

# Interactive Workshop on Standardization of Technical Textiles

The Indian Technical Textile Association (ITTA) jointly with Bureau of Indian Standards (BIS) organized the "INTERACTIVE WORKSHOP ON STANDARDISATION OF TECHNICAL TEXTILES" on 02nd February 2022 on Virtual Platform. The workshop received over whelming response and attended by more than 150 delegates from the technical textile Industry, COEs, Textile Colleges & Universities and Senior Officers from BIS Regional Offices.

Shri. Amit Agarwal, Chairman, ITTA welcomed the Experts & Speakers from BIS, Senior Officials from all Major Regional Offices of BIS all over India, ITTA members & other Stakeholders from the Technical Textile (TT)



industry present in the interactive workshop. He spoke how the Product and Process Standardization is very important and also pointed out that ITTA & its members significantly contribute in the process of Indian Standard development for last 5-6 years. More than 40 Members are active in 10 BIS Sub-Committees on Technical Textiles. He also observed that there is significant improvement in developing & publishing IS standards at a much faster pace as compared to previous years. He informed that ED-ITTA heads many Panels formed by BIS where specific domain knowledge is required to formulate the Indian standards. He mentioned that there are further improvements are required such as still in many purchasers in Private & Govt Sectors are using International Stds. in their Tenders/ purchase contracts. They should use IS standards. Product Certification process need to be made more user friendly with ease of operations & reduced timeline.

Speaking on the event, Shri. Jayanta Roy Chowdhury, Scientist-G & DDG (Standardization-I), BIS said that this interaction will pave the way for the collaboration with the industry and



research institutes. He pointed out the importance of standardization in technical textiles. He emphasized that there is huge potential for TT because of large demand gap which is to be met in terms of utility of product and consumption. In this regard, the Govt. & MOT is also encouraging & promoting the technical textile industry with the different schemes such as PLI, NTTM, etc. He informed that standards provide solution in terms of what is expected for the products, its characteristics, performance and help in facilitating market access in trade. Therefore, when we talk about promoting the TT sector, we have to look into standard formation. Because of this BIS has started emphasizing on the development of standards with the support & involvement of TT industry. He said that till now we have developed around 500 IS on technical textiles. He also mentioned that BIS has been engaged in the international standards work with ISO.

## TECHNICAL SESSIONS -

Eminent Speakers from BIS enlightened the participants on the following major aspects - Standardization Process, Committee Structure and Recent Initiative By BIS, BIS Conformity Assessment Schemes on Product & Process Certification, Status of Standardization in Technical Textile Segments and Speciality Fibers, BIS Services Available all Over India and Future Needs & Expectations from the Technical Textile Industry. The Technical Sessions were moderated by Dr. Anup Rakshit, Executive Director, ITTA.

"Industry's Contribution on Developing Indian Standards on Technical Textiles" was presented by Dr. Anup Rakshit, ITTA. He mentioned about the ITTA's prime focus on Product & Process Standardization by actively involving stakeholders, encourage them to participate in std development process, industry experts taken as members in BIS sub-committees, help BIS to get industry data &



prepare draft stds and created standardization cells on all technical textile segments. He pointed out that ITTA contributes in Identification of Products/Testing Standards & Draft Preparation for Development of BIS Standards. ITTA Secretariat and more than its 40 members represent Ten BIS Sub-committees on Technical Textiles. As per the request from BIS, ITTA formed 10 "Standardization Cells" taking key members from the 13 TT Segments to strategize the stds development in TT sector, identify the needs and priorities of the industry, to facilitate their engagement & participation in stds development both nationally and internationally and to promote implementation of standards. Industry analysis showed that the stronger TT Segments on standardization are- Geosynthetics, Agrotexiles, Medical Textiles, Protective textiles & Packaging textiles which are ahead of other segments, namely- Industrial Textiles, Building & Constructional Textiles, Mobiltech/Automotive Textiles, Composites and Speciality Fibres & Smart Textiles, he said.

Shri. J. K. Gupta, Head (Textiles) spoke about the "Standardization Process, Committee Structure and Recent Initiative by BIS. He explained in detail about the overview of textile departments i.e., Total Indian Standards published- 1435, Standards on Technical Textiles- about 500, Product under certification- 59 and Total No. of Sectional Committee- 26. The committee is structured by governing council, executive committee, standards advisory committee & division council for Advisory & Administrative Work and sectional committee, sub-committee & panel/working groups for Technical Work. At present there are 15 Division Councils in BIS such as Textiles (TXD), Civil Engineering (CED), Petrochemical, Coal & Related Products (PCD), Production and General Engineering (PGD), etc. Functions of Division Council (DC) are advising on the subject areas, set up sectional committee, approve proposals for work and study the work of international organizations. Sectional Committee is appointed by DC for the preparation of a particular standard or group of standards. It consists of members from Manufacturers/industry associations, Users, Govt.



dept., Academic institutions, Consultants, etc. Technical Committees under TXD are 26. He also highlighted about the process of standards development at national level i.e., Stage 1- New Work Item Proposal, Stage 2- Working Draft, Stage 3- Preliminary Draft, Stage 4- Wide Circulation, Stage 5- Finalized Draft and Stage 6- Published as Indian Stds. He talked about the New Initiatives taken by BIS on Stds Development- i) Digitization of Standardization Activity in BIS (MANAKONLINE.IN), ii) Online Commenting: Drafts & Standards, iii) Online Proposals of New Subjects, iv) Webinars with Stakeholders, v) Engagement of Consultants, vi) Strategic Roadmap, vii) Access to Stds, viii) Creation of Standardization Cells and ix) Integration of Standardization in Educational Curriculum.

Shri. Aditya Das, Scientist-D, BIS presented the topic on "BIS Conformity Assessment Schemes on Product & Process Certification". He mentioned about the BIS Conformity Assessment Regulations, 2018. Several Conformity Assessment Schemes defined in the Regulations. Some Important schemes are: Scheme-I: Product Certification (Over 39000 licences ~ 1100 standards across most product categories), Scheme-II: Registration (Over 19000 licences~45 standards mostly electrical and electronic products), Scheme-III: Management System Certification (Quality Management System - IS/ISO 9001, Environmental Management System-IS/ISO 14001 etc.) & Scheme IX: Product, Process and System Certification (Milk and Milk products) - New. The Product Certification Scheme is a Type 4 Conformity Assessment Scheme as per ISO/IEC 17067:2013. Certification Process (Manakonline) = Option 1- 90 days (application submission without test report) & Option 2- 30 days (application submission with test report of 3rd party lab). Nearly 800 licences granted for more than 60 products. Important developments in Product Certification are Cluster Laboratories - in-house testing facilities to MSME manufacturers and Concessions in Marking Fee - concession of 20% on minimum marking fee to MSME manufacturers across all products and additional 10% concessions to units located in North Eastern Region states.



“Status of Standardization in the area of Meditech, Sportech, Composites and Speciality Fibres” was presented by Dharmbeer, Scientist-C, BIS. He talked about the Standardization in the field of Medical Textiles i.e., Technical Textiles for



Medtech Application Sectional Committee, TXD 36 under which Number of standards formulated: 72, Number of standards under development: 03, Product Standards: 60 & Method of tests: 12. Important stds are IS 16289:2014 Surgical Face Masks, IS 17423:2021, Bio-Protective Coveralls Specification, IS 17334: 2019 Surgical Gowns and Surgical Drapes, IS 17509:2021 Disposable Baby Diaper, etc. Standardization in Technical Textiles for Sportech Application Sectional Committee, TXD 37 under which Number of standards formulated: 03. Important stds are IS 8991 Nylon Fabrics for Sleeping Bags, IS 8430 Nylon Fabrics for Inflatable Equipment & IS 11915:1986, Nylon Fabrics for making Mountaineering Equipment. Standardization in Technical Textiles for Composite and Speciality Fibres Sectional Committee, TXD 40 under which Number of standards formulated: 34, Terminology: 02, Product Standards: 03, Method of tests: 23 & Code of Practice: 06. Important stds are IS 11273:1992 Woven roving fabrics of 'E' glass fibre, IS 11320:1997 Glass fibre rovings for the reinforcement of polyester and of epoxide resin systems & IS 11551:1996 Glass fibre chopped strand mat for the reinforcement of epoxy, phenolic and polyester resin systems.

Shri. Himanshu Shukla, Scientist-B, BIS presented on “Status of Standardization in the area of Geotech, Indutech, Agrotech and Mobiltech”. He emphasized about the Standardization in the field of Agro Textiles i.e., Technical Textiles for Agrotech



Applications Sectional Committee, TXD 35 under which Number of standards formulated: 24, Product Standards: 23 & Terminology: 01. Important published stds are IS 16008:2016 (Part 1 & Part 2) Shade Nets for Agriculture and Horticulture Purposes, IS 17358 (Part 1 & 2) Fencing nets for

agriculture and horticulture purposes, IS 17730:2021 (Part 1 &2) Hail Protection Nets for Agriculture and Horticulture Purposes, etc. Standardization in Geosynthetics Sectional Committee, TXD 30 under which Number of standards formulated: 79, Product Standards: 20, Code of practices: 09, Method of tests: 45, Terminogy: 01, Others: 04 & Number of standards under development: 03. Important published stds are IS 16653:2017 Needle punched nonwoven geobags for coastal and waterways protection, IS 17483:2020 Geocells - Part 1 Load Bearing Application and Part 2 Slope Erosion Protection Application, IS 16352:2015 HDPE Geomembranes for lining, etc. Standardization in Technical textiles for Mobiltech Applications Sectional Committee, TXD 38 under which Number of standards formulated: 17, Number of standards under development: 5, Product Standards: 4 & Method of tests: 13. Important stds are IS 17757:2021 Automotive Tufted Floor Covering, IS 17758:2021 Automotive Non-Woven Carpet/ Mat, etc. Proposals for new subjects- Airbags, Headliners, Seat belts & Seat upholstery. Standardization in Industrial Fabrics Sectional Committee, TXD 33 under which Number of standards formulated: 44, Product Standards: 34, Method of tests: 10 & Number of standards under development: 8. Important published stds are Filter fabric, Chafer fabrics, Belting fabrics, Liner fabrics, Interlining fabrics, Test methods for non wovens, etc.

“Status of Standardization in the area of Protech, Packtech and Buildtech” was presented by Shri. Mayur Katiyar, Scientist-B, BIS. He highlighted about the Standardization in the field of Protective Textiles i.e., Textiles Protective Clothing



Sectional Committee, TXD 32 under which Number of Standards Formulated: 60, Product Standards: 22, Code of Practice: 1, Method of Test: 36 & Others: 1. Important stds are IS 15809:2018 High visibility warning clothes, IS 16890:2018 Protective clothing for firefighters, IS 17051:2018 Bullet Resistant Jacket, etc. Stds under development - Extreme cold climate clothing, Aluminized fire proximity suits, Anti flash hoods for gunners, etc. Standardization in the field of Packtech i.e., Textile Materials Made from

Polyolefins Sectional Committee, TXD 23 under which Number of Standards Formulated: 19, Product Standards: 17, Method of Tests: 1 & Others: 1. Important stds are IS 14887:2014 HDPE/ PP woven sacks for packaging of 50 kg food grains, etc. Standards under development is Hermetically sealed storage bags. Standardization in Technical Textiles for Buildtech Applications Sectional Committee, TXD 34 under which Number of Standards Formulated: 7, Product Standards: 5, Terminology: 1 & Safety: 1. Important published stds are Camping tents, Industrial Safety nets, Micro fibers for use in cement-based matrix, etc. and Standards under development - Architectural Membranes, Hoarding and signage (Flex), Scaffolding nets, Acoustic fabrics, Insect nets for buildings etc.

### **INTERACTIVE SESSION**

Interactive Session with Industry participants was held at the end of the technical session by ITTA & BIS together. Major points/ views/ suggestions raised by the participants are as follow - Does BIS have a National Standardization Strategy, How BIS std are fareed in global stage i.e., other countries., Does BIS issue technical regulations or the Ministry, Do we have Cyto Toxicity & Skin Irritation to skin requirements in medical textile products as per BIS,

How is BIS standard different from NIOSH and EN standard for face masks, What is status of market surveillance and sampling by BIS and what is the category for pharma & electronics uniforms. Expert Speakers from BIS had answered all the queries of participants and asked the participants to submit if they have any other queries and email their comments/views/ suggestions to ITTA & BIS.

### **FEEDBACK FROM THE PARTICIPANTS**

1. SRF LTD. - Very good insight to various standards by BIS team & thanks to ITTA in arranging this session.
2. RELIANCE - Thanks ITTA & BIS for this wonderful & informative webinar
3. SITRA - Very informative session on the standards in technical textiles
4. TRIVITRON HEALTHCARE - Very productive & insightful session
5. LOHIA GROUP - Very informative and phenomenal session.
6. SHINGORA TEXTILES - Wonderful session. We have good BIS standard specially on Medical Textiles.