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**BUREAU OF INDIAN STANDARDS**

**Minutes**

**Technical Textiles for Buildtech Applications Sectional Committee, TXD 34 10th Meeting**

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| **Date (day)** | **Time** | **Venue** |
| 06 November 2023 | 1100 h | Through Video Conferencing |

**Attendance:**

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| --- | --- | --- |
|  | **Prof (Dr) Abhijit Majumdar**  ***(Chairperson)*** | **Indian Institute of Technology, Delhi** |
|  | Shri K Jayasankar | Cement Manufacturers Association, Noida |
|  | Shri Shubho Chakravarty | -do- |
|  | Smt. Smitha Gopinath | CSIR-Structural Engineering Research Centre, Chennai |
|  | Shri Rajendra Ghadge | Garware Technical Fibres Limited, Pune |
|  | Dr Mukesh Kumar Sinha | Ministry of Textile, New Delhi |
|  | Mr. Chetan Nalavade | P N Safety Industries, Mumbai |
|  | Shri Surender Chaudhary | Plastindia Foundation, Mumbai |
|  | Shri Rajiv Gauri | Reliance Industries Ltd, Mumbai |
|  | Smt Angelina Divya | SRF Technical Fibres Limited, Chennai |
|  | Shri Ravi Prakash Singh | The Synthetic and Art Silk Mills Research Association, Mumbai |
|  | Prof. S K Singh |  |

**BIS DIRECTORATE GENERAL:**

13. Shri Mayur Katiyar Scientist B & Member Secretary

**Item 0 WELCOME AND INTRODUCTORY REMARKS BY THE CHAIRPERSON**

**0.1** The Chairman extended a hearty welcome to the members of TXD 34 present in the meeting. The member secretary also welcomed the Chairman and all the members of the committee.

**Item 1 CONFIRMATION OF THE MINUTES OF THE LAST MEETING**

**1.1** In view of no comments received, the committee CONFIRMED the minutes of the 9th meeting of the committee held on 28 August 2023 as circulated vide BISDG letter no. TXD 34/ A2.09 dated 30 September 2023.

**Item 2 COMPOSITION AND SCOPE OF TXD 34**

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

**Item 3 ISSUES ARISING OUT OF THE LASTMEETING**

**3.1** The Committee NOTED the summary of actions taken on the various decisions of the 9th meeting as given in Annex 2 to the agenda.

**Item 4 RESEARCH AND DEVELOPMENT PROJECT**

**4.1** The committee scrutinized the draft Terms of Reference (ToR) for the proposed research and development project on scaffolding nets. After detailed deliberations the committee finalized the following ToR:

**TERMS OF REFERENCE FOR THE R&D PROJECTS**

**1. Title of the Project:** Preparation of a draft Indian standard on Scaffolding Nets

**2.** **Background**

1. Technical Committee: Technical Textiles for Buildtech Applications Sectional Committee- TXD 34 under Textile Division Council.
2. TXD 34 Technical Textiles for Buildtech Applications Sectional Committee has taken up new work item proposal on Scaffolding Nets. Scaffolding nets, also referred to as safety nets or debris nets, are crucial components of construction and workplace safety. They are specialized nets made from durable materials. These nets are designed to provide protection in various industries, especially in construction and maintenance work conducted at elevated heights.
3. Scaffolding nets play a crucial role in improving safety during activities conducted at elevated heights in construction and other work settings. These nets serve dual purposes, providing containment for debris and ensuring the safety of workers. This underscores the paramount significance of this subject. The subject of scaffolding nets has been identified in the SNAP 2022-27 for the formulation of new Indian Standard. Considering the above facts in mind, the TXD 34 sectional committee has decided to takeup the subject of scaffolding nets as a research and development project in order to formulate the standard on scaffolding nets based on the data acquired from test results and latest market practices in time bound manner.

**3.** **Scope and objective**

The scope of this project covers generation of data for important requirements of HDPE monofilament Scaffolding Nets like tensile strength, extension at break, bursting strength, UV resistance, ageing and dimensions for different GSMs (Gram per metre square) and prepare a draft standard after incorporating above mentioned requirements along with the requirements of packaging, test methods and sampling procedure.

The project aims to bring out a draft standard for scaffolding nets supported by technical information, scientific data, and NABL accredited third party lab report.

**4.** **Expected Deliverables**

1. To deliver the complete data for the requirements of tensile strength, extension at break, bursting strength, UV resistance, ageing, and dimensions of different GSM ranges (120 to 149, 150 to 169, 170 to 199 and, 200 or above) of HDPE monofilament Scaffolding Nets.
2. To deliver a draft standard after incorporating the above requirements along with the requirements of packaging and sampling.
3. To appropriately incorporate the test methods in the draft standard for testing the above mentioned requirements.

**5.** **Research Methodology**:

1. Collect the available data for the requirements of scaffolding nets through desktop study, books, magazines, journals, national and international standards, information available with manufactures, laboratories, academia or any other source.
2. Identify the stakeholders, including manufacturer, Laboratories, etc. for scaffolding nets to understand the manufacturing process and collect data.
3. To collect 1 sample for each GSM range (120 to 149, 150 to 169, 170 to 199 and, 200 or above) of HDPE monofilament Scaffolding nets and test them for the requirement(s) mentioned above in NABL accredited independent lab. These results are to be tabulated and examined to determine the final values which has to be incorporated in the draft standard.
4. Visiting of Scaffolding nets industries/testing labs to collect information, regarding packaging practices, sampling and test methods.
5. Drafting of the standard after incorporating all the requirements along with information of packaging, sampling and test methods.

**6.** **Requirement for the CVs:**

The person shall be graduate in Textile Engineering/ Technology with a minimum work experience of 5 years in the field of testing or manufacturing/production of scaffolding nets in technical and/or managerial position.

**7.** **Timeline and Method of Progress Review:**

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| --- | --- |
| **No. of Days(Timeline)** | **Status of work to be done** |
| 0 to 45 | To collect the available data for the requirements of scaffolding nets through desktop study, books, magazines, journals, national and international standards, information available with manufactures, laboratories, academia or any other source. Identifying the stakeholders, including manufacturer, Laboratories, etc. for scaffolding nets to understand the manufacturing process and collect data. |
| 45 to 90 | Visiting of Scaffolding nets industries/testing labs to collect information, regarding packaging practices, sampling and testing methods. Collecting samples and getting them tested from NABL accredited labs. |
| 90 to 135 | Examining the results of samples tested and preparation of draft standard. |
| 135 to 180 | Submission of final draft Indian standards of the project. |

**8.** **Support BIS will Provide:**

All the relevant Indian Standards required during the project will be provided by BIS.