**भारतीय मानक ब्यूरो**

**BUREAU OF INDIAN STANDARDS**

|  |  |  |  |
| --- | --- | --- | --- |
| **Meeting** | **Date and Time** | | **Venue** |
| 24th meeting of Pumps Sectional Committee, MED 20 | 24 January 2024, at 10:00 AM onwards | | Physical mode at SIEMA office, Coimbatore, Tamil Nadu |
| *in joint session with* |  | |  |
| Agriculture and Domestic Pumps Subcommittee, MED 20:5 | | 17th Meeting | |
| Utility and Industrial Application Pumps Subcommittee, MED 20:6 | | 17th Meeting | |

**Chairperson:** Shri A. K. Nijhawan, In Personal Capacity

**Member Secretary**: Shri Aman Dhanawat, Scientist ‘B’, MED, BIS, New Delhi

**ITEM 0 WELCOME AND OPENING REMARKS**

**0.1** Welcome by Head, Mechanical Engineering Department.

**0.2** Opening remarks by the Chairperson.

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

**1.1** The minutes of the 23rd Meeting of Pumps Sectional Committee, MED 20, held in joint session with 16th Meeting of Agriculture and Domestic Pumps Sub Committee, MED 20 : 5 & 16th Meeting of Utility and Industrial Application Pumps Sub Committee, MED 20 : 6 held on 09th August 2023 in virtual mode, were circulated to the members vide our letter dated 06th November 2023.

*No comments were received*.

*The Committee may formally confirm the minutes of the last meeting.*

**1.2** It may further be noted that the Committee meeting held dated 08th November 2023 specifically to discuss TORs for the R&D projects, has been converted as a special meeting, as per the direction of BIS higher authorities.

Further, as directed by the BIS higher authorities the TORs are modified further as enclosed below for approval:



*The Committee may approve the above TOR.*

**Item 2 REFORMS IN THE PROCESS OF STANDARDISATION**

Letter ref: P&C/09/18/2023-PNC-BIS dated 09 November 2023 was sent to all the members, under the signature of BG BIS for compliance, please.Same is enclosed as Annex A in the email.

**Item 3 THE ROLLING ANNUAL ACTION PLAN FOR THE YEAR 2023-24**

The list of standards taken up for review under the rolling annual action plan that was prepared for the year 2023-24 are given in the following google sheet along with their current status:

<https://docs.google.com/spreadsheets/d/1SIWbHUoE2sJSZJXr6DwLT4WQIj43JTnMFp4vpdPstgQ/edit?usp=sharing>

The Committee may go through the same and decide further.

It is further informed that as mentioned in the reforms under Item 2 above, now there is a provision of archiving the standards which are neither fit for taken up for review now nor they can be withdrawn due to its importance in other standard or the product is getting obsolete but still being used in some areas.

**ITEM 4 ACTIONS ARISING OUT OF THE LAST MEETING**

**4.1** The summary of actions taken on the minutes of the 23rd Meeting of Agriculture Pumps Sectional Committee, MED 20 held on 9th August 2023 at Central Water and Power Research Station (CWPRS), Pune in physical mode which were discussed, and decision taken, are given below:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl No** | **\*Item No.** | **Decision taken during 22nd Meeting** | **Action Taken on Minutes of 22nd** | **Decision taken during 23rd Meeting** | **Action Taken on Minutes of 23rd** |
|  | **Item no. 2.2 Sl no. 2** | During the meeting Member Secretary informed that a panel meeting to dispose off the comments received was held dated 10.01.2023, following members attended the Panel meeting:  - Shri AK Nijhawan, Chairperson MED 20  - Shri C Murugesan, Aquasub Engineering  - Shri KV Karthik, SIEMA  - Shri Sudhir Mali, Kirloskar Brothers Pvt. Ltd.  - Shri Sachin Bhandari, Shakti Pump  - Shri Rahul Patidar, Shakti Pump  - Shri Sanjeev Chaudhary, Grundfos Pumps  - Shri AK Jain, In personal capacity  - Representative of Laxmi Drunken Components Pvt Ltd.  During the Panel meeting, Panel discussed the comments in length and recommended the following:  a) Amendment no. 2 to IS 8034: 2018, Amendment no. 1 to IS 9079: 2018 and Amendment no. 1 to IS 6595 (Part 1): 2018 may be finalized after the incorporation of the comments and making necessary editorial changes.  b) Comment provided by M/S Shakti Pumps Pvt Ltd. on clause 16.4.1 (a) of draft Amendment no. 1 to IS 14220: 2018 regarding horizontal multistage pump may be discussed among the Committee members in the upcoming meeting to be held dated 11.01.2023.  The Committee noted the recommendation of the Panel and decided the following:  a) A Panel meeting to be convened to incorporate the comments in the Amendment no. 2 to IS 8034: 2018, Amendment no. 1 to IS 9079: 2018 and Amendment no. 1 to IS 6595 (Part 1): 2018 and modified amendments as provided by the Panel may directly be sent for publication with prior approval of Chairperson MED 20.  b) The comment was discussed in length and Committee decided and requested the Panel to add ‘horizontal multistage’ in 16.4.1 (b), and after the incorporation of the comments the modified amendment as provided by the Panel may directly be sent for publication with prior approval of Chairperson MED 20.  Committee further decided that to avoid any confusion the ‘Minimum Efficiency Index (MEI)’ may be replace with ‘Minimum Efficiency Level (MEL) in above amendments’.  It was agreed to conduct a Panel meeting on 13th January to discuss the all comments  and finalize the draft amendment with due consideration to the comments received. | As decided by the Committee the modified draft amendments to IS 8034: 2018, IS 9079: 2018, IS 14220: 2018, IS 6595 (Part 1): 2018 as received from Dr. C Murugesan were sent for publication with prior approval of Chairperson MED 20.  During the process of publication, the standards with any active license are to be sent to CMD III, to review the changes in the standards for its implications during certification process.  In view of the above, the amendments were sent to CMD III, and CMD III have provided their comments enclosed below, and circulated to all the Committee members dated 24 July 2023.    Committee may consider and decide. | During the meeting Committee discussed each comment in length. After subsequent discussion held with the CMD 3 and Panel members, the comment wise decision of the Committee for each amendment is enclosed as **Annex 1**. | The amendments of IS 6595-1, IS 9079, IS 8034, and IS 14220 are under publication process. |
|  | **Item 2.3, S No 1** | Committee noted the information and decided that member secretary to see from previous records and list out the members who have been previously nominated in WG of ISO/TC 115. | From the record of minutes of the previous meetings, it was found out that following members were nominated by the Committee in various ISO subcommittees and working groups:  1) nominations for ISO/TC 115/SC 2/WG 4 - Rotodynamic pumps - Hydraulic performance acceptance tests using a model pump :  Shri Chidambar Deshpande, KBL, and Shri G. Rajendran, CRI Pumps/ Shri Nirmal Tiwari  2) Shri I C Jain for ISO/TC 115/SC 3/WG 2 - Joint ISO/TC 115/SC 3 - ISO/TC 67/SC 6 WG: Positive displacement pumps for petroleum and natural gas industries  3) Dr. Ravindra S Birajdar, Convener, MED 20:6 for ISO/TC 115/SC 3/WG 6 - Joint ISO/TC 115/SC 3 - ISO/TC 67/SC 6 WG: Shaft sealing systems for centrifugal and rotary pumps  4) Shri Uttkarsh Chhaya, M/s IPMA has been registered as ‘Expert’ in ISO/TC 115/SC 2/WG 2 - Rotodynamic pumps test codes.  The Committee may go through the scope, program of work of ISO/TC 115, its Subcommittees and Working Groups ate **Item 10.4** and decide.  BIS higher authorities have also directed that Committees shall increase their participation in International Committee work.  Committee may go through the following BIS guidelines ‘Guidelines for Payment of TA/DA to Members of BIS Technical Committees under BIS Funds’: | Committee noted the information and decided that a separate Panel may be constituted for commenting on ISO ballots.  Committee further decided that the Conveners MED 20:5 and MED 20:6 may discuss this agenda point in the upcoming meeting for pruning of Composition of Committee and its Subcommittees and propose the members for above Panel and for nominating in different ISO working groups. | A Panel meeting was held dated 11.12.2023 to discuss the composition of MED 20, MED 20:5, MED 20:6 and the ISO related work. The minutes of the meeting are enclosed below for kind perusal:    Committee may note. |
|  |  |  | Some queries have been received from Ministry regarding the comparison of our Indian Standards with ISO or IEC standards. Accordingly, BIS higher authorities have directed the following:  a) If any ISO or IEC standard exist corresponding to our Indian Standard, then provide the detailed comparison and reason for formulating our Indian Standard, instead of adopting the corresponding ISO or IEC standard.  b) If no ISO or IEC standard exist corresponding to our Indian Standard, then same may be proposed as NWIP in ISO or IEC.  The Committee may consider and decide. | Committee noted the information and requested Conveners of Subcommittees MED 20:5 and MED 20:6 to constitute different Panels and allocate the standards to Panels pertaining to their respective Subcommittees, for analysis as given in the Agenda. | To be discussed. |
|  |  |  | BIS to reconstitute technical committees having members who have served more than 5 years of their tenure in their personal capacity or belonging to any private institutions. | Conveners were requested to consider the same during the review of composition. | Please see action at **Item 4.1 Sl no 2**. |
|  | **Item 2.1**  **Sl No. 2** | Committee requested the Conveners to expedite and convene a meeting to review the composition of MED 20 and its subcommittees MED 20:5 and MED 20:6.  Committee further decided that a letter may be written to concerned branch offices of BIS, requesting them to recommend young technical members with whom they are meeting during the inspections, to co-opt them in the Committee. | The meeting will be convened in due course of time. | Due to paucity of time, the Committee decided to discuss this agenda point in the next Committee meeting. | Please see action at **Item 4.1 Sl no 2**. |
|  | — | 1) The Committee noted the information and decided that after publication of the standards a complimentary copy may be shared with all the Committee members.  2) The Committee was of the view that the comments received on IS 6595 (Part 2) are related to the IS 11346.  Committee requested ERDA and Rajkot Engineering Association to take up the revision of IS 11346 and go through the above comments for their incorporation in revision of IS 11346. ERDA and Rajkot Engineering Association agreed for above and informed that by April 2nd week they will provide the revision draft of IS 11346 incorporating above comments also.  Committee further decided that revision draft of IS 6595 (Part 2) may be sent for publication. | 1) Revision drafts of IS 12225 and IS 6595 (Part 2) are still under publication.  2) Editable soft copy of IS 11346 and the comments were circulated to ERDA and REA dated 20 Jan 2023 and 14 June 2023.  Revision draft is awaited. | Due to paucity of time, the Committee decided to discuss this agenda point in the next Committee meeting. | 1) The revision of IS 12225 and IS 6595 (Part 2) are still under publication. |
|  |  |  |  |  | The decision taken by BIS in accordance with the instructions issued by the Director General, BIS, in respect of those Committee members who have not attended the last two consecutive meetings shall be terminate from the Committee, guidelines are attached below.    In view of above, the following members have been terminated from the committee:   1. Tata Consulting Engineers, Bangalore 2. Projects & Development India Ltd., Vadodara 3. Mangalore Refinery and Petrochemicals Ltd, Mangalore 4. Delhi Jal Board, New Delhi 5. Petroleum Conservation Research Association, New Delhi 6. North India Pump Manufacture Association, Phagwara 7. Kirloskar Ebara Pumps Ltd., Pune |
|  |  |  |  |  | M/s Grundfos Pumps India Private Limited, Chennai have sent the revised nomination, as follows:  A) Shri Sanjeev Chaudhary is nominated as a principal member.  B) Shri Amitrup Dutta, Sr. Product Specialist is nominated as a alternate member. |
|  |  |  |  |  | A new work item proposal (NWIP) was received on ‘Methods for testing and performance of turbomolecular pump with backing pump’, details of the proposal is enclosed as Annex B in the email.  The Committee may consider and decide. |
|  |  |  |  |  | M/s International copper association India has sent a nomination seeking membership in 20:05 subcommittee. Accordingly ICA has sent following nominations as a principal member for Subcommittee MED 20:5.  Shri Sanjay Kumar Namdeo  Designation : Director – Clean Energy Transition  General Interest : pump selection, energy efficiency, standards and labelling, market transformation  ICA further requested to add the same member as an Alternate member under MED 20 Committee.  The Committee may consider and decide. |

**4.2** The summary of actions taken on the minutes of the 16th Meeting of Agriculture and Domestic Pumps Sub Committee, MED 20 : 5 held on 9th August 2023 t at Central Water and Power Research Station (CWPRS), Pune in physical mode which were discussed, and decision taken, are given below:

| **Sl No** | **\*Item No.** | **Decision taken during 15th Meeting** | **Action Taken on Minutes of 15th Meeting** | **Decision taken during 16th Meeting** | **Action Taken on Minutes of 16th Meeting** |
| --- | --- | --- | --- | --- | --- |
|  | **Item no. 2.2 Sl no. 1** | Committee noted the information. | To be wide circulated | Need to update based on revised draft | The amendment no. 1 of IS 17292: 2020 was wide circulate for 30 days, no comments received. |
|  | Item no. 6.1 | 1) The Committee noted the information.  2) Committee noted the information.  3) The Committee noted the information and decided that this standard may be allocated to Shri Utkarsh Chhaya, Shri Yogesh Mistri and representatives from Roto Pumps and Tushaco Pumps.  Committee decided that a letter may be written to Roto Pumps and Tushaco Pumps requesting them to provide their nominations for MED 20 and its subcommittees.  4) The Committee noted the information and decided that after publication of the standards a complementary copy may be shared with all the Committee members. | 3) An invitation letter to Roto Pumps and Tushaco Pumps (Circor) requesting them to become the Committee members and provide their nominations for MED 20 and its subcommittees has been sent, their response is awaited. | Due to paucity of time, the Committee decided to discuss this agenda point in the next Committee meeting. | No response received till date. |

\* The Item number refers to the proceedings of the last meeting of MED 20 : 5.

**4.3** The summary of action taken on the minutes of the 16th Meeting of Utility and Industrial Application Pumps Sub Committee, MED 20 : 6 and decisions taken are given below:

| **S No** | **\*Item No.** | **Decision taken during 15th Meeting** | **Action Taken on Minutes of 15th Meeting** | **Decision taken during 16th Meeting** | **Action Taken on Minutes of 16th Meeting** |
| --- | --- | --- | --- | --- | --- |
|  | **Item 2.3, S No 4** | Convener MED 20:6 informed that the requirements of horizontal split case pumps are have been covered in IS 5120. Committee noted the information and decided that Shri KV Karthik, SIEMA may go through the revision draft of IS 5120 to check the requirements of horizontal split case pumps covered under revision draft of IS 5120, and provide his comments/suggestions.  If no technical comment received the above draft may be circulated as wide circulation for the period of 30 days. | The draft revision of IS 5120 was circulated to Shri KV Karthik dated 3 April 2023 for comments.  Comments are awaited. | Based on earlier 22nd meeting, Shri KV Karthik, SIEMA may go through the revision draft of IS 5120 to check the requirements of horizontal split case pumps covered under revision draft of IS 5120, and provide his comments/suggestions | No comments received. Committee may consider and decide. |

\* The Item number refers to the proceedings of the last meeting of MED 20 : 6.

**ITEM 5 SCOPE AND COMPOSITION OF COMMITTEE**

**5.1 Scope**

1. Formulation of standards on components, equipment, methods of tests and code of practices for different type of pumps, excluding handpumps.
2. Co-ordination of work with ISO/TC 115 Pumps.

*The Committee may propose any addition/deletion/modification required in the scope.*

**5.2 Composition of Committee**

**5.2.1** The present composition of Pumps Sectional Committee MED 20 is given at **Annex-1A**. The list shows the attendance of the members in the last three consecutive meetings along with category wise distribution.

*The committee may note and suggest any addition/deletion/modification in the composition.*

**5.2.2** The present composition of Agriculture and Domestic Pumps Sub Committee, MED 20:5 is given at **Annex-1B**. The list shows the attendance of the members in the last three consecutive meetings along with category wise distribution.

*The committee may note and suggest any addition/deletion/modification in the composition.*

**5.2.3** The present composition of Utility and Industrial Application Pumps Sub Committee, MED 20:6 is given at **Annex-1C**. The list shows the attendance of the members in the last three consecutive meetings along with category wise distribution.

*The committee may note and suggest any addition/deletion/modification in the composition.*

**5.2.4** The present composition of Solar Photovoltaic Water Pumping System Sub Committee, MED 20:7 is given at **Annex-1D**. The list shows the attendance of the members in the last three consecutive meetings along with category wise distribution.

*The committee may note and suggest any addition/deletion/modification in the composition.*

**5.3** Request for co-option in the Committee.

WPIL has been removed from the committee as per the direction of DG BIS due to lack of attendance, but WPIL has sent revised nomination as given below and wants to become a member of the committee again.



*The Committee may please decide.*

**5.4** The following directions have been received from the Competent Authority of the Bureau for reviewing the composition of the Sectional Committee:

1. Major Government purchasing organizations like DGS&D, RDSO, CPWD, Defense etc. are to be given representation in the committees wherever applicable.
2. Examine the justification and need for continuation of a member in an individual capacity who is continuing for more than six years in a sectional committee.
3. New members are to be co-opted who are expected to contribute to emerging new technology.
4. In case a representative of the concerned organisation is not attending the meeting regularly or not continuing even by correspondence, the organisation may be informed for substituting their member.
5. Members who are represented in individual capacity, the continuation of their membership is to be considered on the basis of their past attendance and contribution.
6. Efforts should be made to include representatives of different product segments as per the scope of the committee.

*The committee may please note.*

**5.5** The desire of the Ministry of Consumer Affairs, Food & Public Distribution, Govt. of India, which is the Controlling Ministry of the Bureau that the composition of Sectional Committees be reviewed to replace the persons who are continuing for longer periods, to co-opt the members/organisations which are capable of contributing in emerging new technologies and new areas of work and strengthof the manufacturers should be restricted to 1/3 of the total strength of the Technical Committees.

*The committee may please note.*

**5.6** As per the decision taken by the Controlling Ministry, the composition of all sectional committees is to be reviewed periodically after a period of three years and efforts are to be made to keep the strength of committee optimum. New members may be co-opted where necessary. It is desired to have functionally efficient, vibrant and participative technical committees. The Committee may deliberate about the continuance of those members who are neither attending the meeting, nor contributing to the work of the committee by way of sending comments. Nomination of such members may be recommended for withdrawal to Mechanical Engineering Division Council (MEDC).

*The committee may please note.*

**5.7** Search Committee

As directed by the competent authority a Search Committee may be formed that will review the composition of the Committee for active participation of the members and infuse fresh blood in the Committee.

**ITEM 6 COMMENTS ON PUBLISHED STANDARDS**

**6.1** No comments received.

**ITEM 7 SELECTION OF SUBJECTS/NEW SUBJECTS**

As per the latest policy and guidelines, before any new subject is taken up for formulation of National Standard the following issues are to be examined by BIS.

1. Whether the subject is financed by the proposer;
2. Sale ability of the standard;
3. Standards shall be user friendly;and
4. Social needs with regards to safety, health and environment.

Only after assessing the above aspects will it be possible for BIS to consider the formulation of the Indian standard. The proposal should essentially be taken in the **Prescribed Performa**, as a preliminary work item as given in **Annex 2**. When members propose in the Technical Committee (TC) meeting, they have to fill-in the Performa beforehand which is then considered by the TC.

*The Committee may please note and suggest new subjects for standards formulation.*

**ITEM 8 INTERNATIONAL ACTIVITIES**

**8.1** BIS, as a founding member of International Organization for Standardization (ISO), actively participates in standardization activities at international level including participation in its policy making bodies like Development Committee (DEVCO), Committee on Conformation Assessment (CASCO) and Committee on Consumer Policy (COPALCO). In the current global economic scenario, standardization has become necessary as emerging of concept like Technical Barriers to Trade Agreement(TBT), issued by WTO, which tries to ensure that regulations, standards, conformity assessment procedures do not create unnecessary obstacles to trade internationally. Over **203** ISO technical committees are engaged in the formulation of international standards with the consensus of all member countries.

*The committee may please note.*

**8.2** India is ‘P’ member of ISO/TC 115 – Pumps**.** Being P member, it is obligatory for India to vote on all the documents. The comments from the members are compiled and sent to the Chairman for approval for voting. All the members and the Chairman are requested to take prompt action on the circulated documents for voting as voting is time bound.

**Effective participation in ISO activities is crucial for our nation as we have a significant stake in international trade and ISO standards. Therefore, it is essential that the committee participates effectively and thoroughly examines ISO ballots with respect to their relevance. If the ballot is relevant to us, the committee should nominate experts to represent our nation in ISO meetings. This will help to ensure that our national interests are well-represented and safeguarded in the international arena. Currently, following ballots (where India is ‘P’ member) are under circulation:**

*The committee may please note.*

**8.3** India has established itself as a significant manufacturing hub and has a considerable stake in international trade. To ensure our active involvement in trade-related norms set by different countries, it is essential for us to participate in the standardisation process of ISO and provide input for the betterment of our industries. Standardisation is the key to influence these norms, and a **closer examination of new work item proposals** received from ISO is necessary for us to standardise products at the international level. This activity will benefit Indian manufacturers at all levels to keep up with or enter into international level trade, ultimately improving their competitiveness in the global market. Currently no NWIPs ballot received from ISO, however NWIPs already under development. Details of this work item is given below:

*The committee may please note.*

**8.4** List of International Standards formulated by ISO/TC 115 & its SC’s ISO/TC 115/SC 1, ISO/TC 115/SC 2 and ISO/TC 115/SC 3 can be accessed with following links respectively:

[**https://www.iso.org/committee/51766.html**](https://www.iso.org/committee/51766.html)

[**https://www.iso.org/committee/51776.html**](https://www.iso.org/committee/51776.html)

[**https://www.iso.org/committee/51790.html**](https://www.iso.org/committee/51790.html)

[**https://www.iso.org/committee/51796.html**](https://www.iso.org/committee/51796.html)

*The committee may please note.*

**8.5** India is 'P' (Participating Member) in ISO/TC 115 – Pumps. The list of ISO Standards published by ISO/TC 115 and its Subcommittees are given at **Annex 3**. The committee may review ISO Standards published and identify the Standards for possible adoption as Indian Standards or inputs can be taken for revising the existing Indian Standards.

**8.6** The present membership status of BIS on the Pump Committee/Subcommittees is given below:

|  |  |  |
| --- | --- | --- |
| **ISO/TC 115** | **Pumps** | **P** |
| ISO/TC 115/SC 1 | Dimensions and Technical Specifications of pumps | **P** |
| ISO/TC 115/SC 2 | Methods of Measurement and Testing | **P** |
| ISO/TC 115/SC 3 | Installation and Special Application | **P** |

*The Committee may please note.*

**ITEM 9 PROGRAMME OF WORK**

**9.1** The present program of work of the Pumps Sectional Committee, MED 20 can be accessed through the link below. The committee has formulated 50 Indian Standards.

<https://www.services.bis.gov.in/php/BIS_2.0/bisconnect/pow_new>

*The committee may please note.*

**9.2** Status of Standards under BIS Product Certification Scheme.

The following Standards formulated by MED 20 are under BIS Product Certification Scheme:

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No.** | **IS No.** | **Title** | **No. of BIS Licenses** |
|  | 6595 (Pt 1) : 2018 | Horizontal centrifugal pumps for clear, cold water: Part 1 Agricultural and rural water supply purposes | 19 |
|  | 6595 (Pt 2) : 1993 | Horizontal centrifugal pumps for clear, cold water: Part 2 General purpose (other than agricultural and rural water supply) - Specification | 1 |
|  | 8034:2018 | Submersible pumpsets | 498 |
|  | 8418:1999 | Horizontal Centrifugal self-priming pumps | 2 |
|  | 8472:2019 | Regenerative pumps for clear cold water | 100 |
|  | 9079:2018 | Electric moonset pumps for clear, cold water for Agricultural and water supply purposes | 82 |
|  | 10805:2022 | Foot-Valves, Reflux Valves or Non Return Valves and Bore Valves to be Used in Suction Lines of Agricultural Pumping Systems —Specification (Second Revision) | 9 |
|  | 11501:1986 | Engine monoset pumps for clear, cold, fresh water for agriculture purposes | 0 |
|  | 12225:1997 | Centrifugal Jet pump | 11 |
|  | 14220:2018 | Openwell submersible pumpsets | 251 |
|  | IS 17018 (Part 1) 2022 | Solar Photovoltaic Water Pumping Systems Part 1 Centrifugal Pumps Specification | 1 |

*The committee may please note.*

**ITEM 10 LETTER OF APPRECIATION TO COMMITTEE MEMBERS**

Objective: To recognize significant contribution of members of technical committees in developing standard(s) that can be considered to be a major development in the subject area and in national/international standardization.

Any individual can be nominated in his/her capacity as a member of a Committee/Subcommittee/panel including their Chairperson/Convenor. Candidates may be nominated by fellow members, by the Chairperson/Convenor or Member Secretary of the relevant technical committee in the prescribed form.

The person nominating shall consider those individuals who have made significant contribution in an important recent standardization project. The following aspects shall be considered while recommending for letter of appreciation:

a) Leadership in initiating a project.

b) Technical inputs provided on standard(s) developed including during preparation of the draft standard.

c) Draft document(s) developed (new Indian Standards/revision of existing Indian Standards).

d) Technical comments/inputs provided on ISO/IEC documents/deliverables or major contributions made in developing International Standards.

e) Exceptional contributions in leading standardization projects at national/international level.

f) Initiatives taken/contributions in standards promotion work through workshops, conferences, seminars and trainings.

The Committee may please note.

**Item 11 NATIONAL AND INTERNATIONAL LEVEL EVENTS TO BE PARTICIPATED IN**

BIS has envisaged **participation in events organised at national and international level** as these events showcases the latest trends in the field of standardisation and technological advancements. Considering the importance of these events committee members may please suggest such events where participation of BIS and other members can benefit development of national standards.

**Item 12 SCIENTIFIC JOURNALS AND PERIODICALS TO BE SUBSCRIBED**

BIS has taken a new initiative to subscribe to scientific journal and periodicals relevant to committee work. It is also envisaged that relevant articles from these journal and periodicals are shared with members of sectional committee.

Committee members may please suggest important journals and magazines that may benefit this committee.

**Item 13 CREATION OF POOL OF EXPERTS**

As part of its initiative to develop a pool of experts for standardization activities, BIS has established standardization chairs in technical institutes of national repute, including IITs, NITs, and others. In addition, BIS plans to establish standardization cells in various manufacturer's associations to further this effort. By tapping into the knowledge and skills available in the country, this initiative can assist BIS in developing more effective and technically sound standards. This approach can also ensure that technical experts are linked with the National Standards Body to foster a high-quality ecosystem in India.

**Item 14 RESEARCH PROJECT TO BE TAKEN UP FOR INCLUSION OF EMPIRICAL DATA AND INSIGHTS**

BIS has recognized the importance of including research to generate empirical data in its standardization process for the development of Indian standards. Decision making without evidence can be challenging, and it may result in dropping some crucial projects related to standard-making. In this regard, empirical data can help the committee to make informed decisions on such issues. By incorporating research-based empirical data, the standardization process can become more evidence-based, accurate, and effective, ultimately leading to the development of better and more relevant Indian standards. This type of project may be granted to experts in the relevant field. The committee may deliberate on this topic and identify standards that require empirical data for their development or revision

**ITEM 15 RECENT INITIATIVES IN THE STANDARD DEVELOPMENT PROCESS OF BIS**

In the recent months, several initiatives have been undertaken to reform the standard making process in BIS with the aim to make the delivery mechanism in tune with the National needs and aspirations. These initiatives are both process initiatives as well as technical initiatives. Some of the important initiatives are:

**15.1 Green Initiative by BIS**

As part of ‘Green Initiative’ to conserve resources, the Bureau of Indian Standards (BIS) has decided to communicate with all the technical committee members only through electronic media. From 01 January 2014 onwards, the meeting notice, agenda, minutes of all technical committee meetings of BIS and other documents associated with technical committee work, such as P-drafts, WC-drafts etc. are being sent in Electronic Form only at the email addresses provided by the technical committee members. No printed documents of any kind shall thereafter be sent to the technical committee members. It may be noted that the activities of sectional committees namely, Programme of work, Composition of sectional committees, Draft standards in circulation, etc. are also available on www.bis.gov.in. Further, formats for comments on drafts and also proposals for new work items are available on the BIS website. Members are encouraged to visit BIS website on a periodical basis to be acquainted with the latest status in standards development process.

*The committee may please note.*

**15.2 Interaction with SDO**

A number of Standards Developing Organizations (SDOs) under various Govt. Departments exist which cater to the needs of specific sectors by developing standards. It has been identified that an effort may be made to adopt such standards developed by these SDOs as Indian Standards so as to avoid duplication of work. Further these standards will also be upgraded as Indian Standards.

*The committee may please note.*

**ITEM 16 GUIDELINES FOR MEMBERS OF TECHNICAL COMMITTEES**

**16.1** The Committee may please note the following Guidelines provided by Competent Authority of BIS for implementation:

1. Identification and involvement of talent available in the country related to the subject dealt by the committee and methodology to involve them in the proceedings of the Committee,
2. Status of standardisation in the areas dealt by the committee at international level and suggestions for improving participation in the related committees of ISO/IEC, and
3. Future plans and strategies to be adopted by the committee during the next 05 years aiming at contribution in related standardisation activity at national and international level.

*The committee may please note.*

**ITEM 17 NEW INITIATIVES IN STANDARDIZATION**

1. **DOWNLOADING OF INDIAN STANDARDS (FREE OF COST)**

In order to encourage 'Ease of Doing Business' as well as promote the use of Indian Standards, BIS has decided that the Indian Standards except those adopted from other International Standards bodies may be made available free of cost to the users for non- commercial purposes. The adopted standards from standards developing organisations (SDOs) and all other Indian Standards intended to be used for commercial purposes may be continued to be made available for a price as per existing guidelines.

*The committee may please note.*

1. **NATIONAL INSTITUTE FOR TRAINING IN STANDARDIZATION (NITS)**

The training schedule of the training offered by National Institute for Training in Standardization (NITS), NOIDA is available on BIS website www.bis.gov.in.

*The committee may please note.*

1. **BIS ACTIVITIES ON SOCIAL MEDIA**

BIS is now active on Social Media. The links have been provided on the BIS website.

*The committee may please note.*

1. **ONE NATION ONE STANDARD**

Bureau of Indian Standards (BIS), the National Standards Body of India, has developed more than 20000 Indian Standards across 15 sectors covering various aspects of the economy. There are several other government entities in sectors such as railways, defence, space, nuclear energy applications etc. publishing standards for their own use. In addition, there are Standards Developing Organizations (SDOs) and Regulatory bodies with their expertise overlapping with BIS, which are also developing standards in different domains. Apart from this, leading overseas private standards bodies have set up Indian offices/chapters to promote the use of their standards among Indian industry. This multiplicity of standards has resulted in multiplicity of conformity assessment schemes. There are instances of the same product being subjected to multiple certification as mandated by different Ministries/regulators. This leads to confusion among industry, consumers and purchase organisations as to which standards should be followed and adds to the cost of certification. Such situations are not desirable and are in contradiction to ease of doing business. It also defeats the very purpose of standardisation and results in wastage of resources due to parallel efforts. In order to increase the ‘Ease of Doing Business’, it is important to tackle the issue of multiplicity of standards. Considering that the convergence of standards is of decisive strategic importance to the future of Indian economic growth story, BIS has taken active steps to promote "One Nation One Standard", with BIS, the National Standards Body, functioning as the umbrella organisation steering India's standardisation efforts. As mandated by the BIS Act, 2016, BIS would be recognizing and synergizing the efforts of SDOs to develop standards as per good practices and six principles of international standardisation outlined by WTO and by recognizing these standards formulated by SDOs/Regulators as Indian Standards. BIS has prepared a draft scheme for recognition of SDOs, which was circulated among the SDOs for their comments. Comments received are being examined for necessary modifications in the scheme, if any. In this regard, two consultative meetings of SDOs were held on 09 August 2019 and 02 December 2019.

*The committee may please note.*

1. **MEMORANDUM OF UNDERSTANDING WITH EMINENT INSTITUTES**

Bureau of Indian Standards (BIS), has signed Memorandum of Understanding (MoU) with the following institutes of eminence for collaboration in the field of standardisation and conformity assessment:

* Indian Institute of Technology, Delhi
* Indian Institute of Technology, Bombay
* Indian Institute of Technology, Kanpur
* Indian Institute of Technology, Madras
* Harcourt Butler Technical University, Kanpur
* Northern India Textile Research Association, Ghaziabad
* Indian Institute of Technology, Roorkee

*The committee may please note.*

**ITEM 18 UNECE GENDER RESPONSIVE STANDARDS DECLARATION**

Bureau of Indian Standards is a signatory to the UNECE Gender Responsive Standards Declaration. The UNECE Gender Responsive Standards Initiative aims to provide a practical framework for standards bodies seeking to make the standards they develop, and the standards development process they follow, gender responsive. Established in 2016, the Initiative has the objectives of:

1. Strengthening the use of standards and technical regulations as powerful tools to attain SDG 5 (Achieve Gender Equality and Empower all Women and Girls);
2. Integrating a gender lens in the development of both standards and technical regulations; and
3. Elaborating gender indicators and criteria that could be used in standards development.
4. In line with these objectives, BIS aims to work towards:

* Gender responsive standards;
* Gender balance at all levels in all Committees including leadership positions; and
* Enhanced expertise to create and deliver gender inclusivity.

The Committees are requested to work in tandem with these aims to create a gender balance environment in all walks of life through standards.

*The committee may please note.*

**ITEM 19 SUSTAINABILITY PERSPECTIVE IN INDIAN STANDARDS**

1. In keeping with India’s commitment on the UN SDG 2030 and Paris Agreement on Climate Action, there will be specific focus in developing and updating standards so as to address these issues. Climate change mitigation and adaptation through reduction in carbon emissions, carbon foot-printing and life cycle analysis, carbon capture and storage, application of circular economy, ensuring resource efficiency, promoting alternative fuel technologies and renewable energy use, reducing embodied energy and improving thermal performance in buildings through building design and construction, etc would be some of the approaches/considerations in standards development.
2. A framework that can provide guidance to the technical committees on how sustainability issues are to be addressed in Indian Standards would be developed. Some of the UN SDGs that are considered to be important from standardisation perspective are Climate Action (SDG 13), Good Health and Wellbeing (SDG 3), Gender Equality (SDG 5), Clean Water and Sanitation (SDG 6), Affordable and Clean Energy (SDG 7), Responsible Consumption and Production (SDG 12), Industry, Innovation and Infrastructure (SDG 9) and Sustainable Cities and Communities (SDG 11), and are considered as high priority areas of work. A broad range of aspects that could potentially help in addressing sustainability and climate change through standards include the use of natural resources, ensuring energy efficiency and water efficiency, reducing wastes, use of waste and recyclable materials, reducing pollution in land, air and water, protection of natural habitats, protection of biodiversity, carbon neutrality and net-zero, carbon foot-printing and LCA, application of technology and innovation around these issues, economic performance and development, addressing health and safety, social equity (including concerns like gender responsiveness and accessibility for persons with disabilities and the elderly), quality of life, etc.

*The committee may please note.*

**ITEM 20 ACCESSIBILITY**

A request was received from the Department of Empowerment of Persons with Disabilities, Government of India to include additional requirements in the relevant Indian standards that will help/assist the specially-abled person under the Accessible India Campaign (AIC).

*The committee may please note.*

**ITEM 21 DATE AND PLACE FOR THE NEXT MEETING**

*The Committee may please decide the date and place for the next meeting.*

**ITEM 22 ANY OTHER BUSINESS**

*The committee may please decide.*

**Annex 1A**

(*Refer Item* 5.2.1)

**COMPOSITION OF PUMPS SECTIONAL COMMITTEE, MED 20**

|  |  |  |
| --- | --- | --- |
| **No. of Meeting** | **Date** | **Place** |
| 24th | 8th November 2023 | Hybrid Meeting(Bureau of Indian Standards , New Delhi, Delhi, India) |
| 23rd | 9th August 2023 | Virtual Meeting (webex) |
| 22nd | 11th January 2023 | Central Water and Power Research Station (CWPRS), Pune in physical mode |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl No.** | **Organisation Represented** | **CAT.** | **PRINCIPAL MEMBER/ALTERNATE MEMBER** | **22nd** | **23rd** | **24th** | **TOTAL** |
|  | In Personal Capacity | G | Shri A. K. Nijhawan (*Chairman*) | Y | Y | Y | 3/3 |
|  | Aquasub Engineering, Coimbatore | M | Shri C. Murugesan  Shri P. Ramesh (*Alt*)  Shri G. Prasath (*Young Professional*) | Y | Y | Y | 3/3 |
|  | Best Engineers Pumps Pvt. Limited, Coimbatore | M | Mrs. C. G. Sripriya  Mr. T. Parthiban (*Alt*) | Y | Y | Y | 3/3 |
|  | [Bharat Heavy Electrical Limited, New Delhi](javascript:;) | G | Shri Anuj Jain  Shri Hardeep Singh Dogra (*Alt*) | N | Y | Y | 2/3 |
|  | Bharat Petroleum Corporation Ltd., Mumbai | C | Shri D. P. Chandramore  Shri Santosh N. Kale (*Alt*) | Y | Y | N | 2/3 |
|  | Bureau of Energy Efficiency, New Delhi | G | Ms P. Samal  Shri Mukhe K Sai Satvik (*Alt I*)  Shri Kamran Shaikh (*Alt II*) | N | Y | N | 1/3 |
|  | Central Water & Power Research Station, Pune | R&D | Shri Abdul Rahiman | Y | Y | Y | 3/3 |
|  | Chief Quality Assurance Establishment, Ministry of Defense, New Delhi | G | Shri G. Arvindam | N | N | N | 0/3 |
|  | Crompton Greaves Consumer Electricals Limited, Ahmednagar | M | Shri Pravin Garje  Shri Parvin Murdekar (*Alt*)  Shri Rohit Kanase (*Yp*) | N | Y | N | 1/3 |
|  | [Directorate General of Quality Assurance, Ministry of Defence, New Delhi](javascript:;) | G | Shri Lalajee Dongre  Shri R.V. Jain (*Alt*) | N | N | N | 0/3 |
|  | Electrical Research & Development Association (ERDA), Vadodra, Gujrat | R&D | Shri Ravi Prakash Singh  Shri Jitendra Tahilwani (*Alt*) | Y | Y | Y | 3/3 |
|  | Engineers India Ltd, New Delhi | L | Shri Abhay Kumar  Ms Rima Singh (*Alt I*)  Shri Mahesh Gupta (*Alt II*) | N | Y | Y | 2/3 |
|  | Gail India Ltd, New Delhi | C | Shri Rakesh Kumar Singh  Shri Shashi Ranjan (*Alt*) | N | Y | Y | 2/3 |
|  | [Grundfos Pumps India Private Limited, Chennai](javascript:;) | M | Shri Bibek Saha  Shri Sanjeev Choudhary (*Alt*) | Y | Y | Y | 3/3 |
|  | Havells India  Ltd., Noida | M | Shri Anil Sukumar Akole | Y | Y | Y | 3/3 |
|  | Hindustan Petroleum Corporation Ltd., Mumbai | C | Shri Sourabh Sharma  Shri Akash Raj (*Alt*) | N | Y | Y | 2/3 |
|  | Indian Pump Mfrs Association | M | Shri Milind Alwekar  Shri Yogesh Mistri (*Alt*) | Y | Y | Y | 3/3 |
|  | International Copper Association India, Mumbai | L | Shri K N Hemanth Kumar | Y | Y | Y | 3/3 |
|  | Kirloskar Brothers Limited, Pune | M | Shri R.S. Birajdar  Shri Shri Sudhir Mali (*Alt*) | Y | Y | Y | 3/3 |
|  | KSB Pumps Limited, Pune | M | Shri Rajesh B Gote  Shri Dattatray Katkar (*Alt*) | Y | Y | Y | 3/3 |
|  | Mecon Limited, Ranchi | L | MD Aziz Ahmad  Shri Sandeep Kumar (*Alt*) | N | Y | N | 1/3 |
|  | National Bank for Agri & Rural Development, Mumbai | O | Shri D. Elangovan  Shri A. K. Sinha (*Alt I*)  Shri Sukanta K. Sahoo (*Alt II*) | N | Y | Y | 2/3 |
|  | Punjab Agriculture University, Ludhiana | R&D | Dr (Prof.) Sunil Garg  Shri Sanjay Satpute (*Alt*) | N | Y | Y | 2/3 |
|  | Rajkot Engg Association, Rajkot | M | Shri Sunny R. Marvania Shri Vinod Asodariya (*Alt* *I*) | Y | Y | Y | 3/3 |
|  | [Scientific and Industrial Testing and Research Centre, Coimbatore](javascript:;) | R&D | Shri Ma Sendilkumar  Dr. K Ulaganathan (*Alt*) | Y | Y | Y | 3/3 |
|  | [Southern India Engineering Manufacturers Association, Coimbatore](javascript:;) | L | Shri K.V. Karthik  Shri D. Vignesh (*Alt*) | Y | Y | Y | 3/3 |
|  | Wilo Mather and Platt Pumps Ltd, Pune | M | Shri Kishor A. Dumbre | Y | Y | N | 2/3 |
|  | In Pesonal Capacity, Mumbai | O | Shri S. L. Abhyankar | N | Y | N | 1/3 |
|  | In Pesonal Capacity, | O | Mr. Shri A. K. Jain | Y | Y | Y | 3/3 |

**Manufacturer M, Ten (10)**

**Consumer C, Three (3)**

**Government & Regulatory G, Five (5)**

**R&D and Technical Institution, R&D, Four (4)**

**Consultants L, Four (4)**

**Others O, Three, (3)**

**Annex 1B**

(*Refer Item* 5.2.2)

**COMPOSITION OF AGRICULTURAL AND DOMESTIC**

**PUMPS SUBCOMMITTEE 20:5**

|  |  |  |
| --- | --- | --- |
| **No. of Meeting** | **Date** | **Place** |
| 17th | 8th November 2023 | Hybrid Meeting(Bureau of Indian Standards , New Delhi, Delhi, India) |
| 16th | 9th August 2023 | Virtual Meeting (webex) |
| 15th | 11th January 2023 | Central Water and Power Research Station (CWPRS), Pune in physical mode |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl**  **No.** | **ORGANIZATION NAME** | **CAT** | **PRINCIPAL/ALTERNATE MEMBERS** | **15th** | **16th** | **17th** | **TOTAL** |
|  | [Southern India Engineering Manufacturers' Association, Coimbatore](javascript:;) | O | Shri G. Rajendran (*Convener*) | Y | N | N | 1/3 |
|  | Agrofab, Jaipur | M | Shri Alok Gupta  Shri Siddharth Gupta (*Alt*) | Y | Y | Y | 3/3 |
|  | Aquasub Engineering, Coimbatore | M | Dr C. Murugesasn  Shri. Shri G. Prasath (*Young Professional*)  Shri P. Ramesh (*Alt*) | Y | Y | Y | 3/3 |
|  | Best Engineers Pumps Pvt Ltd., Coimbatore | M | Shri S Thangapandi  Shri C. G. Sripriya (Alt) | Y | N | Y | 2/3 |
|  | CSIR-Central Mechanical Engineering Research Institute, Durgapur | R&D | Shri Subrata Kumar Mandal  Shri Ashok Kumar Prasad (Alt) | N | Y | N | 1/3 |
|  | Central Equip & Stores Procurement, Lucknow | G | Shri Arun Kumar  Shri M. P. Kandoi (Alt) | N | N | N | 0/3 |
|  | Central Ground Water Board, Nagpur | G | Shri G.D. Ojha  Shri Ashis Chakraborty (Alt) | N | N | N | 0/3 |
|  | Crompton Greaves Consumer Electricals Limited, Ahmednagar | M | Shri Pravin Garje  Shri ParvinMurdekar (Alt)  Shri Prashant Mahale (YP) | N | Y | N | 1/3 |
|  | Electrical Research and Development Association, Vadodara | R&D | Shri Ravi Singh | Y | Y | Y | 3/3 |
|  | [Havells India Limited, Noida](javascript:;) | -- | Shri Anil SukumarAkole  Shri Manish Kumar Vimal (Alt) | Y | Y | N | 2/3 |
|  | In Pesonal Capacity, Mumbai | O | Shri. S. L.Abhyankar | N | Y | N | 1/3 |
|  | Indian pump Manufacturers Association, Ahmadabad | M | Shri Yogesh Mistri  Shri Utkarsh A Chhaya (*Alt I*)  Shri Prabhudas Patel (*Alt II*) | Y | Y | Y | 3/3 |
|  | KSB Pumps Ltd., Pune | M | Shri Shri Rajesh B Gote  Shri Shri Dattatray Katkar (Alt) | Y | Y | Y | 3/3 |
|  | Kalsi Metal Works, Jalandhar | M | Shri Barinder Kalsi  Shri Puneet Kalsi  Shri K.R. Kohli (Alt) | N | Y | Y | 2/3 |
|  | Kirloskar Brothers Ltd., Pune | M | Shri Ravindra Birajdar  Shri Sudhir Mali (Alt) | Y | Y | Y | 3/3 |
|  | North India Pump Manufacturers Association, Jalandhar | M | Shri C L Garg  Shri Jatin Kalsi (Alt.) | N | N | N | 0/3 |
|  | Punjab Agricultural University, Ludhiana | R&D | Dr Sunil Garg (Alt) | N | Y | Y | 2/3 |
|  | Rajkot Engg Association, Rajkot | M | Shri Sunny R. Marvania  Shri Vinod Asodariya (*Alt*) | Y | Y | Y | 3/3 |
|  | Roxon Industries (Regd.), Amritsar | M | Shri Kirpal Singh | N | Y | Y | 2/3 |
|  | [Scientific And Industrial Testing And Research Centre, Coimbatore](javascript:;) | R&D | Shri Kirpal Singh  Dr. K Ulaganathan | Y | Y | Y | 3/3 |
|  | The Southern India Engineering Manufacturers' Association, Coimbatore | M | Shri Mithun Ramdas | Y | Y | N | 2/3 |
|  | UL India Pvt Ltd, Whitefield, Bangalore | R&D | Shri Manjunath V | N | Y | N | 2/3 |

**Annex 1C**

(*Refer Item* 5.2.3)

**COMPOSITION OF UTILITY AND INDUSTRIAL APPLICATION PUMPS SUBCOMMITTEE 20 : 6**

|  |  |  |
| --- | --- | --- |
| **No. of Meeting** | **Date** | **Place** |
| 17th | 8th November 2023 | Hybrid Meeting(Bureau of Indian Standards , New Delhi, Delhi, India) |
| 16th | 9th August 2023 | Virtual Meeting (webex) |
| 15th | 11th January 2023 | Central Water and Power Research Station (CWPRS), Pune in physical mode |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl**  **No.** | **ORGANIZATION NAME** | **CAT** | **PRINCIPAL/ALTERNATE MEMBERS** | **15th** | **16th** | **17th** | **TOTAL** |
|  | [Kirloskar Brothers Limited, Pune](javascript:;) | O | Shri R Birajdar  (*Convener*) | Y | N | Y | 2/3 |
|  | Best Engineers Pumps Pvt Ltd, Coimbatore | M | Shri S Thangapandi  Shri C. G. Sripriya (Alt) | Y | Y | Y | 3/3 |
|  | Crompton Greaves Consumer Electricals Limited, Ahmednagar | M | Shri Pravin Garje | N | N | N | 0/3 |
|  | Engineers India Limited, New Delhi | G | Shri Abhay Kumar  Shri Mahesh Gupta (Alt) | N | Y | N | 1/3 |
|  | Flowmore Limited, Gurgaon | M | SH. I. C. Jain | N | N | Y | 1/3 |
|  | Hindustan Petroleum Corporation Ltd, Mumbai | C | Shri Sourabh Sharma  Shri Akash Raj (Alt) | N | Y | Y | 2/3 |
|  | In Personal Capacity, Mumbai | O | Shri S.L. Abhyankar | N | Y | N | 1/3 |
|  | Indian pump Manufacturers Association, Ahmadabad | M | Shri Shri Milind Alwekar | Y | N | N | 1/3 |
|  | KSB Pumps Limited, Pune | M | Shri Rajesh B Gote  Shri Dattatray Katkar (Alt) | Y | Y | Y | 3/3 |
|  | Kirloskar Brothers Limited, Pune | M | Shri Chidambar Deshpande | Y | Y | Y | 3/3 |
|  | Mecon Ltd. Ranchi | G | Md. Aziz Ahmad  Shri Sandeep Kumar (Alt) | N | Y | N | 1/3 |
|  | Mechanical Engg. Res & Devp. Organisation, Ludhiana | R&D | Shri Rakesh Nigam  Shri S.K. Mandal (Alt) | N | N | N | 0/3 |
|  | North India Pump Manufacturers Association Jallandhar | M | Shri C.L. Garg  Shri. Jatins Kalsi (Alt) | N | N | N | 0/3 |
|  | Projects & Development India Ltd, Vadodara | C | Shri G.P. Dabi  Shri R.C. Sharma (*Alt*) | N | N | N | 0/3 |
|  | Roxon Industries (Regd.), Amritsar | M | Shri Kirpal Singh | N | Y | Y | 2/3 |
|  | [Scientific And Industrial Testing And Research Centre, Coimbatore](javascript:;) | R&D | Shri R Karthikeyan  Shri A.M. Selvaraj (*Alt*) | Y | Y | Y | 3/3 |
|  | Southern India EnggMfrs Association, Coimbatore | M | Shri K.V. Kartik  Shri A Prabhakaran (Alt.) | Y | Y | Y | 3/3 |
|  | Tata Consulting Engineers,  Bangalore | C | Shri S V Kamesh  Shri R Madhavan (Alt) | N | N | N | 0/3 |
|  | Thyssenkrupp Industrial Solutions (India) Private Limited, Mumbai | M | Shri Suhas Shrirao  Shri Rajesh Shekatkar (Alt) | N | N | N | 0/3 |
|  | UL India Pvt Ltd, Whitefield, Bangalore | R&D | Shri V. Manjunath  Shri Satish Kumar (Alt) | N | Y | Y | 2/3 |
|  | WPIL Ltd, Ghaziabad | C | Shri B.C. Bhaoyal  Shri B.P. Khare (Alt) | N | N | N | 0/3 |
|  | Wilo Mather And Platt Pumps Ltd; Pune | M | Shri Manoj Bafna | N | N | N | 0/3 |

**Annex 1D**

(*Refer Item* 5.2.4)

**COMPOSITION OF SOLAR PHOTO VOLTAIC WATER PUMPING SYSTEMS SUBCOMMITTEE, MED 20 : 7**

|  |  |  |
| --- | --- | --- |
| **No. of Meeting** | **Date** | **Place** |
| 6th | 20 04 2022 | Webex |
| 7th | 03 11 2022 | Webex |
| 8th | 21 06 2023 | Webex |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl No.** | **ORGANISATION REPRESENTED** | **CAT.** | **PRINCIPAL MEMBER / ALTERNATE MEMBER** | **6th** | **7th** | **8th** | **TOTAL** |
|  | Ministry Of New & Renewable Energy (Mnre), Govt. Of India | G | Shri J. K. Jethani, (*Convener)* | Y | Y | Y | 3/3 |
|  | Agricultural Engineering Department, Chennai | C | Dr. R. Murugesan  Ms ShanthiSundar Ram (Alt) | Y | Y | Y | 3/3 |
|  | Electrical Research and Development Association  (ERDA), Vadodara | R&D | Shri Ravi Prakash Singh  Shri Vinod Gupta (Alt) | Y | Y | Y | 3/3 |
|  | Flowmore Limited, Gurugram, Haryana | M | Shri I C Jain | Y | Y | Y | 3/3 |
|  | Department of Electrical Engineering, IIT, Delhi | R&D | Prof. Amit Kumar Jain | N | N | N | 0/3 |
|  | Grundfos Pumps India Private Limited, Gurugram | M | Shri Bibek Saha  Shri Rangarajan (Alt) Shri Ramaswamy(Alt) | Y | Y | Y | 3/3 |
|  | Indian Pump Manufacturers Association (IPMA) , Ahmedabad | M | Shri Yogesh Mistri  ShriUtkarshA.Chhaya(Alt) | Y | Y | Y | 3/3 |
|  | Jain Irrigation Systems Ltd., Jalgaon | M | Shri Sanjeev Phadnis  ShriPradipBhosale(Alt) | Y | Y | Y | 3/3 |
|  | KSB Pumps Limited, Pune | M | Shri Sunil Bapat | NA | NA | Y | 1/1 |
|  | Kinetica Solar Pvt. Ltd., Jaipur | M | ShriNimeshSheth  ShriMihir Patel (Alt) | N | N | Y | 1/3 |
|  | La Gajjar Machinery Private Limited, Ahmedabad | M | Shri Vipul Kumar Hargovandas  Ms Kavita Shahu | NA | NA | Y | 1/1 |
|  | National Institute  of Solar Energy (NISE), Gwalpahari, Gurugram | R&D | Er. Sanjay Kumar  Ms. RichaParmar  Shri Gopal Kumar (Alt) | Y | Y | N | 2/3 |
|  | North India Pump Manufacturers Association, (NIPMA) Ludhiana | M | Shri C.L. Garg  Shri Puneet Kalsi (Alt) | Y | Y | N | 2/3 |
|  | Punjab Agricultural University  Ludhiana | R&D | Professor Rakesh Sharda  ShriRajan Aggarwal (Alt) | Y | Y | Y | 3/3 |
|  | Rajkot Engineering Association , Rajkot | M | ShriAnandSavaliya  Shri Vinod Asodariya(Alt) | Y | N | Y | 2/3 |
|  | Rotomag Motors & Controls Pvt. Ltd., Gujarat | M | ShriUmeshBalani  Shri Sanjay Mahagaokar(Alt) | Y | Y | Y | 3/3 |
|  | Scientific and Industrial Testing and Research Centre (SITARC), Coimbatore | R&D | Shri A.M. Selvaraj | Y | Y | Y | 3/3 |
|  | Shakti Pumps (India) Ltd., Pithampur, (Indore) | M | Shri Dinesh Patidar  Shri Amit Mukherjee (Alt) | Y | Y | Y | 3/3 |
|  | The Southern India Engineering Manufacturers Association, (SIEMA) Coimbatore | M | Shri K.V. Karthik  Shri P Ramesh (Alt) | Y | Y | Y | 3/3 |
|  | Tata Power Solar Systems Limited, Noida | M | Shri Ramakrishna Sataluri  ShriArpit Srivastava (Alt) | N | N | N | 0/3 |
|  | Vyoda Private Limited, Mysuru | M | ShriPadmakarPratapure  ShriAvinash Kumar (Alt) | Y | Y | Y | 3/3 |
|  | Maxop Research & Testing Institute Pvt. Ltd., N Delhi | O | Dr O S Sastry | N | N | N | 0/3 |

**Annex 2**

*(Refer Item* ***7****)*

**PROFORMA FOR PROPOSING NEW SUBJECTS FOR NATIONAL STANDARDIZATION**

1. Proposer

(Name & Address)

1. Title ..................................................................................................................................

(Indicate whether the standard required is for product specification/methods of test/code of practice and define the subject in brief.)

3 Scope ................................................................................................................................

(Define the limits to be considered)

4 Purpose and justification ...................................................................................................

5 Likely users of standard and their inputs .....................................................................................

1. Any related standard/series of standard/system standard required to make this subject standard complete...............................................................................................................
2. When the final Standard would be required (any time limit) ............................................

8 Any specific bottlenecks without this Standard................................................................

9 Bearing with Government legislation regulation, etc.....................................................................

10 Name and address of manufacturers, implementing industries, purchasing organization/component supplier/raw material supplier...................................................

(Approx. production figure and approx. value of overseas trade, if available)

1. Availability of test facilities...............................................................................................
2. Whether related to variety reduction, export, health, safety consumer production, mass consumption, energy conservation, technology transfer, technology up-gradation, protection of environment & other national priorities

13 Relevant supportive documents/standards........................................................................

14 R&D work done in India...................................................................................................

15 Status of the industry in the country...................................................................................

16 Any foreign collaboration (give details) ............................................................................

17 Liaison with any Organization(s).......................................................................................

1. Preparatory work:
2. Whether draft attached.................................................................................................
3. Whether outline attached and draft can be prepared....................................................
4. No draft possible, if so, why? .....................................................................................

19 Whether this project can be funded by your organization or can it be sponsored by industry/associations/ professional bodies/ministry? If yes, to what extent?....................

20 Whether your Organization would be interested to opt for BIS Standard Mark once the standard is published?.......................................................................................................

Date..................... Signature

NOTES

1. It is desirable that the information is provided by the proposer for all items of the proforma; in any case information against item 1 to 5 must be provided.

2. Write `NA' wherever not applicable.

3. Add separate sheet to elaborate.

**Annex 3**

(*Refer Item* 8.5)

**Standards and projects under the direct responsibility of ISO/TC 115 Secretariat and its SC’s/WG’s**

**ISO/TC 115 - Pumps**

|  |
| --- |
| [ISO 3661:1977](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=9112) End-suction centrifugal pumps – Base plate and installation dimensions |
| [ISO/ASME DIS 14414](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=54740):2019 Pump system energy assessment |
| [ISO 17769-1 : 2012](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=55821) Liquid pumps and installation — General terms, definitions, quantities, letter symbols and units — Part 1: Liquid pumps |
| [ISO 17769-2 : 2012](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=54108) Liquid pumps and installation — General terms, definitions, quantities, letter symbols and units — Part 2: Pumping system |
| ISO 20361 : 2019 Liquid pumps and pump units — Noise test code — Grades 2 and 3 of accuracy |

**ISO/TC 115/SC 1 - Dimensions and technical specifications of pumps**

|  |
| --- |
| [ISO 2858:1975](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=7862) End-suction centrifugal pumps (rating 16 bar) -- Designation, nominal duty point and dimensions |
| [ISO 3069:2000](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=8184) End-suction centrifugal pumps -- Dimensions of cavities for mechanical seals and for soft packing |
| [ISO 5199:2002](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=31945) Technical specifications for centrifugal pumps -- Class II |
| [ISO 9905:1994](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=17788) Technical specifications for centrifugal pumps -- Class I |
| [ISO 9905:1994/Cor 1:2005](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=41990) |
| [ISO 9905:1994/Amd 1:2011](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=57327) |
| [ISO 9908:1993](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=17790) Technical specifications for centrifugal pumps -- Class III |
| [ISO 9908:1993/Amd 1:2011](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=57328) |
| [ISO 14847:1999](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=25745) Rotary positive displacement pumps -- Technical requirements |
| [ISO 15783:2002](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=28987) Seal-less rotodynamic pumps -- Class II -- Specification |
| [ISO 15783:2002/Amd 1:2008](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=45649) |
| [ISO 16330:2003](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=32189) Reciprocating positive displacement pumps and pump units -- Technical requirements |
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**ISO/TC 115/SC 2 - Methods of measurement and testing**

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| [ISO 5198:1987](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=11203) Centrifugal, mixed flow and axial pumps -- Code for hydraulic performance tests -- Precision grade |
| [ISO 9906:2012](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=41202) Rotodynamic pumps -- Hydraulic performance acceptance tests -- Grades 1, 2 and 3 |
| ISO/TR 19688 :2019  Rotodymanic pumps -- Hydraulic performance acceptance test using model pump |
| [ISO 21630:2007](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=35953) Pumps -- Testing -- Submersible mixers for wastewater and similar applications |

**ISO/TC 115/SC 3 - Installation and special application**

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| [ISO 13709:2009](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=41612) Centrifugal pumps for petroleum, petrochemical and natural gas industries |
| [ISO 13710:2004](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=36129) Petroleum, petrochemical and natural gas industries -- Reciprocating positive displacement pumps |
| [ISO 21049:2004](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=35625) Pumps -- Shaft sealing systems for centrifugal and rotary pumps |

**WORKING GROUPS (WG’s) of ISO/TC 115**

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| ISO/TC 115/WG 7 | Pumping system energy assessment |
| ISO/TC 115/SC 2/WG 2 | Rotodynamic pumps test codes |
| ISO/TC 115/SC 2/WG 4 | Rotodynamic pumps - Hydraulic performance acceptance tests using a model pump |
| ISO/TC 115/SC 3/WG 2 | Joint ISO/TC 115/SC 3 - ISO/TC 67/SC 6 WG : Positive displacement pumps for petroleum and natural gas industries |
| ISO/TC 115/SC 3/WG 6 | Joint ISO/TC 115/SC 3 - ISO/TC 67/SC 6 WG: Shaft sealing systems for centrifugal and rotary pumps |