**BUREAU OF INDIAN STANDARDS**

**AGENDA**

**GLASS, GLASSWARE AND LABORATORYWARE SECTIONAL COMMITTEE, CHD 10**

**Twenty Fifth Meeting**

|  |  |  |
| --- | --- | --- |
| **Day & Date** | **:** | Monday, 18 March 2024 |
| **Time** | **:** | 02 : 30 PM |
| **Venue** | **:** | CGCRI, Kolkata (Hybrid) |
| **Meeting Link** | **:** | [**https://bismanak.webex.com/bismanak/j.php?MTID=mbb823b347de95de2af5e5e7ce5fa1f03**](https://bismanak.webex.com/bismanak/j.php?MTID=mbb823b347de95de2af5e5e7ce5fa1f03) |
| **Meeting Id** | **:** | 2521 100 3450 |
| **Password** | **:** | Meeting@123 |

**Item 1 OPENING OF THE MEETING**

**1.1** Welcome by Bureau of Indian Standards.

**1.2** Opening remarks by Convener.

**Item 2 COMPOSITION OF THE COMMITTEE**

**2.1** The scope & composition of CHD 10 Committee is given in **Annex-I.**

The Committee may **REVIEW**.

**2.2** Change in nominations:

1. Dr. Alam Tanweer from Indian Institute of Packaging, Delhi has provided his consent to chair the CHD 10:3 Glass Containers and Packaging Subcommittee.
2. The membership of Building Materials and Technology Promotion Council, New Delhi has been withdrawn as they have not attended last 3 meetings of the committee.
3. The membership of DPIIT has been withdrawn as they have not attended last 3 meetings of the committee.
4. The membership of Shree Labware and Process Systems, Bengaluru has been withdrawn as they have not attended last 3 meetings of the committee.

The Committee may **NOTE**.

**Item 3 DRAFT STANDARDS/ AMENDMENTS FOR FINALIZATION**

**3.1 Amendment No. 2 to IS 2553-1: 2018 Safety Glass – Specifications [Doc. No. CHD 10/24069]**

In response to the comment received from M/s Amrapali Glass Industries, the draft amendment attached at **Annex-II** prepared by the CHD 10:4 Processed Glass Subcommittee was sent for wide circulation on 14-11-2023 for a period of one month. The amendment addresses the following issues:

* **Fragmentation Test for small flat glass pieces**: For fragmentation test, a glass of minimum area of 0.36 m2 is required as of now. However, there are glass processors with limited furnace capacity and in some cases, the furnace is so small such that it cannot handle glass pieces having an area of 0.36 m2. Generally, these glasses are used in electronic appliances and utensils. The subcommittee deliberated an alternative method for smaller glass pieces and recommended that for flat samples, the same test method and requirement as given in 5.3 of IS 2553 (Part 1) may be used with actual size of the glasses.
* **Fragmentation Test Method for Curved Glasses**: Some glass processors are only processing curved glasses such as utensil lids, but as of now in IS 2553 (Part 1): 2018, the fragmentation test is carried out on flat glass samples only however the curved safety glass is recognized as a separate variety, hence for ensuring consumer safety, a fragmentation test method for curved safety glasses may be added. The subcommittee recommended a test method and the requirements for evaluating the fragmentation test for curved glasses.
* **Addition of Impact Test for small pieces of glasses**: In the Amendment No. 1, it was decided that the subcommittee is looking for an alternative test method to ball drop test which may be added for smaller and thinner safety glass samples. The subcommittee noted that in IS 2553 (Part 3) which is the Indian standard on safety glass for solar applications, a steel ball weighing 227 g is used instead of 1040 g ball for glasses having thickness less than 5 mm. Hence, the subcommittee recommended that the same may also be specified in this standard also.

During the circulation period a comment was received from Gold Plus Glass Industry regarding the impact test for small glass pieces which has been discussed in the 11th meeting of the CHD 10:4 Subcommittee held on 06-02-2024 wherein the subcommittee rejected the comment and recommended to finalize the draft for printing.

The Committee may **FINALIZE** for Printing**.**

**3.2 Amendment No. 1 to IS 2553 (Part 3): 2018 Safety Glass for Solar Applications [Doc. No. 24807]**

The CHD 10:4 subcommittee in its 11th meeting noted that the clause 4.1 of IS 2553 (Part 3) specifies that the raw glass shall conform to the requirements specified in Doc CHD 10 (13078) ‘Low iron textured glass – specifications’. However, as per the decision of the committee, instead of a new standard, a new variety namely ‘Extra clear patterned glass’ has been added in the latest revision of IS 5437: 2024. Hence, on the proposal of the BIS secretariat, the subcommittee prepared a draft amendment as attached in **Annex-III** in order to update the requirements for raw material. The draft amendment was sent into wide circulation on for a period of one month. We have received one comment during the circulation as given below:

**Comments from ASAHI India**: In clause 5.1, the requirements may be converted to recommendatory in line with the practice being followed in other Indian standards.

The Committee may **DISCUSS** & **FINALIZE** for Printing**.**

**3.3 Documents recommended by CHD 10:5 for finalization**

**3.3.1** Revision of **IS 4825: 1982** Liquid-in-glass solid-stem reference thermometers – specification [Doc. No. CHD 10/24360]

**3.3.2** Revision of **IS 3608 (Part 1): 1987** Glass alcoholometers - specification part 1 glass alcoholometers without thermometer [Doc. No. CHD 10/24338]

**3.3.3** Revision of **IS 6500: 1972** Thermometer for measurement of sea surface temperature – specification [Doc. No. CHD 10/24353]

**3.3.4** Revision of **IS 8728: 1977** Adjustable range thermometers – specification [Doc. No. CHD 10/24335]

**3.3.5** Revision of **IS 12244 (Part 1): 1988** Calorimeter thermometers – specification part 1 solid-stem thermometers [Doc. No. CHD 10/24460]

**3.3.6** Revision of **IS 5725: 1970** Psychrometers unventilated dry and wet bulb hygrometers – specification [Doc. No. CHD 10/20974]

**3.3.7** Revision of **IS 6592: 1972** Soil thermometers – specification [Doc. No. CHD 10/24339]

**3.3.8** Revision of **IS 3608 (Part 2): 1987** Glass alcoholometers - specification part 2 glass alcoholometers with thermometer (thermo-alcoholometers) [Doc. No. CHD 10/24365]

**3.3.9** Revision of **IS 6274: 1971** Method of calibrating liquid - In - Glass thermometers [Doc. No. CHD 10/24354]

**3.3.10** Revision of **IS 12244 (Part 2): 1988** Calorimeter thermometers – specification part 2 enclosed scale thermometers [Doc. No. CHD 10/24358]

**3.3.11** Revision of **IS 2627: 1979** Liquid-in-glass thermometers – glossary [Doc. No. CHD 10/24340]

**3.3.12** Revision of **IS 5681: 1992** General meteorological liquid in-glass thermometers – specification [Doc. No. CHD 10/24334]

**3.3.13** Revision of **IS 6017: 1971** Thermometer for whirling psychrometers – specification [Doc. No. CHD 10/24380]

**3.3.14** Revision of **IS 7000: 1973** general purpose maximum and minimum thermometers – specification [Doc. No. CHD 10/24355]

The CHD 10:5 subcommittee in its 3rd meeting decided to revise all the thermometer standards based on the changes made in the other thermometer standards such as:

1. Kerosene oil and other thermometric liquids has been added as an alternative thermometric liquid along with their recommended working range range.
2. Requirement for Stability is added by referring to IS 6274: 1971.
3. A test method for accuracy has also been added by referring to IS 6274: 1971.
4. A sampling plan for lot inspection has also been prescribed.
5. Class of glass used is prescribed as HGB 3 or better as per IS 2303(Part 1/Sec 1): 2021.
6. Updated BIS Certification Marking Clause as per BIS Act 2016 and rules and regulations framed thereunder; and,
7. Several editorial changes as per the latest standard format such as inclusion of Hindi title, ICS No., Reference clause, updated references, etc.

The committee in its 22nd meeting approved these documents for wide circulation for a period of 2 months incorporating the above changes and accordingly these documents were circulated. The CHD 10:5 Subcommittee in its 4th meeting recommended to finalize these documents for printing.

The Committee may **DISCUSS** & **FINALIZE** for Printing**.**

**3.3.15 Revision of IS 12255: 1988 Baume Hydrometer – Specification**

The revised draft [Doc. No. CHD 10/20852] incorporating the following changes was sent for wide circulation for a period of 2 months:

1) Existing standard covers Hydrometer for only liquid heavier than water however Baume Hydrometers are also commonly used for measuring the density of liquids lighter than water. In this revision hydrometers for liquids lighter than water are also covered.

2) Dimensions of hydrometers like length and diameter have been modified to accommodate hydrometers of higher accuracy/least count.

3) Marking details have been modified. The explanatory note has been modified.

The draft has completed the WC stage without comments. The document has been reviewed by CHD 10:5 subcommittee and recommended for finalization for printing.

The Committee may **DISCUSS** & **FINALIZE** for Printing**.**

**3.3.16 Revision of IS 4426: 1992 Methods of sampling laboratory glassware**

The revised draft [Doc. No. CHD 10/20485] incorporating the following changes was sent for wide circulation for a period of 2 months:

While reviewing the standard, the committee noted that all the referred test methods have been revised and new standards for testing of capacity and thermal shock resistance of laboratory glassware have been published by adopting ISO 4787 and ISO 718 respectively, hence in view of the above, the committee decided to undertake the second revision of the standard to incorporate the above changes along with the editorial changes such as the addition of ICS No., Hindi Title, Updation of References, etc. as per the latest standard formulation practices.

The draft has completed the WC stage without comments. The document has been reviewed by CHD 10:5 subcommittee and recommended for finalization for printing.

The Committee may **DISCUSS** & **FINALIZE** for Printing**.**

**3.3.17 Revision of IS 10073: 1982 Plastics laboratory ware – Graduated measuring cylinders**

The revised draft [Doc. No. CHD 10/21577] as an adoption of ISO 6706: 1981 was sent for wide circulation for a period of 2 months which has now been completed. The document has been reviewed by CHD 10:5 subcommittee and recommended for finalization for printing.

The Committee may **DISCUSS** & **FINALIZE** for Printing**.**

**3.3.18 Revision of IS 10231: 1982 Plastics laboratory ware – Filter funnels**

The revised draft [Doc. No. CHD 10/21578] as an adoption of ISO 7057: 1981 was sent for wide circulation for a period of 2 months which has now been completed. The document has been reviewed by CHD 10:5 subcommittee and recommended for finalization for printing.

The Committee may **DISCUSS** & **FINALIZE** for Printing**.**

**3.3.19 Revision of IS 10072: 1982 Plastics laboratory ware – Beakers**

The revised draft [Doc. No. CHD 10/21576] as an adoption of ISO 7056: 1981 was sent for wide circulation for a period of 2 months which has now been completed. The document has been reviewed by CHD 10:5 subcommittee and recommended for finalization for printing.

The Committee may **DISCUSS** & **FINALIZE** for Printing**.**

**Item 4 DRAFT STANDARDS/ AMENDMENTS FOR WIDE CIRCULATION**

**4.1 Fire Resistant Glass – Specification [Doc. No. CHD 10/22416]**

* The draft prepared by CHD 10: P2 FRG Panel was circulated as preliminary draft for 21 days on 08-05-2023 among the committee and panel members for comments/views.
* The comments received from the members have been discussed in 7 meetings of the panel.
* A seminar was also held on the draft standard on 03 Feb 2024 at JIO World Convention Centre, Mumbai during the Fire Safe Build India event on “Passive Fire Protective Systems”.
* In the seventh meeting of the panel held on 26-02-2024, the panel recommended the draft attached at **Annex-IV** for wide circulation for a period of 2 months.

The Committee may **APPROVE** for Wide Circulation**.**

**Item 5 NEW SUBJECTS**

**5.1 Chemically Tempered Screen Glass Protectors**

In the last meeting, it was decided to float an RFP on BIS website inviting proposal for an R&D project which will help in formulating an Indian Standard on Chemically Tempered Glass and accordingly, the ToR approved by the committee was uploaded on the BIS website with a deadline of 29 Feb 2024, however no proposal was received. Also, the Ministry of Electronics and Information Technology (MEITY) has requested BIS to expedite the standard for “Chemically Tempered Screen Glass Protectors”.

In view of the above, it is proposed to condense the scope of the document and limit it to the specifications of chemically tempered screen glass protectors only. The member secretary has initiated the work of identifying the relevant stakeholders and is developing a working draft on the subject with the help of Gold Plus Glass Industry and Corning Glass. It is proposed that the subject may be taken further in CHD 10:4 Processed Glass Subcommittee. The proposed timelines are as follows:

Proposed date for Preliminary circulation of the draft: 30 May 2024

Proposed date for Wide circulation of the draft: 30 August 2024

Proposed date for Finalization of the draft: 30 December 2024

The Committee may **CONSIDER.**

**Item 6 ANY OTHER BUSINESS**

**Item 7 DATE AND TIME FOR NEXT MEETING**

The next meeting may be held in 2nd week of June 2024.

**Item 8 VOTE OF THANKS**

**ANNEX – I**

**SCOPE and COMPOSITION of GLASS, GLASSWARE AND LABORATORYWARE SECTIONAL COMMITTEE CHD 10**

**SCOPE**:

a) To formulate Indian Standards for terminology, code of practice, methods of sampling and tests and specifications for glass including, its raw material, glassware, processed glass, electrical and electronic visual displays, laboratoryware, including thermometer, hydrometers (made from glass, plastics, ceramic, silica etc) not covered in scope of other Sectional Committees.

b) To co-ordinate with:

i) ISO/TC 48 Laboratory equipment

ii) ISO/TC 63 Glass containers

iii) ISO/TC 160 Glass in building

**Details of Last Three Meetings**

|  |  |  |
| --- | --- | --- |
| **Meeting** | **Date** | **Place** |
| 22nd | 20-12-2022 | VC |
| 23rd | 27-06-2023 | VC |
| 24th | 27-06-2023 | VC |

**COMPOSITION**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sl. No** | **Organization** | **Representative** | **Meetings attended** | | | |
| **21st** | **22nd** | **23rd** | **Total** |
|  | CSIR-Central Glass & Ceramic Research Institute, Kolkata (**R**) | Dr. Suman Kumari Mishra – Director (***Chairperson***) | | | | |
|  | Asahi India Glass Limited, Rewari (**M**) | Shri Nagendra Kumar  Shri Navin Rai | P | P | P | 3/3 |
|  | Bhabha Atomic Research Centre, Mumbai (**R**) | Dr.(Smt) Madhumita Goswami Dr. P. N. Nandi | - | - | - | 0/3 |
|  | Borosil Ltd, Mumbai (**M**) | Shri Jeevan Dogra  Shri Satish Chitriv | P | - | P | 2/3 |
|  | Centre for the Development of Glass Industry, Firozabad (**T**) | Shri Sanjeev Chinmilli Shri Devendra Sah | - | - | - | 0/3 |
|  | Confederation of Construction Products and Services, New Delhi (**U**) | Shri Deepak Gahlowt Smt. Sarita Balodhi | P | P | P | 3/3 |
|  | Consumer - Voluntary Organization in Interest of Consumer Education (CVOICE) (**U**) | Shri K. C. Chaudhary  Shri B K Mukhopadhyay | - | P | P | 2/3 |
|  | CSIR-Central Building Research Institute, Roorkee (**R**) | Dr. Navjeev Saxena  Shri Ajay Chaurasia | - | - | P | 1/3 |
|  | CSIR-Central Glass & Ceramic Research Institute, Kolkata (**R**) | Dr. K Annapurna Dr. Sitendu Mandal | P | P | P | 3/3 |
|  | Controllerate of Quality Assurance(Materials), Kanpur (**O**) | Dr S K Tiwari Shri B S Tomar | - | - | - | 1/3 |
|  | Federation of Safety Glass, Faridabad (**M**) | Shri Sharanjit Singh  Shri Gurmeet Singh | P | P | P | 3/3 |
|  | Glazing Society of India, Chennai (**T**) | Shri G N Gohul Deepak  MS Dilna Subramanian | P | P | P | 3/3 |
|  | Gold Plus Glass Industry Ltd., New Delhi (**M**) | Shri Vivek Dubey  Shri Prem Dutt | P | P | - | 2/3 |
|  | Govt. College of Engineering and Ceramic Technology, Kolkata (**A**) | Dr. Rituparno Sen Dr. (Ms.) Kaberi Das | - | - | - | 0/3 |
|  | Hindustan Glass Works Ltd, New Delhi (**M**) | Shri Varun Gupta Shri K. Arvin | P | - | - | 1/3 |
|  | Hindustan National Glass & Industries Ltd, Kolkata (**M**) | Shri Prasanna Jain  Shri S K Misra | - | - | P | 1/3 |
|  | HSIL Ltd., Packaging Products Division, AGI Glaspac, Hyderabad (**M**) | Shri Rajesh Khosla  Shri Vishwanath Ambadipudi | - | - | - | 0/3 |
|  | Indian Institute of Packaging, Mumbai (**A**) | Dr. Tanweer Alam  Shri Bidhan Das | - | - | - | 0/3 |
|  | IIT-BHU, Varanasi (**A**) | Nominations Awaited | P | - | - | 1/3 |
|  | Office of the Development Commissioner (MSME), New Delhi (**O**) | Shri Ambrose Royson C  Shri G V Rangarao | - | P | P | 2/3 |
|  | Saint - Gobain India Pvt. Ltd., Chennai (**M**) | Shri A R Unnikrishnan  Shri Chiranjit Roy | P | P | p | 3/3 |
|  | Schott Glass India Pvt. Ltd., Pune (**M**) | Shri Anand Bakshi  Shri Hansraj Goud | P | - | P | 2/3 |
|  | Shriram Institute for Industrial Research, Delhi (**A**) | Shri Aneesh Kumar Dr Laxmi Rawat | - | - | - | 0/3 |
|  | SISECAM Flat Glass India Pvt. Ltd., Panchmahal (**M**) | Shri Parag Shah  Shri Pankaj Nuwal | - | P | P | 2/3 |
|  | The All India Glass Manufacturers Federation, New Delhi (**M**) | Shri Sourabh Kankar  Shri Vinit Kapur/ Shri Gopal Ganatra | P | - | - | 2/3 |