INDIAN TECHNICAL TEXTILE ASSOCIATION

E-BULLETIN

e-magazine for members

Issue No. 74 July-August, 2021

Union Cabinet approved Rs. 10,683 Cr. Production Linked Incentive (PLI) Scheme for MMF and Technical Textiles.

GOVT SCHEMES TO BOOST TEXTILE/TECHNICAL TEXTILE EXPORTS

- REBATE OF STATE AND CENTRAL TAXES AND LEVIES (ROSCTL) FROM 1ST JAN,21
- REMISSION OF DUTIES AND TAXES ON EXPORTED PRODUCTS (RODTEP) STARTED FROM 1ST JAN,21
- INTEREST EQUALIZATION SCHEME (IES) EXTENDED UPTO 30.09.2021

SUCCESSFULLY CONDUCTED 4 COURSES ON PROTECTIVE & MEDICAL TEXTILES

- RECEIVED UNIQUE RESPONSE FROM INDUSTRY
- LOOK FOR ANNOUNCEMENT OF NEXT COURSE ON GEOSYNTHETICS

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FEATURES

INDIAN TECHNICAL TEXTILE ASSOCIATION

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PLI SCHEME

The Industry Congratulated and Thanks the Union Cabinet for approving Production Linked Incentive (PLI) Scheme for Textiles. This scheme is specially focused at high value and expanding MMF and Technical Textiles segments of Textiles Value Chain. Incentives worth Rs. 10,683 crore will be provided to industry over five years for manufacturing notified products of MMF Apparel & MMF Fabrics and 10 segments/products of Technical Textiles in India.

It is expected that this scheme will result in fresh Investment of above Rs 19000 crore, additional Production turnover of Rs.3 lakh crore in Five Years and will create additional employment for 7.5 lakh persons.

Commenting on the announcement, Dr. Sundararaman K S, Chairman, the Indian Technical Textile Association (ITTA) said "This is a Landmark scheme for the manifold Growth of the Technical Textile Industry and I thank the Prime Minister Shri Narendra Modi Ji , The Minister for Textiles Shri Piyush Goyal Ji , The MOS and Ministry of Textiles for the same, this will accelerate the creation of world class, world competitive companies in India"

He further said that "PLI for Textiles along with RoSCTL, RoDTEP and other measures of Government in textile sector e.g. providing raw material at competitive prices, skill development etc will herald a new age in textiles manufacturing. Combining this with various State level Incentivisation schemes provides the Technical Textile Industry of India with Unprecedented Financial Support towards rapid Growth."

- Taking steps forward towards the vision of 'Atmanirbhar Bharat', the Union Cabinet, chaired by the Hon'ble Prime Minister, Shri Narendra Modi, approved the Production Linked Incentive (PLI) Scheme for Textiles for MMF Apparel, MMF Fabrics and 10 segments/ products of Technical Textiles with a budgetary outlay of Rs. 10,683 crore.
- This scheme will promote production of high value MMF Fabric, Garments and Technical Textiles in country. These products have higher margin which helps neutralize the disadvantages faced by Indian garment manufacturers.
- The incentive structure has been so formulated that industry will be encouraged to invest in fresh capacities in these segments. This will give a major push to growing high value MMF segment which will complement the efforts of cotton and other natural fibre-based textiles industry in generating new opportunities for employment and trade, resultantly helping India regain its historical dominant status in global textiles trade.
- The Technical Textiles segment is a new age textile, whose application in several sector of economy, including infrastructure, water, health and hygiene, defense, security, automobiles, aviation will improve the efficiencies in those sectors of economy. Government has also launched a National Technical Textiles Mission in past for promoting R&D efforts in that sector. PLI will help further, in attracting investment in this segment and production of appropriate products.
- There are two types of investment possible with different set of incentive structure. Any person, which includes firm / company willing to invest minimum ₹300 Crore in Plant, Machinery, Equipment and Civil Works (excluding land and administrative building cost) to produce products of Notified lines (MMF Fabrics, Garment) and products of Technical Textiles, shall be eligible to apply for participation in first part of the scheme.
- In second part any person, (which includes firm / company) willing to invest minimum ₹100 Crore shall be eligible to apply for participation in this part of the scheme.
- In addition, priority will be given for investment in Aspirational Districts, Tier 3, Tier 4 towns, and rural area. Due to this priority Industry will be incentivized to move to backward area. Such move will also help industry by availability of appropriate demography of working age population in those area.
- This scheme will positively impact the states with strong textiles ecosystem e.g. Gujrat, UP, Maharashtra, Tamilnadu, Punjab, AP, Telangana etc.

DR. SUNDARARAMAN K S,
Chairman, ITTA

EXPORT-IMPORT PERFORMANCE OF TECHNICAL TEXTILE PRODUCTS OF MAY 2021

(*ITTA Analysis on Ministry of Commerce and Industry Data*)

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

A. EXPORT PERFORMANCE

(Value in INR Cr.)

Sr. No	Segments	May 2020	May 2021	% Growth	Apr'20-May'20	Apr'21-May'21	% Growth
1	Agrotech	26	50	88%	37	100	171%
2	Buildtech	71	62	-12%	80	124	54%
3	Clothtech	12	23	94%	14	46	234%
4	Geotech	115	211	83%	139	422	203%
5	Hometech	12	22	84%	13	41	224%
6	Indutech	116	172	48%	156	353	126%
7	Meditech	63	92	47%	91	185	105%
8	Mobiltech	91	122	35%	117	257	119%
9	Packtech	316	589	86%	469	1193	155%
10	Protech	17	34	105%	22	69	213%
11	Sportech	10	20	101%	17	43	149%
12	Nonwovens	79	141	78%	116	288	148%
	GRAND TOTAL	**928**	**1538**	**66%**	**1271**	**3121**	**146%**

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

ITTA Analysis on Monthly data (May'20 vs. May'21) of Top Four Growth Sectors -

a) Protech - Key Products: Bullet Proof Jackets, Bomb Disposal Jackets, Life Jackets and Fire-retardant fabrics.

b) Sportech - Key Products: Sport nets, Parachute fabrics and Artificial turf.

c) Clothtech - Key Products: Narrow woven fabrics- by weight 5% elastomeric yarn and Knitted or Crocheted fabric - width less than 30 cm.

d) Agrotech - Key Products: Fishing nets, Anti Insects nets and Shade nets.

B. IMPORT PERFORMANCE

(Value in INR Cr.)

Sr. No	Segments	May 2020	May 2021	% Growth	Apr'20-May'20	Apr'21-May'21	% Growth
1	Agrotech	17	37	121%	24	74	213%
2	Buildtech	116	144	24%	170	269	58%
3	Clothtech	10	18	88%	13	41	223%
4	Geotech	106	143	35%	156	282	80%
5	Hometech	40	28	-28%	68	62	-8%
6	Indutech	190	267	41%	315	512	63%
7	Meditech	37	57	55%	70	131	87%
8	Mobiltech	275	515	87%	543	999	84%
9	Packtech	16	32	100%	22	73	231%
10	Protech	40	41	3%	94	77	-18%
11	Sportech	9	14	55%	12	27	126%
12	Nonwovens	128	170	33%	243	361	48%
	GRAND TOTAL	**984**	**1466**	**49%**	**1730**	**2908**	**68%**

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

ITTA Analysis on Monthly data (May'20 vs. May'21) of Top Four Growth Sectors -

a) **Agrotech -** Key Products: Shade nets and Fishing nets.

b) **Packtech -** Key Products: Polyethylene Laminated Jute Fabrics and FIBC.

c) **Clothtech -** Key Products: Knitted or Crocheted fabric - width less than 30 cm.

d) **Mobiltech** - Key Products: Polyester & Nylon tyre cord fabric and Nylon tyre yarn.

Stakeholders consultation Meeting on "Reducing compliance burden in ATUFS"

The Stakeholders consultation meeting on reducing compliance burden and matters relating to streamlining the processes under Amended Technology Upgradation Fund Scheme (ATUFS) was held on 06th July 2021 through Video Conference under the Chairmanship of Smt. Smriti Irani, Hon'ble Minister of Textiles. Dr. Anup Rakshit, ED, ITTA attended the meeting.

Following points were discussed and decision taken -

1. Delay in payment of subsidy. Recently there had been some improvement in this front but lots of cases are still pending, which needs to be expedited.
2. In many cases, JIT inspection has been conducted, a report has been submitted but approval and disbursement awaited for more than one year.
3. i-tufs portal are not regularly updated and applicants are unable to get status update.
4. There should be a Helpline in all Regional Offices & Head office in Mumbai to get updates on ATUFs cases and this list should be published on the TXC website.

Meeting of ITTA & Its Members with MOT on Proposed PLI Scheme for Technical Textiles

Textile ministry organized this meeting on 13.08.2021 through VC, mainly to get the feedback from ITTA & its members on the PLI Scheme for proposed for technical textiles and MMF. From MoT the secretary-textiles, trade advisor & Jt. Secretary (TT) were present and about 20 ITTA members. Secretary-textiles, mot welcomed all the participants from the industry and made opening remarks saying that the PLI scheme on MMF & technical textile (TT) have been modified and it got delayed for many reasons. But it will be implemented shortly and this interaction with stakeholders for the purpose of refining the PLI scheme. then trade advisor, mot made a brief presentation on the revised PLI scheme on MMF & technical textiles. During the interactive session following key points were highlighted –

1. Industry members recommended that TT Sector should be treated separately from MMF in PLI scheme guidelines, given the Asset turnover ratio typically is 1:1.3 in the technical textile industry since it is capital intensive and they are functional products.
2. Indutech products to be included in the PLI scheme.
3. The 300 Cr Minimum investment for Greenfield Projects should be lower than the proposed level.
4. For blended units whose turnover is a mix of Technical Textile and conventional textiles, the TT portion may be treated as an independent unit for Turnover calculation, with the certificate from Statutory Auditor of the company being accepted for this purpose.
5. The incentive rates may be considered at a higher level over 5 years in a decreasing manner.
6. Gestation period of up to 2 years beyond set up period of one year to be provided, if companies can reach turnover targets earlier that can also be accepted.
7. No cap on growth to be made, i.e., if a company makes more than stipulated growth% in a year, the full incremental value to be incentivized.
8. Other Central/Stage Govt schemes and subsidies for setting up units may be allowed for availing concomitantly.

Rationalization of HSN codes for Technical Textiles

A meeting was held on 31.08.21 through video conferencing with Secretary-TT, MOT & Officers from OTXC with ITTA & its members to start working on the HSN Code issues on technical textiles. it was proposed to rationalize the HSN codes for technical textiles. the list of 207 already approved items to be expanded to include left out items and make additional list of technical textile items under "others & products not defined earlier category".

It was decided to form a working group on HSN Codes for technical textiles under the jurisdiction of OTXC. Mr. S. P. Verma of OTXC will be the coordinator for the same. The working group will consist of ED-ITTA and its selected members from different TT segments. The group will submit the report with 30 days to MOT, Delhi.

DEVELOPMENT OF INDIAN STANDARDS ON TECHNICAL TEXTILES

1. BIS Sectional Committee Meetings-

1.1 Technical Textiles for Mobiletech Applications (TXD 38)

The 3rd Meeting of Technical Textiles for Mobiletech Applications Sectional Committee, TXD 38 was held through video conferencing on 03rd August 2021 under the Chairmanship of Dr. M S Parmar, NITRA, Ghaziabad. As the member of committee, Dr. Anup Rakshit, ED, ITTA and Mr. Rakesh Jani, Autotech Nonwovens (Alternate Member) attended the meeting.

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

1. Standards on Automotive Tufted Floor Covering & Automotive Nonwoven Carpet/ Mat were finalized for publication as Indian Stds (IS 16482 & IS 16483).

2. Fresh Preliminary drafts to be prepared on Seat belt webbing, Airbags, Car body covers, Seat upholstery fabric and Aircraft upholstery, Headliners and Nylon/ Polyester/ Viscose rayon tyre cords.

1.2 Technical Textiles for Agro Tech Applications (TXD 35)

The 15th Meeting of Technical Textiles for Agro Tech Sectional Committee, TXD 35 was held through video conferencing on 04th August 2021 under the Chairmanship of Dr. U.K. Gangopadhyay of SASMIRA. Dr. Anup Rakshit, ED, ITTA attended the meeting as committee member.

During the meeting, standards on Polypropylene spun bonded non-woven crop covers, Fruit skirting bags, HDPE laminated woven lay flat tube for rain irrigation system, Flexible water storage tank, Warp Knitted Hail protection nets and laminated woven orchard protection cover were finalized for publication as Indian Stds (IS 17569, IS 17570, IS 17571, IS 17572 & IS 17574).

Govt notifies RoDTEP Scheme Guidelines and Rates

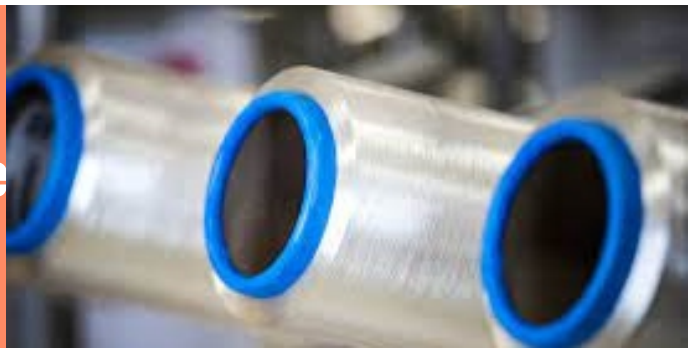
The Government has issued Notification No. 19/2015-2020 dated 17th August 2021 on the Scheme Guidelines and Rates for Remission of Duties and Taxes on Exported Products (RoDTEP) to boost the exports & competitiveness in the global markets. The rates of RoDTEP will cover 8555 tariff lines.

Scheme's objective is to refund, currently un-refunded: Duties/ taxes/ levies, at the Central, State & local level, borne on the exported product, including prior stage cumulative indirect taxes on goods & services used in production of the exported product, and Such indirect Duties/ taxes/ levies in respect of distribution of exported products.

It may be noted that rebate under the Scheme shall not be available in respect of duties and taxes already exempted or remitted or credited. RoDTEP support will be available to eligible exporters at a notified rate as a percentage of Freight On Board (FOB) value. Rebate on certain export products will also be subject to value cap per unit of the exported product.

[Source - https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1746688]

Govt. removes anti-dumping duty on Viscose Staple Fibre



The Government revokes the anti-dumping duty imposed on "Viscose Staple Fibre excluding Bamboo Fibre" falling under tariff item 55041000, originating in or exported from People's Republic of China and Indonesia, and imported into India in the Notification No. 44/2021-Customs (ADD) dated 12th August 2021 published by the Ministry of Finance, Department of Revenue.

[Source - https://www.cbic.gov.in/resources//htdocs-cbec/customs/cs-act/notifications/notfns-2021/cs-add2021/csadd44-2021.pdf;jsessionid=2EA2EC9862A0E77BA593F2259CB5A874]

Govt notifies extension of RoSCTL scheme for textile exporters

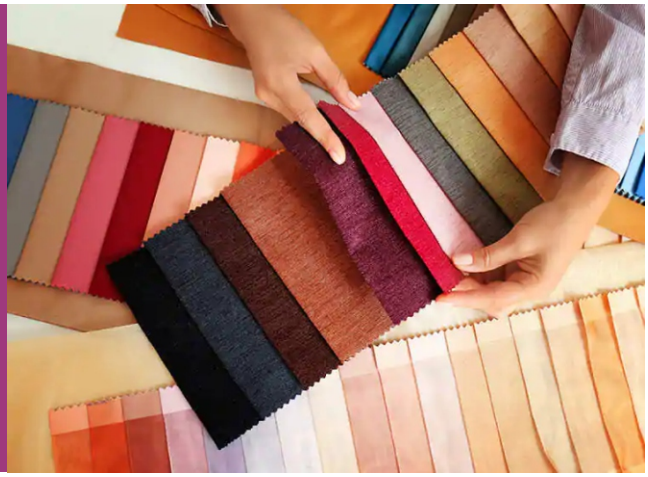
The Government has issued Notification regarding continuation of Scheme for Rebate of State and Central Taxes and levies (RoSCTL) on export of garments and made-ups to enhance competitiveness of these sectors. Government has decided to continue the RoSCTL w.e.f. 01st January 2021 to 31st March 2024 for apparel/garments (under Chapter 61 and 62) and Made-ups (under Chapter 63) to enhance competitiveness of these sectors.

The Scheme shall be implemented by Department of Revenue with end-to-end digitization for issuance of transferable Duty Credit Scrip, which will be maintained in an electronic ledger in the Customs system. Duty Credit Scrip under RoSCTL Scheme shall be issued without insisting on realization of export proceeds.

Continuation of RoSCTL for Apparel/Garments and Made-ups will make these products globally competitive by rebating all embedded taxes/levies which are currently not being rebated under any other mechanism. It will ensure a stable and predictable policy regime and provide a level playing field to Indian textiles exporters. Further, it will promote startups and entrepreneurs to export and ensure creation of lakhs of jobs.

[Source - https://www.pib.gov.in/PressReleasePage.aspx?PRID=1745519]

Summary of Various measures taken by Government for promotion of exports



Government is committed for promoting Indian exports in international markets and suitable interventions are done from time to time. The key schemes/interventions taken are:

- The Foreign Trade Policy has been extended upto 30.09.2021.
- Advance Authorization Scheme and EPCG Scheme are being implemented.
- Interest Equalization Scheme has been extended upto 30.09.2021.
- RoDTEP scheme has been operationalized for exports with effect from 01.01.2021.
- Extended the RoSCTL Scheme for apparel and made-up exports till March 2024.
- Transport and Marketing Assistance (TMA) scheme for specified agriculture products.

- Digital platform for Certificate of Origin (CoO) has been launched to increase Free Trade Agreement (FTA) utilization by exporters.
- To leverage full export potential, Districts are being promoted as Exports Hubs. Export action plans for 478 districts have been prepared.
- An 'Action Plan for Champion Sectors in Services' is developed to give focused attention to identified Champion Services Sectors through identified nodal Ministries/Departments.
- Assistance is being extended to exporters under Market Access Initiative (MAI) scheme.
- Working group on export infrastructure up-gradation has been constituted under National Committee on Trade Facilitation (NCTF) & National Trade Facilitation Action Plan (NTFAP) has been formulated.
- Production Linked Incentive (PLI) Schemes in 13 sectors are being implemented.
- Govt. initiated review of some of the existing Free Trade Agreements (FTAs) to maximize its export potential.
- In addition, bilateral trade negotiations have been initiated with a number of countries.

Government is continuously engaged in strengthening Indian industry through "ease of doing business" for improving the business environment and attracting foreign investments. This information was given by the Minister of State in the Ministry of Commerce and Industry, Smt. Anupriya Patel, in a written reply in the Lok Sabha.

[Source - https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1742406]

Reinforced Soil wall at Chakkai canal & Hydraulically Applied Erosion Control Products in Rajasthan

A bridge with approach ramps was planned across the Chakkai canal, Kerala connecting NH bypass with the New International Airport in Trivandrum. Soil investigation reports revealed that the subsurface soil primarily consisted of clay upto 3m depth and high ground water table owing to the proximity to canal. The foundation soil was found to have inadequate bearing capacity to bear the load of the approach ramps.

MacRes® system consisting of reinforced soil (RS) wall with concrete panels as fascia and ParaWeb® as reinforcement was used for the approach ramps of the bridge. The maximum height of RS wall is 5.6m. Keeping in mind the high-water table and excessive consolidation settlements, stone column technique with composite soil was used to improve the bearing capacity of soil, reduce post–construction settlement and facilitate the solution implementation.

A railway embankment of maximum slope height 18m was constructed in Rajasthan using silty sand. The embankment slope was at risk of failing due to soil erosion because of heavy precipitation, steep gradient, absence of vegetation cover, drainage issues, risk of formation of rills and rain-cuts, leading to a surficial slide or undermining of the edges of the embankment.

Soil erosion prevention measures were required to protect the slope. These measures for slope consisted of different solutions based on the slope height to be protected. On the slope of height upto 4m, Hydraulically Applied Erosion Control Products (HECPs) - MacFlex and MacGanics along with the soil amendments and seeds was sprayed. For heights 4m to 7m, HECPs were applied on the surface followed by installation of a biodegradable erosion control mat (BioMac®). On heights over 7m, HECP was followed by the unreinforced 3-D geosynthetic mat (MacMat®). Extremely high temperatures, absence of organic content in soil and long slopes made the project very challenging. The embankment slope was covered with vegetation in a short period.

[Source-https://www.maccaferri.com/in/macres-reinforced-soil-rs-wall-chakkai-canal/

96 Kms of roads constructed using coir geo-textiles in India

In a written reply in Lok Sabha, Union Minister of State for Rural Development Smt. Sadhvi Niranjan Jyoti informed that as of July 2021, about 96.59 Kms of roads have been constructed using coir geo-textiles in Karnataka, Kerala, Andhra Pradesh and Tamil Nadu. The details of roads constructed as on 28th July, 2021 using coir geo-textiles are: Karnataka - 28.85 km, Kerala - 14.29 km, Madhya Pradesh - 9.05 km and Tamil Nadu - 44.40 km.

The Indian Road Congress (IRC) has also accredited the use of coir geo-textiles in construction of roads. In the preliminary observations by the National Quality Monitors (NQMs), these roads were found to be performing well. For those areas where coir is locally available, use of coir geo-textiles in road pavements is economical compared to the traditional methods of soil stabilization, especially when traditional material may not be available locally.

The State of Kerala has been allocated target length of construction of 71 km road length using Coir geo-textile under PMGSY-III, for which the requirement of Coir Geo-textile is assessed to be around 2.80 Lakh Square metre approximately.

[Source - https://www.pib.gov.in/PressReleasePage.aspx?PRID=1741956]

MSMEs can expand Business in Global Market

Ministry of Micro, Small and Medium Enterprises (MSME) through its MSME-Development Institutes (DI) situated in all States, facilitates MSMEs to export from Domestic Tariff Area (DTA) and Special Economic Zone (SEZ). For this purpose, 52 Export Facilitation Cells (EFC) have been established to provide hand-holding support to MSMEs as well as creating linkages with Export Promotion Councils, Commodity Boards, etc. Further, Government has recently included retail and wholesale trades under the MSME category making them eligible for Priority Sector Lending (PSL).

To support MSMEs reach out to customers across the world, Ministry is implementing International Cooperation Scheme (ICS) facilitating participation of the MSMEs in International Exhibitions, Trade Fairs, Buyer-seller meets etc. Further, various other schemes are being implemented by the Ministry to help MSMEs expand their business in the global market by providing them assistance for technology upgradation, skill development, quality certification etc. Besides, Directorate General of Foreign Trade (DGFT) is implementing schemes like Niryat Bandhu Scheme (NBS) for mentoring new and potential entrepreneurs about the intricacies of foreign trade and Interest Equalization Scheme (IES) to provide cheaper source of rupee credit for pre-shipment and post-shipment activities, wherein all tariff lines are covered for MSMEs with 5% subvention rates.

This information was given by Union Minister for Micro, Small and Medium Enterprises, Shri Narayan Rane in a written reply in Lok Sabha.

[Source - https://pib.gov.in/PressReleasePage.aspx?PRID=1740279]

SMART TEXTILES - Washable Smart Clothes & Smart Sensor-based Bra

Future washable smart clothes powered by Wi-Fi will monitor your health

Engineers from Purdue University, USA have developed a new spray/ sewing method to transform any conventional cloth items into battery-free wearables that can be cleaned in the washing machine. These smart clothes are powered wirelessly through a flexible, silk-based coil sewn on the textile. Flexible silk-based coil sewn onto a smart textile, capable of harvesting energy from radio & Wi-Fi. signals.By spray-coating smart clothes with highly hydrophobic molecules, they were able to render them repellent to water, oil and mud. These smart clothes are almost impossible to stain and can be used underwater and washed in conventional washing machines without damaging the electronic components sewn on their surface. Because of the ultrathin coating, these smart clothes remain as flexible, stretchable and breathable as conventional cotton T-shirts.

Flexible silk-based coil sewn onto a smart textile, capable of harvesting energy from radio & Wi-Fi. signals.

Unlike common wearables, these smart clothes do not require batteries for powering. By simply harvesting energy from Wi-Fi or radio waves in the environment, the clothes are capable of powering the circuitry sewn on the textile. One example is a battery-free glove that illuminates its fingertips every time the user is near a live cable to warn about the possibility of an electric shock.

[Source-https://www.purdue.edu/newsroom/releases/2021/Q2/forget-wearables-future-washable-smart-clothes-powered-by-wi-fi-will-monitor-your-health.html]

Smart sensor-based, breastfeeding-friendly bra developed to help new mothers

New York based Nextiles, a smart fabric technology start-up, has joined hands with women's health brand Lilu to bring the next level of breast pumping technology to new mothers.

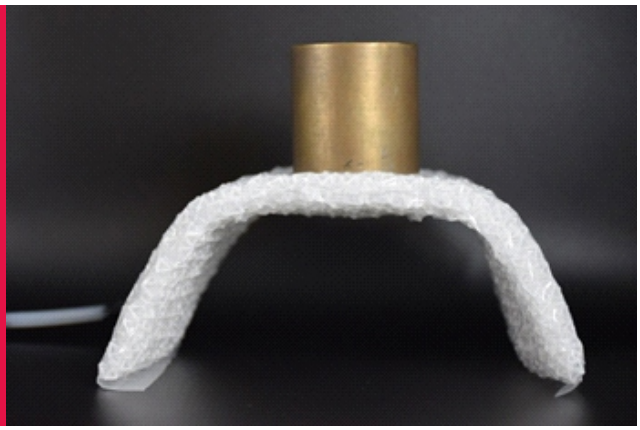
The companies are using Lilu's breast pumping massage bra and integrating Nextiles' sensor technology to create performance data for new mothers and the broader healthcare industry.

Nextiles' patent-protected manufacturing process blends traditional sewing techniques with printed circuit boards to embed flexible sensors directly into fabrics for the breastfeeding-friendly bra. Using fabric such as nylon and spandex, the breast pumping bra is designed to be comfortable and is machine washable for easy clean-up. The bra will collect data to provide mothers with insights about their lactation, to help them reach their breastfeeding goals.

[Source-https://apparelresources.com/technology-news/manufacturing-tech/smart-sensor-based-breastfeeding-friendly-bra-developed-help-new-mothers/]

PROTECH - 3D Printed Lightweight Fabric & Protective Motor Racing Suits

3D-printed lightweight fabric can be soft or hard



When stiffened, new chain mail fabric can withstand upto 50 times its own weightA new type of 'chain mail' fabric that is flexible like cloth but can stiffen on demand has been developed by scientists from Nanyang Technological University in Singapore and the California Institute of Technology (Caltech). The lightweight fabric is 3D-printed from nylon plastic polymers and comprises hollow octahedrons - a shape with eight equal triangular faces - that interlock with each other.

When the soft fabric is wrapped within a flexible plastic envelope and vacuum-packed, it turns into a rigid structure that is 25 times stiffer or harder to bend than when relaxed. These new 'wearable structured fabrics' could pave the way for smart fabrics that can harden to protect a user against an impact or when additional load-bearing capacity is needed. Potential applications include bullet-proof or stab-proof vests, configurable medical support for the elderly, and protective exoskeletons for high-impact sports or workplaces like construction sites. It could also lead to a new platform technology with applications in medical and robotic systems.

[Source - https://www.innovationintextiles.com/research-development-education/3dprinted-fabric-can-be-soft-or-hard/?utm_source=news_alerts&utm_medium=email&utm_campaign=news_alerts]

Formula E Racing Suit raises the bar for protective performance

Teijin Aramid, Netherlands has collaborated with Italy based OMP Racing, producer of premium motorsport safety equipment, to engineer a new protective motor racing suit that will be worn for the first time at the Berlin Formula E 'E-Prix'.

The new suit uses Teijin Aramid's Teijinconex neo fibres and has been custom-made. It contains innovative features designed to maximise the safety and comfort of drivers during competition. The outer layer of the garment consists of an ultra-light fabric made with Teijinconex, that can resist

temperatures of up to 400°C (750°F) and does not burn or melt when exposed to extreme heat.

The suit contains just two layers, one less than most standard racing suits. This allows the wearer greater flexibility, a more tailored, comfortable fit and is also up to 10% lighter than the previous racing wear further enabling the movement and performance of drivers.

[Source-https://www.compositesworld.com/news/teijin-aramid-omp-racing-composite-formula-e-racing-suit-raises-the-bar-for-protective-performance]

COMPOSITES - Lightweight Drone & New Aerospace Composites Materials

Composite components improve drone impact resistance

Composite specialist Cobra International based in Thailand is extending its development and manufacturing partnership with Thai drone manufacturer HG Robotics and in the latest collaboration has supported the development of an entirely new production concept for the new Vetal tail sitter drone. Vetal, a twin rotor, tail sitting, vertical take-off and landing (VTOL) drone suitable for large scale agricultural surveys and general surveillance monitoring.

Cobra designed a hybrid carbon fiber composite flying wing with both hollow and cored sections, with the main body of the aircraft comprising a polyvinyl chloride (PVC) foam sandwich shell with a low density expanded polystyrene (EPS) foam rib which, combined with a fully foam cored tail structure, was fractionally lighter than HG's target.

The new build method also improved the impact resistance and overall durability of the VETAL platform. To reduce weight, a combination of carbon fiber stitched biaxial fabrics and UD reinforcements were used wherever possible, with additional glass fiber reinforced sections of laminate being employed where radio-transparency or insulation from metallic parts were required.

[Source-https://www.materialstoday.com/carbon-fiber/products/composite-components-improve/]

Two Composite Materials Designed for Aerospace Industries

US based Markforged has unveiled two new composite materials, to support aerospace, defence and other manufacturers in highly-regulated industries with its Onyx FR-A and Carbon Fibre FR-A, aerospace-ready versions of its Onyx FR and Carbon Fibre FR materials.

Onyx FR-A and Carbon Fiber FR-A materials are designed to meet flame, smoke and toxicity (FST) requirements for many parts in aircraft interiors, come with traceability and adhere to specifications approved by National Center for Advanced Materials Performance (NCAMP). They are

specifically developed for end-use applications in demanding industries like aerospace and defense because of their high strength-to-weight ratio, exceptional surface finish and high consistency.

[Source - https://www.technicaltextile.net/news/us-markforged-unveils-two-new-composite-materials-275644.html]

MOBILTECH - Latex-Free Needlepunch Carpets

Developed Latex-Free Needlepunch Carpets

Autoneum Needlepunch carpets are now even more sustainable because of the alternative backcoating (ABC) process, which uses a thermoplastic adhesive instead of latex in the backcoating. Unlike latex, thermoplastic adhesives may be heated and melted down with pure PET carpet components at the end of the product life cycle, greatly facilitating recycling.

The thermoplastic adhesive using the ABC process consumes much less energy than the production of latex-based backcoatings and requires no water at all, the environmental impact can already be minimized in the manufacturing process. Backcoatings without latex increase carpet sustainability by improving recyclability at the conclusion of the product life cycle.

Additionally, thermoplastic adhesives developed by Autoneum will open up new possibilities in the future for adapting backcoatings to the individual

needs of vehicle manufacturers in terms of their acoustic performance, stiffness and abrasion resistance. In the near future, backcoatings with thermoplastic adhesives will also be used for Autoneum's tufted carpets.

[Source - https://www.nonwovens-industry.com/contents/view_breaking-news/2021-07-15/autoneum-develops-latex-free-needlepunch-carpets/15304]

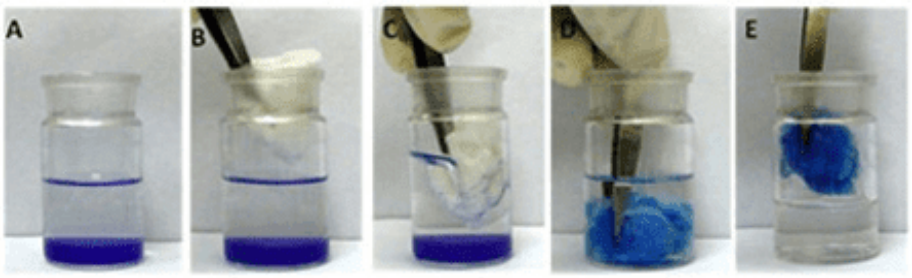
RAW MATERIAL - Superabsorbent cotton & Highly Versatile Elastomer TPU

BARC develops cotton based superabsorbent using radiation technology to combat oil pollution

Bhabha Atomic Research Centre (BARC), a premier nuclear research institute of Department of Atomic Energy located in Mumbai, has developed a highly efficient super-hydrophobic (water disliking) and super-oleophilic (oil liking) cotton by radiation technology.

"There is no absorbent currently available that can remove floating oil from water surface and sediment oil (underwater) simultaneously," says Dr. A.K. Mohanty, Director, BARC, Mumbai. He informed that the "superabsorbent cotton" has been developed by Dr. Subhendu Ray Chowdhury, a scientist working in Isotope and Radiation Application Division, BARC.

The material was developed by bio-inspired molecular-scale surface engineering through tuning of surface roughness (topography) and surface energy with the help of radiation assisted covalent integration. Typically, one gram of the material can



Super Cotton (super absorbent for removal of oily substance from aqueous media) – Bhabha Atomic Research Centre (BARC)

pick up minimum 1.5 kg oil from water media which can be recollected by simple squeezing or compression from the superabsorbent cotton. This biodegradable superabsorbent can be used multiple times (50-100 times).

However, the current technique is cost effective, recovers the oil and adds value to environment as well as economy. The process to produce the superabsorbent cotton in large quantities has been developed and scaled up. Due to design flexibility and weather resistance this material can be packed and stored as per requirement.

[Source - https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1738111]

New IROGRAN® TPU grade for Laminating Technical Textiles

A new thermoplastic polyurethane (TPU) has been developed by Huntsman for technical textile producers manufacturing high performance fabrics for outdoor clothing applications. Irogran A 85 P 4394 HR TPU is a highly versatile elastomer that can be easily extruded and added to nylon and polyester materials to give them a protective, durable, waterproof layer.

Added to fabrics as an extruded film, it can provide items of clothing, such as raincoats, with a highly durable finish combined with a soft touch. With a high tensile strength, extruded films made with the TPU can aid the stretch and recovery of the materials they are used on - increasing their longevity. The new grade also offers good levels of abrasion and tear resistance, making it ideal for use in bladder applications, in the manufacture of tension fabrics and in industrial textile applications.

With a high melt strength, it is very stable during production and being tolerant to high forces in its melted, blown state, extruded films made with it are far less likely to break during processing. This enables manufacturers to improve production throughput and lower scrap rates, which in turn reduces waste and keeps costs down.

[Source - https://worldoftechnicaltextile.com/huntsman-develops-new-irogran-tpu-grade-for-laminating-technical-textiles/]

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NEW MEMBERS

POLYON TEXTILES PVT. LTD., GUJARAT

Polyon Textiles have state of the art facility in Ahmedabad to manufacture Fiberglass & Polyester based Geogrids with a production capacity of 20 lakh m^2/year. They have works with various stakeholders of the industry such as consultants, contractors, governing bodies in developing & supplying high quality geogrids. They have weaving, coating and lamination machineries.

GENUS APPARELS LTD., HARYANA

Genus Apparels is a Hi-fashion knit & woven garment manufacturer and exporter incorporated in 2005. They offer fabrics made of cotton, viscose, modal, polyester and all kinds of blends and knit structures. Certified by GOTS for manufacturing organic garments. Having 3 thread & 5 thread overlock m/c, 4 needle Kansai m/c, flat lock m/c, etc. They have recently started manufacturing safety wear products like reusable face masks, anti-pollution masks, mask pouch, coveralls, etc.

AURA BIOTECHNOLOGIES PVT. LTD., CHENNAI

AURA Biotechnologies is a biotech company. It is involved in developing and manufacturing hemostatic pad (Gauze) made from chitosan fibre to stop the bleeding from cut injuries, accidents, surgeries and bullet injuries etc. They have needle punching machinery & sophisticated testing equipment like, Fast Liquid Chromatography, etc.

DPI EXIM PVT. LTD., HARYANA

DPI Exim, established in 2014, is a leading manufacturer of Synthetic leather substrate with a vast customer range of leather substrate Rexene plants. They are also into manufacturing Stitch Bonding nonwoven used for shoes and garments applicable with production capacity of 1440 MT/year (FY 2019-20). They have high speed needle punching line and stitch bonding machines. Their other group companies lead in Velcro Tape and Flyknit shoes upper.

ITTA PUBLICATIONS

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

*Courier charges extra

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UPCOMING EVENTS

JULY 2021

WORLD OF WIPES (WOW)
12-15 July 2021, Georgia, USA
Web: https://www.worldofwipes.org

ASIA NONWOVENS EXHIBITION AND CONFERENCE (ANEX) &
THE 19TH SHANGHAI INTERNATIONAL NONWOVENS EXHIBITION (SINCE)
22-24 July 2021, Shanghai, China
Web: https://www.worldofwipes.org

AUGUST 2021

TECHTEXTIL NORTH AMERICA
23-25 August 2021, North Carolina, USA
Web: https://techtextil-north-america.us.messefrankfurt.com

IFAI OUTLOOK CONFERENCE 2021
29-31 August 2021, South Carolina, US
Web: https://techtextil-north-america.us.messefrankfurt.com

SEPTEMBER 2021

INDEX
7-10 September 2021, Geneva, Switzerland
Web: http://www.edana.org

RISE 2021 (Research Innovation & Science for Engineered Fabrics Conference)
28-30 September 2021
Web: http://www.edana.org

OCTOBER 2021

A+A
26-29 October 2021, Düsseldorf, Germany
Web: https://www.aplusa-online.com

NOVEMBER 2021

IFAI EXPO
1-4 November 2021, Tennessee, USA
Web: http://ifaiexpo.com

HYGIENIX
15-18 November 2021, Arizona, USA
Web: https://www.hygienix.org

OSH INDIA 2021
25-26 November 2021, Mumbai, India
Web: https://www.oshindia.com/mumbai/

TECHTEXTIL INDIA
25-27 November 2021, Mumbai, India
Web: https://techtextil-india.in.messefrankfurt.com/

DECEMBER 2021

INDIA ITME 2021
(11th India International Textile Machinery Exhibitions)
8-13 December 2021, Greater Noida
Web: https://itme2021.india-itme.com

MARCH 2022

IDEA 2022
28-31 March 2022, Florida, USA
Web: https://www.ideashow.org/

FiltXPO™ 2022
29-31 March 2022, Florida, USA
Web: https://www.filtxpo.com/

JUNE 2022

INTERNATIONAL TEXTILE MACHINERY EXHIBITION (ITM) 2022
14-18 June 2022, Istanbul
Web: https://www.itmexhibition.com/itm2022/

HIGHTEX 2022 (International Technical Textiles and Nonwoven Trade Fair)
14-18 June 2022, Turkey
Web: https://www.hightexfairs.com/hightex2022/

TECHTEXTIL 2021
21-24 June 2022, Frankfurt, France
Web: https://techtextil.messefrankfurt.com/frankfurt/en.html