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**BUREAU OF INDIAN STANDARDS**

*(New Delhi)*

**Minutes**

# Made-up Textiles (Including Ready-Made Garments) 25th Meeting

# Sectional Committee, TXD 20

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| --- | --- | --- |
| **Date** | **Time** | **Venue** |
| 19 April 2024 (Friday) | 11:00 h | Video Conference through CISCO Webex |

**ATTENDEES:**

|  |  |  |
| --- | --- | --- |
|  | Dr Arindam Basu (Chairman) | Northern India Textile Research Association, Ghaziabad |
|  | Smt Deepali Plawat | Ahmedabad Textile Industries Research Association, Ahmedabad |
|  | Shri  K Krishnaraj | CSIR - Central Leather Research Institute, Chennai |
|  | Shri Ramesh Chand Meena (representative) | Ministry of Communications, Department of Posts, New Delhi |
|  | Shri Vivek Agarwal | Northern India Textile Research Association, Ghaziabad |
|  | Dr Neha Kapil | -do- |
|  | Prof Monika Gupta | National Institute of Fashion Technology, Delhi |
|  | Shri C R Kalesan | Office of the Textile Commissioner, Mumbai |
|  | Dr. Karthikeyan K. | SGS India Private Limited, Mumbai |
|  | Shri Mahalakshmi R | -do- |
|  | Shri Rajneesh Rai | Shahi Exports Private Limited, Faridabad |
|  | Mr. Sounder Raj | The South India Textile Research Association, Coimbatore |
|  | Mr. Shirish Gupta (Invitee) | Aerocom Cushions Pvt. Ltd. |
|  | Mr. Hemant Gupta (Invitee) | -do- |
|  | Shri Aditya Kalani (representative) | Reliance Industries Limited, Mumbai |
|  | Shri Rahel Qureshi (Invitee) | -do- |
|  | Shri Sandeep Kumar Singh (Invitee) | Northern Railways |
|  | Shri Shubham Singhal (Invitee) | Trident Group, Punjab |
|  | Shri Udit Raj (Invitee) | -do- |
|  | Shri Rohan Gade (Invitee) | -do- |
|  | Shri Kunjdand (Invitee) | -do- |
|  | Shri Kuldip Gupta (Invitee) | Aerocom Pvt. Ltd. Bhubneshwar |

**BIS DIRECTORATE GENERAL:**

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| --- | --- | --- |
| 23. | Shri Gourav Mishra | Scientist-B/Assistant Director (Textiles)  & Member Secretary TXD 20 |
| 24. | Shri Himanshu Shukla | Scientist-B/Assistant Director (Textiles) |
| 25. | Ms. Shelly Sirohi | Executive Assistant (Textiles) |

**Item 0 WELCOME & INTRODUCTORY REMARKS**

Dr. Arindam Basu, Chairman TXD 20, welcomed all the members and invitees present in the meeting. He further emphasized the need to conduct the sectional committee meetings of TXD 20 more frequently and requested the members to actively participate and complete the assigned task in a time bound manner.

Member Secretary also extended a hearty welcome to the Chairman and members of TXD 20.

# Item 1 CONFIRMATION OF THE MINUTES OF THE PREVIOUS MEETING

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The Committee confirmed the minutes of 24th meeting held on held on 05 April 2023 through virtual mode at BIS, New Delhi and as circulated vide BISDG letter no. TXD 20/A2.24 dated 24 April 2023.

**Item 2 SCOPE AND COMPOSITION OF TXD 20**

**2.1** The committee reviewed the present scope and composition of the committee as given in **Annex 1** to the agenda.

1. After detailed deliberations, the committee decided to recommend to the Textiles Division Council (TXDC), the withdrawal of the following organizations due to a lack of interest in the work of committee/non-participation in the last committee meetings:
   1. Birla VXL Limited, Faridabad; and
   2. Orient Craft Ltd., Gurgaon.
2. Smt. Monika Gupta from NIFT Delhi informed the committee that Smt. Vandana Narang has retired from the service, so the committee decided to seek a fresh nomination from NIFT Delhi.

**2.2 to 2.4** The committee considered the co-option request received from the following person/organization:

1. Shri Madhan R, Manjushree Spntek Pvt. Ltd., Bangalore
2. Shri Venkatesh A, Viridian Testing Labortories LLP, Tiruppur, Tamil Nadu
3. Shri Xavier Pinto, Siyaram Silk Mills Limited

After detailed deliberation, the committee did not agree to the co-option requests for Shri Madhan R and Shri Xavier Pinto as the person/organization does not have the expertise relevant to the scope of technical committee TXD 20. Also, the committee did not agree to the co-option request for Shri Venkatesh A as the research and development/testing organizations have already been adequately represented in the committee.

**Item 3 ISSUES ARISING OUT OF THE PREVIOUS MEETING OF TXD 20**

**3.1** The committee noted the summary of actions taken on the various decisions of the 24th meeting as given in **Annex 2** of the agenda.

# Item 4 NEW WORK ITEM PROPOSAL

The committee considered the new work item proposal received from Northern Railways to formulate a new standard on “Textiles – Polyester Fibre Filled Pillows – Specification”. The committee also scrutinized the draft prepared based on the proposed specifications, test reports provided by the railways, and inputs from the industry given in **Annex 3** to the agenda.

After detailed deliberation, the committee decided to incorporate the below changes in the draft:

1. The nominal areal density of the base fabric of outer protective cover shall be 90 GSM.
2. The base fabric blend composition for the outer protective cover shall be 100% polyester.
3. Filler fibres shall be virgin hollow conjugate siliconized polyester fibres.
4. The minimum thickness of the TPU laminate film shall be 20 microns.
5. Requirements and test methods for compression recovery of pillows shall be incorporated into the draft after consultation with NITRA, Ghaziabad. For the testing and validation of compression recovery, Reliance Industries will provide the pillow samples to NITRA, Ghaziabad.

The committee further decided that the draft standard shall be issued in wide circulation for a time period of one month after incorporating the above changes for eliciting technical comments from stakeholders. BIS may carry out the editorial changes in the draft, if required.

# Item 5 COMMENTS ON PUBLISHED INDIAN STANDARD

**5.1 IS 13489:2000, Textiles – Bed mattress – Specification**

The committee considered the comments received from Aerocom P Limited as given in **Annex** **4** to the agenda. After detailed deliberation, the committee decided that IS 13489:2000 shall be taken up for revision based on the comments, changes in technology, and current industrial practices. The committee further requested Aerocom P Limited to provide test reports/data for the varieties covered under IS 13489:2000. The draft revision, as prepared, will be placed in the next technical committee meeting.

# Item 6 RESEARCH AND DEVELOPMENT PROJECT

**6.1** The Committee considered the terms of references (ToR) and BIS guidelines for R&D project as given in **Annex 6 and Annex 5** to the agenda respectively. After deliberation, the committee approved the ToR for the R&D Project for revision of IS 10228:1982, ‘Specification for School Bag', with the following changes in the CV requirements.

**Requirement for the CVs:**

Graduate in textile technology or textile engineering or textiles chemistry or fibre science and technology or manmade fibre technology and leather technology.

The ToR as approved by the committee is given in **Annex 1** to the meeting.

**Item 7 STANDARDS DUE FOR REVIEW/REVIEW OF PRE-2000 STANDARDS**

**7.1** The committee considered the list of standards due for review. After detailed deliberations, the committee decided as mentioned in the following tables:

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl No.** | **IS No.** | **IS Title** | **Decision Taken** |
| 5 | IS 11161: 2000 ISO 4916:1991 | Textiles – Seam types – Classification and terminology (first revision) | To fill the review proforma and circulate for 15 days. Reaffirm  the standard in case of no  comment received. |

Further, the committee decided that the following standards shall be reaffirmed since their due date and shall be taken up for revision based on technical inputs/comments from the committee members/experts and stakeholders. To complete this task, it was decided that the soft copies (preferably in word format for ease in incorporation of changes) will be circulated for a period of one month and the draft revision, as prepared, will be placed in the next technical committee meeting.

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| **Sl No.** | **IS No.** | **IS Title** | **Decision Taken** |
| 1 | IS 13489 : 2000 | Textiles – Bed mattress – Specification (first revision) | To reaffirm since their due date and circulate review proforma for 30 days. To prepare the revised draft based on comment/inputs received. |
| 2 | IS 14351 : 1996 | Textiles – Ground sheets (light weight) – Specification |
| 3 | IS 14354 : 1996 | Textiles – Waterproof covers – Specification |
| 4 | IS 8928 : 1988 | Specification for CHAGUL |

**Item 8 DATE AND PLACE OF NEXT MEETING**

**8.1** The Committee DECIDED to hold the next meeting of TXD 20 in consultation with the Chairman after all the actions are completed. The date and place of the meeting would be finalized in consultation with the Chairman, TXD 20, in due course.

# Item 9 ANY OTHER BUSINESS

**9.1** There being no other business, the meeting ended with a hearty vote of thanks to the Chair.

**Annex 1**

(*Item* 6.1)

**1. Title of the Project:** Study of constructional, performance and safety requirements for School Bags.

**2. Background**

**2.1** A school bag is a type of bag used by students to carry books, notebooks, stationery, and other school supplies. School bags come in various sizes, styles, and designs to accommodate different needs and preferences. They typically feature multiple compartments and pockets for organizing items. When choosing a school bag, factors such as durability, comfort, and capacity are important considerations.

**2.2** Backpack-type school bags are considered to be more comfortable and convenient to handle. A variety of materials are used in school bags for outer fabric, padding, mesh fabric for the bottle compartment, and piping materials. Considering all these requirements, it becomes essential to revise the existing Indian standard, IS 10228:1982, ‘Specification for School Bags', for inclusion of all the major varieties of school bags along with their performance requirements in the current market scenario. This comprehensive revision aims to enhance the standard's relevance in today’s context.

**2.3** The outcome of this R&D project will serve as the basis for revision of IS 10228:1982, ‘Specification for School Bags’ to incorporate additional varieties with more comprehensive constructional and performance requirements.

**3. Objective**

The objective of the project is to collect technical data for constructional parameters, performance, and safety requirements for school bags based on a literature review/desktop study, industry visit, testing results of the samples, and feedback from the users.

**4. Scope**

1. **Literature survey**

Undertake study and analyse the existing literature, which includes but is not restricted to the following:

i) International standards and regulations,

ii) Journals and research papers,

iii) Standard operating procedures (SOPs)/guidelines of the Ministry/regulator/users,

iv) Studies/research conducted by any organization,

v) Any other relevant published information.

1. **Manufacturing Facility and Testing Infrastructure**: - Collection of the database for manufacturers (small, medium, and large), testing infrastructure and users in the country.
2. **Study of Import – Export data-** Analysis of data for the types of standards and regulations being followed by domestic and foreign manufacturers, comparative analysis of these standards and regulations.
3. **Visits to Manufacturing Facilities:** Visit at least two manufacturing facilities for each category (small, medium, and large) and collect information on the following aspect:

i) Types of raw materials being used

ii) Manufacturing process

iii) In-process controls being exercised during manufacturing

iv) Varieties being manufactured

v) Standards being followed

vi) Testing methods being used

vii) Testing infrastructure available

viii) Post manufacturing quality/in-house data for safety, performance and constructional parameter for all the varieties being manufactured

ix) Sampling plan being followed

x) Marking and labelling of the product

xi) Packaging practices being followed

xii) Sustainability practices [sustainable raw material, energy efficient processes and methodologies, renewable energy sources, 3Rs (Reduce, Reuse and Recycle), waste management and disposal mechanisms]

xiii) Focused group discussions with teams involved in production, testing, and R&D to address quality issues, discuss challenges faced, and gather suggestions for improvement

The feedback from other manufacturers (where a visit is not carried out) shall be collected by circulating a suitable questionnaire covering the above information through email or any other digital means.

1. Undertake 2 visits to users and 2 visits to testing labs (one govt and one private NABL accredited lab) to collect information including but not restricted to the following: -

**User**

i) Standards and regulations being followed

ii) Compliance mechanism being followed (test certificate from supplier, third party testing)

iii) Installation methods/guidelines followed

iv) Focused group discussion on quality issues, challenges being faced and suggestions if any.

**Lab**

i) Standards and regulation being followed

ii) Testing methods being followed

iii) Testing infrastructure

iv) Focused group discussion on testing related issues, challenges being faced and suggestion

The feedback from users and labs (govt and private NABL accredited) where visit is not carried out shall be obtained through suitable questionnaire covering above information.

1. **Collection of samples and independent testing:** Collection of 2 samples from each from large, medium, and small-scale industries of each variety of school bags and carry out testing from 2 NABL accredited lab (1 Govt Lab and 1 Private Lab) for parameters like but not restricted to

* Areal density (GSM), breaking and tear strength of fabric, Dimensions of compartments, shoulder strap, top handle, adjustable belt, water bottle pocket along with material specifications and thickness of padded foam.
* Attachment strength of top handle, back strap, adjustable belt, seam strength, sewing thread types, sewing thread breaking strength, fatigue resistance of zip minimum cycles, lateral strength of slide fastner (zip), security of puller attachment of zip.
* Chemical limit requirements like formaldehyde, pH, aromatic amines from azo dyes, phthalates, etc.

1. Prepare a comprehensive project report incorporating all the above information.

**5. Expected Deliverables**

a) Final Analytical report, in hard copy format, covering all aspects mentioned in scope

b) Questionnaires, discussion and visit reports, test reports, to be appended with the final analytical report

**6. Research Methodology: -**

a) Collect and analyze the data/information as specified in the scope [4 (a), (b), and (c)].

b) Visit manufacturers, users, and labs and collect data/information as specified in the scope [4 (d) and (e)].

c) Collect and test the samples as specified in the scope 4 (f).

d) Analysis of the data/information and preparation of a comprehensive project report.

**7. Expected Deliverables: -**

a) A comprehensive report in soft/hard form covering all the aspects detailed in the scope of the R&D project.

b) Questionnaire feedback, testing report, focused group discussion report, other relevant documents and information shall be appended to the project report.

**8. Requirement for the CVs: -**

Graduate in textile technology or textile engineering or textiles chemistry or fibre science and technology or manmade fibre technology and leather engineering.

**9. Timeline and Method of progress Review: -**

The duration of the project is **120 days** from the date of its award. The stagewise indicative timelines are as follows:

|  |  |
| --- | --- |
| **Indicative Time line** | **Method of progress** |
| 0 to 20 days | Literature review, desktop study, collection of data and information  Note — The sampling plan for visit and collection of samples shall be discussed and finalized with nodal officer after literature survey and desktop research. |
| 21 to 60 days | Visit to manufacturer, user, testing lab and collection of samples |
| 60 to 100 days | Testing of samples (except long duration test with testing time more than 30 days)  Preparation and submission of first draft report |
| 100 to 120 days | Submission of the final project report |

**10. Support BIS will provide: -**

a) All the relevant Indian Standards/ISO Standards or any other standards required during the project will be provided by BIS.

b) Facilitate/introduction of the project leader/organization to relevant Industry and industry association, testing lab, institute, academia, user, regulator/ministries.

c) Facilitate testing of samples in BIS Lab/BIS Recognized Lab.