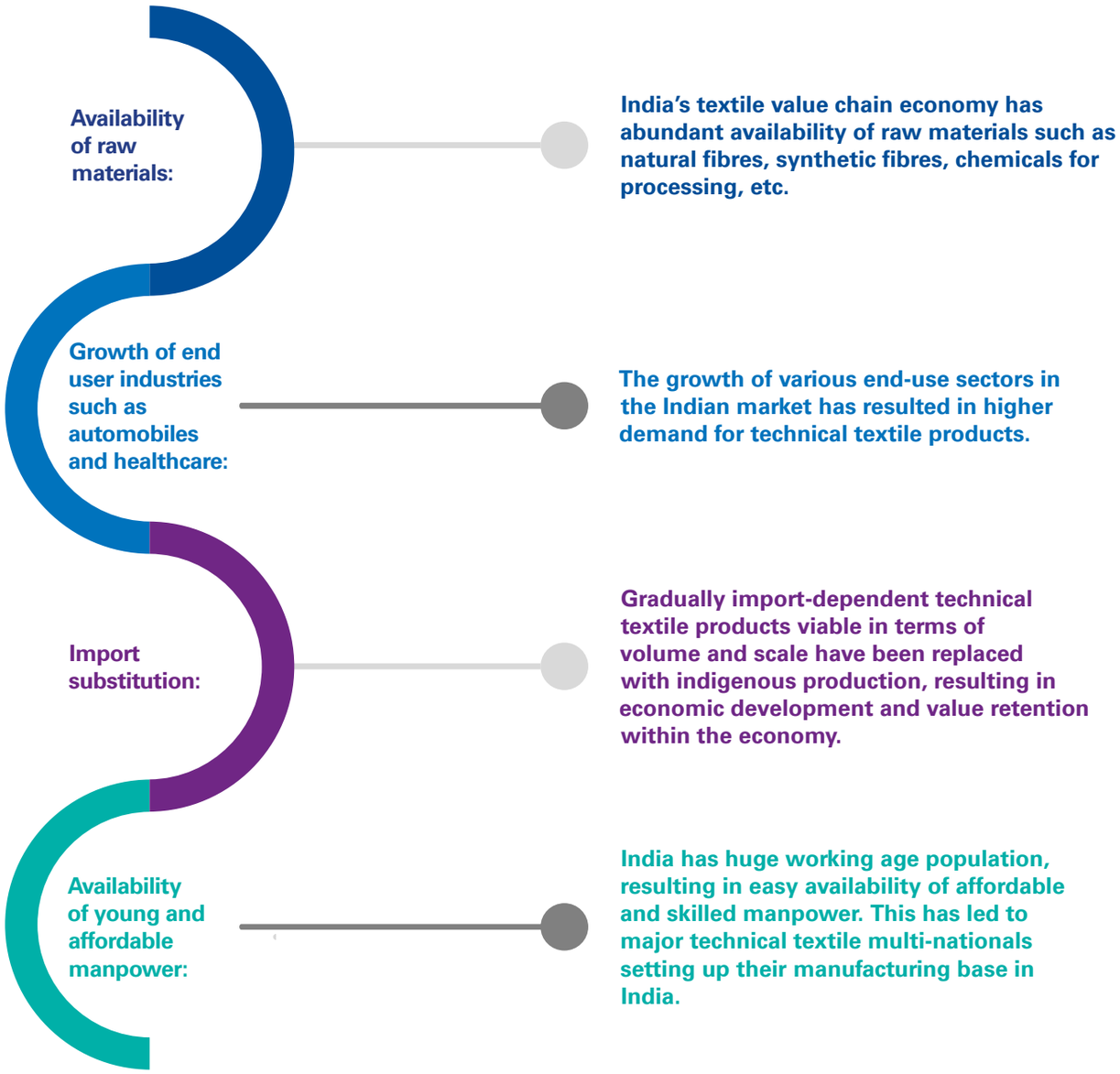
With the availability of affordable products with better safety and hygiene benefits, Indian consumers have embraced technical textiles products and demanding new and innovative products.

Changing regulations:

Government is consistently working towards making use of certain technical textile products mandatory for certain specific applications/industries. These regulations would drive consumption of technical textile products.



B. Growth factors driving manufacturing of technical textiles:



C. Sector specific growth drivers:

i. Mobiltech:

1. Growing automobile industry
2. Growing usage of products like seat belts, airbags and automotive carpets
3. Evolving motor safety regulations

ii. Sportech:

1. Increasing national and international tournaments in India
2. Government schemes such as subsidies to university/colleges to improve sports infrastructure
3. Increasing popularity of sports and sportswear due to Khelo India mission.

iii. Buildtech:

1. Demand is anticipated to increase with higher spending on infrastructure
2. Increasing awareness and usage of products like architectural membrane, scaffolding nets

iv. Meditech:

1. Growth of healthcare industry
2. Growing population
3. Increasing product awareness and acceptance

v. Protech:

1. Enhanced defence spending
2. Growing awareness and use of fire retardant clothing and chemical protective clothing
3. Evolving regulations for protective clothing usage

vi. Geotech:

1. Significant investment in infrastructure planned by the government
2. Increasing awareness of the benefits of usage
3. Inclusion in various government construction norms
4. Active promotion by the government for usage of Geotech products

vii. Indutech:

1. Evolving manufacturing sector in India

viii. Packtech:

1. General consciousness for avoiding the usage of plastics in packaging
2. Ease of manufacturing leading to lower prices per unit, leading to higher public adoption

ix. Agrotech:

1. Active support from the government for promoting the usage of Agrotextiles
2. Increasing awareness creation through krishi vigyan kendras

x. Oekotech:

1. Increasing awareness in environmental protection applications such as erosion prevention, water pollution prevention, sewerage treatment plants, landfills etc.

xi. Hometech:

1. Increasing importance of usage of fire resistant/retardant textile material in public places.
2. Regulations in usage of technical textiles in public places
3. Evolving customer awareness

xii. Clothtech:

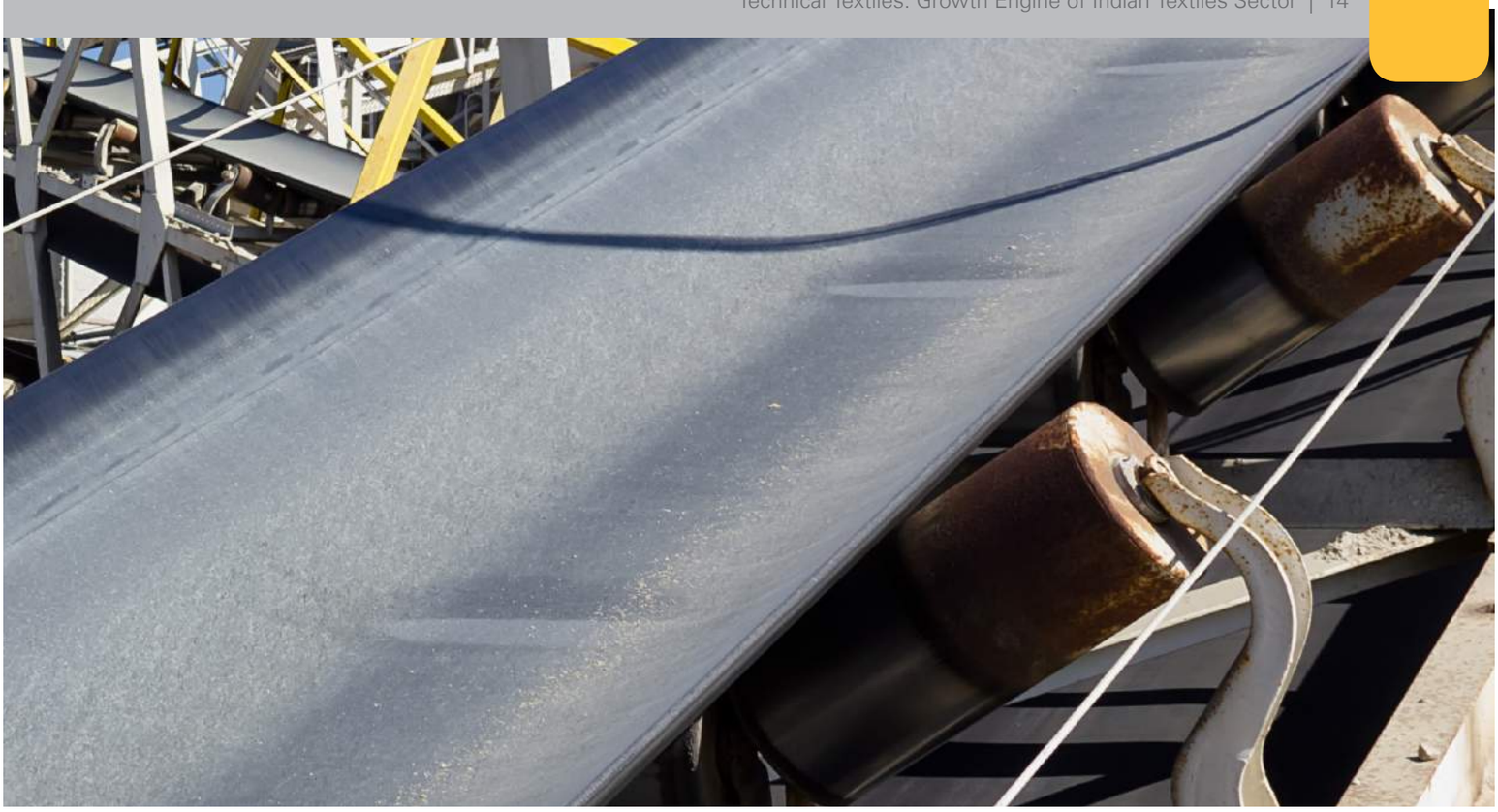
1. Increasing awareness on usage of technical textiles



03 Way forward

Indian technical textile sector is expected to grow significantly in the coming years. However, below concrete steps need to be taken to ensure conducive industry ecosystem to transform India into global technical textiles hub:

1. **Raising awareness of end-use applications:** Technical textile products are highly functional in comparison to their traditional alternatives. These functional elements enhance various beneficial values for end products such as safety, hygiene and better product life cycle. In order to ensure affordability, higher adoption of these products across the population, increasing awareness is of utmost importance. Increasing awareness about the products will lead to higher adaptation of these products.
2. **Development and implementation of standards for technical textile products:** Standardisation of a product being sold in a market is one of the key parameters to ensure the quality of the product. This helps in ensuring the intended functionalities expected from technical textile products are retained and provided to the end user every time the product is used. Further, to ensure the Standardised products are rolled out in the markets, appropriate implementation of these standards is also required at the government level.
3. **Regulatory reforms supporting the usage of standardised technical textile products:** Regulatory reforms are essential for technical textile products deemed necessary for the usage in specific conditions such as car seat belts, air bags for cars, flame resistant/retardant fabrics for public places, etc., Such regulations shall ensure better quality of life of the citizens and shall also expand the technical textiles market.
4. **Incentivising research and development in the field of technical textiles:** India pales in comparison to other countries in terms of R&D expenditure on technical textiles. With high capital requirement, setting up large capacities for technical textiles remains a challenge. Incentivising research and development in the field of technical textiles shall help in fostering the culture of indigenous research, instead of depending only on JVs and technology transfer for manufacturing high end technical textiles products.
5. **Dedicated courses on technical textiles for entrepreneurship training:** India is currently witnessing a boom in entrepreneurial spirit with fresh graduates from IITs and IIMs opting for entrepreneurship. The government needs to work with various entrepreneurship development institutes for initiating courses on entrepreneurship in technical textiles. This would help develop a robust base for technical textiles sector in India, and help in creating a pool of energetic youth transforming the sector.
6. **Improving availability of skilled manpower:** Availability of skilled manpower with specialized skill set is a key requirement for technical textiles industry. Introduction of technical textiles specific courses in various educational institutions is the key to ensure that we have abundant workforce with specialised skills required for technical textiles. courses in various educational institutions is the key to ensure that we have abundance workforce with



specialized skills required for technical textiles.

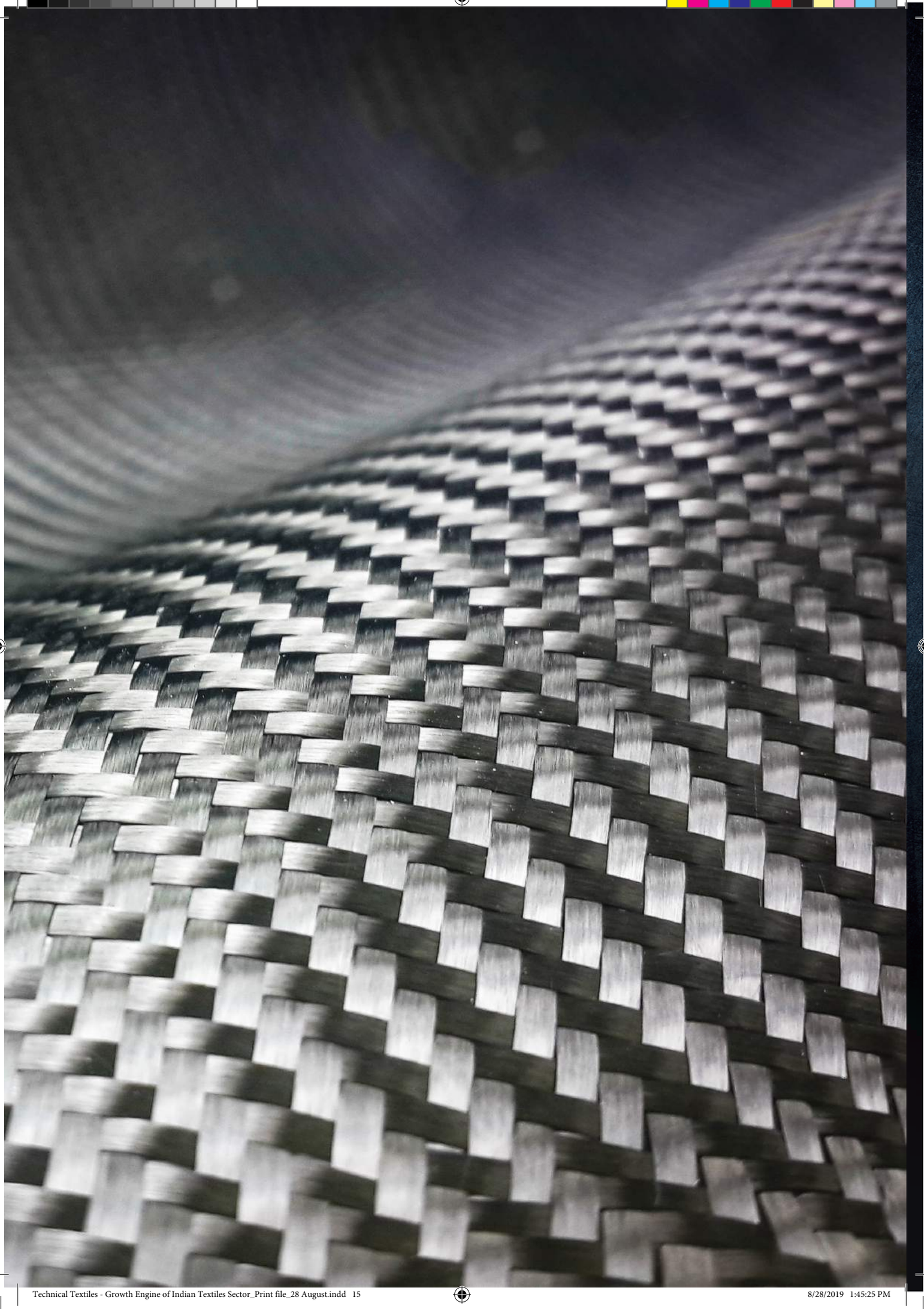
7. **Promoting indigenous manufacturing of high performance specialty fibres:** Currently, most specialty fibres are imported in India, owing to little or no domestic manufacturing of products such as Kevlar, high tenacity PFY, Nylon 11, Nylon 66, Aramid for manufacturing high value products. The Government needs to incentivise manufacturing of these fibres for reducing import dependence and help in reducing the manufacturing costs of high value technical textile products.

8. **Resolving the inverted duty structure:** Currently, lower duties are levied on the finished product while duties on raw materials are higher. This duty structure has had a detrimental effect on the capabilities of indigenous technical textiles industry. Government should revisit the duty structure to ensure growth of indigenous

9. **Promoting institutional buying:** Government needs to actively promote and ensure institutional buyers such as Air Force, Army, Navy, Railways and other to increase procurement from domestic manufacturers. Institutional buying would help in imports substitution and ensure requisite infrastructure in the country and value retention in Indian economy. Government may enable mechanisms where local manufacturers may directly connect with institutional buyers that procure bulk quantities of technical textiles products.

10. **Incentivising production of technical textiles machinery:** Currently, majority of machinery used to manufacture technical textile products are imported into India from Europe, China, Taiwan and South Korea. In order to reduce this dependence on imports, the government could promote manufacturing of such machineries in India – either through facilitating technology transfer or providing incentives for foreign companies to collaborate with domestic firms in India or setting up manufacturing units in the country.

11. **Promotion of exports of technology intensive technical textiles:** Packtech products contributed 39 per cent of technical textile exports from India. These products are less technology intensive and low-value products with minimal research and development. In order to transform India into global hub for technical textiles, it is essential that India develop the required infrastructure, expertise and skill sets for high-value technical textiles products. India should focus on the exports of technology intensive products such as Protech, Geotech, Meditech and Mobiltech segments. The government should increase export incentives for these categories of technical textile products. The proposed Technical Textiles Export Promotion Council can sensitise the government of the various opportunities and challenges that India's technical textiles face in the international arena. Opportunities to collaborate with foreign players could also be sought by the local industries to facilitate technology know-how and technology transfer.



KPMG



KPMG josh IT SHOWS

IN OUR ABILITY TO TRIUMPH OVER
ANYTHING IN OUR SPIRIT OF
UNDYING ENTHUSIASM OUR DRIVE
TO ACHIEVE THE EXTRAORDINARY
UNMOVED BY FEAR OR CONSTRAINT
WE'RE DRIVEN BY JOSH AND IT SHOWS

© 2019 KPMG, an Indian Registered Partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved.

THIS ADVERTISEMENT FEATURES KPMG INDIA EMPLOYEES

KPMG in India contacts:

Nilaya Varma
Partner and Leader – Markets Enablement
T: +91 124 669 1000
E: nilaya@kpmg.com

Ramendra Verma
Partner
Government Advisory
T: + 91 98719 01269
E: Ramendra@kpmg.com

Mohit Bhasin
Partner
Government Advisory
T: +91 95608 81777
E: mohitbhasin@kpmg.com

KPMG.com/in

FICCI contacts:

Chetan Bijesure
Senior Director and Head – Manufacturing
T: + 91 11 2348 7385
E: chetan.bijesure@ficci.com

Shreya Bansal
Research Associate
T: + 91 11 2348 7381
E: shreya.bansal@ficci.com

Madhuri Bhatt
Research Associate
T: + 91 11 2348 7250
E: madhuri.bhatt@ficci.com

Ficci.in

#KPMG josh

home.kpmg/in

Follow us on:
home.kpmg/in/socialmedia

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2019 KPMG, an Indian Registered Partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved.

The KPMG name and logo are registered trademarks or trademarks of KPMG International.

Printed in India. (022_THL0819_SB)