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**भारतीय मानक ब्यूरो**  
**BUREAU OF INDIAN STANDARDS**

**MINUTES**

<b>MEETING</b>	<b>DAY and DATE</b>	<b>TIME</b>
<b>27<sup>th</sup> Meeting of Boilers &amp; Pressure Vessels Sectional Committee, MED 01</b>	<b>29 May 2024 (Wednesday)</b>	<b>11:00 AM Lal C Verman, BIS HQ, Manak Bhawan, New Delhi (Hybrid)</b>

**CHAIRPERSON:** Shri Sandeep Sadanand Kumbhar, Technical Advisor (Boilers) & Secretary, Central Boilers Board, Ministry of Commerce and Industry.

**MEMBER SECRETARY:** Mr. Lokraj Meena, Sc. 'C' & Deputy Director, MED, BIS HQ, New Delhi.

**The members present in the meeting has been listed in Annex A (Page 20-21)**

**0.1 Welcome by Head (MED)**

Shri K.V Rao, Sc. 'F'/Senior Director & Head (MED) was not present in the meeting due to prior commitments. Member Secretary (MS) on his behalf thanked all the Committee members present in the meeting. Further, he underlined the importance of standards being formulated by this Committee and impact of them on common consumers. At last, he hoped that Committee will have a fruitful discussion during the meeting on various agenda items.

**0.2 Opening remarks by Chairperson, MED 01**

Shri Sandeep Sadanand Kumbhar, Chairperson MED 01 welcomed all the members present in the meeting physically and virtually. Being newly appointed as the Chairperson of MED 01, he stated that he is eager to contribute to the national standardization work under this Committee with great

enthusiasm and a strong sense of responsibility,. He encouraged the committee members for active participation in the committee work. He further suggested to promote green energy measures through standard development. At last, he hoped that the Committee will have good and fruitful deliberations during the meeting on various agenda items.

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

There being no comments on the minutes of the last meeting, the Committee formally confirmed the minutes of the last meeting.

## **ITEM 2 SCOPE AND COMPOSITION OF COMMITTEE**

### **2.1 Scope**

The Committee noted the scope of the Committee, deliberated and decided to make no alterations.

### **2.2 COMPOSITION OF THE COMMITTEE**

**2.2.1** The Committee reviewed the composition of the Committee and decided to send a letter to the following organisations for their active participation in the Committee work.

- a) Larsen and Turbo Limited, Mumbai
- b) Mecon Limited, Ranchi

Shri Rahul Kumar Chandra, M/s BHEL was present during the meeting. The Committee requested him to review the nominations from BHEL and nominate one member from each division of BHEL. While nominating the members, it must be ensured that nominated members are able to spare the time for attending the each meeting of the Committee.

#### **2.2.2 Co-option of new members and nomination update of existing members**

- (A)** The Committee noted the information given in the agenda and decided to again write a letter to some senior authority in Central Electricity Authority, New Delhi and M/s Hindustan Petroleum Corporation Limited, Mumbai seeking their active participation in the Committee.
- (B)** The Committee discussed on the requests received from following organizations and decided as follows:
  - a) The Committee didn't agree with the request of Shri Rushiprasad Patel in the lack of expertise in the field of Boiler and pressure vessels. However, it was decided to add him in the mailing list.
  - b) The Committee didn't agree with the request of Shri Shashikant Jagmitra Joshi, Nirma University for inclusion in the Committee. However, it was decided to add him in the Panel

P-5 for contribution in revision of IS 2825. Further, on the basis of his contribution, his request may be reviewed for inclusion in the Committee.

- c) The Committee didn't agree with the request of Shri Shah Dhaval B., Nirma University for inclusion in the Committee. However, it was decided to add him in the Panel P-5 for contribution in revision of IS 2825. Further, on the basis of his contribution, his request may be reviewed for inclusion in the Committee.


2.2.3 The Committee noted the information given in the agenda.

### 2.2.4 Gender Responsive Standards Initiative

The Committee noted the information given in the agenda and recommended that existing organizations may nominate a female expert member in place of current alternate male member and encourage their participation during the meetings and in national standardization work. Further, MS informed the Committee about young professional initiative of BIS whereby a member below the age of 37 years may also be nominated.

### Item 3 ACTIONS ARISING OUT OF THE MINUTES OF 26<sup>th</sup> MEETING

The summary of actions taken on the minutes of 26<sup>th</sup> meeting of **Boiler & Pressure Vessels Sectional Committee, MED 01** and present status is given below:

Sl No.	Item no*	Decision taken in the last meeting	Actions taken	Decision taken in 27 <sup>th</sup> meeting
1.	6.1, sl no 1	<p><b>Revision of IS 2825: 1969 (Code for unfired pressure vessels)</b></p> <p>The Committee decided to add the following members to Panel 05 for revision of IS 2825 : 1969:</p> <p>a) Mr Ranjit D. Naik, Bureau Veritas India Private Limited, Noida.</p> <p>b) Mr Rohinton R. Engineer, M/s Industrial Boilers Limited, Nehru Place, New Delhi.</p> <p>c) Mr Tarun Kumar, Engineers India Limited, New Delhi.</p>	<p>As decided during the last meeting, the Convenership of Panel (P-5) has been updated.</p> <p>Word copy of IS 2825 is attached.</p> <p> IS 2825.docx</p> <p>Panel meetings could not be conducted in the month of Jan 2024.</p> <p>The Committee may kindly note and decide.</p>	<p>The Committee deliberated on the agenda point and requested Shri ESG Pragasam, M/s ISGEC, Noida (<b>Convenor</b>) to conduct the meeting of Panel-5 '<b>Revision of IS 2825 : 1969 'Code for Unfired Pressure Vessels'</b> in the month of June 2024 for discussion among the members and provide the draft revision of IS 2825 at their earliest.</p> <p>Shri ESG Pragasam agreed to hold the Panel meetings and provide the draft revision of IS 2825 by 15<sup>th</sup> July 2024.</p>

	<p>d) Mr B. K. Sreedhar, Indira Gandhi Centre for Atomic Research, Kalpakkam.</p> <p>e) Mr Lakshmana Rao, M/s Tata Consulting Engineers Limited, Navi Mumbai.</p> <p>f) Mr Karthik T, M/s L&amp;T-Sargent &amp; Lundy Limited, Vadodara.</p> <p>The Committee decided to update the Convenership of Panel 05 to Mr ESG Pragasam, M/s India Sugar and General Engineering Corporation, Noida.</p> <p>The Committee requested MS to incorporate comments received in Panel 05 till date in word format and circulate the same to Panel 05 members by the end of Dec, 2023.</p> <p>The Committee directed Panel 05 to hold a physical meeting in Delhi in Jan, 2023 to finalise the comments received. The Panel will provide a deadline for the project during this meeting.</p> <p><b><u>Background</u></b></p> <p>Steel manufacturers as listed were invited to the 5th meeting of Panel 05 dated 10 Feb 2023. It was decided to keep them in the invitee list for future meetings, wherever required.</p> <p>06 meetings were held for Panel 05 in 2023. The panel has not been able to provide the revised draft of IS 2825. In the last meeting of Panel 05 held on 27 Oct 2023. Mr ESG Pragasam</p>		<p>After the receipt of the draft revision, the Committee further decided to circulate it among the Committee members for 15 days.</p> <p>If no comments received till last date, then document will be sent into wide circulation for 60 days in consultation with the Chairperson.</p>
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		<p>expressed interest to lead the work of the panel for providing the revised draft.</p> <p>The Committee decided to expand the panel 05 by adding following members:</p> <p>(i) M/s L&amp;T, Quality Assurance Head, Hazira  (ii) M/s JSPL, Raipur  (iii) M/s SAIL, Bhilai  (iv) M/s Tata Steel, R&amp;D Team,</p> <p>The Committee provided a four month time for the panel to revise IS 2825.</p> <p>Convener of the panel, Mr Ajay Hantodkar, M/s TBWES informed the Committee that Steel manufacturers have already done some work with Jindal and Tata and SAIL. All other chapters of IS 2825 are ready except material. He sought May 2023 timeline to finalise the panel work.</p>		
2.	6.1, sl no 2	<p><b><u>Review of Standards for feedback</u></b>  <b>(a), (b), (c), (d), (e), (h)</b> Action complete.</p> <p><b>(f), (g)</b> (IS 13445 Part 1 &amp; Part 2) The Committee requested MS to incorporate comments received till date in word format and circulate the same to Committee members. The Committee to decide on the revision of these documents in the next meeting.</p>	Please see <i>Item no. 6</i> for details.	Please see <i>Item no. 6</i> for details.

(i) The Committee decided to withdraw IS 13619 : 1993 Industrial steam and hot water boiler plants – Maintaining log and summary sheets – Recommendations.

(j) The Committee decided to circulate the comments from BEE on IS 13979 : 1994 ‘Method of calculation of efficiency of packaged steam boilers’ to all members to seek their opinion. If no comments are received, the document will not be changed.

Mr Lokesh Chaudhary and Mr Rohinton Engineer requested to send to him IS 13979 along with comments from M/s BEE.

(k) The Committee decided to update IS 13980 : 1995 Acceptance tests on industrial boilers – Code of practice as per editorial updates. No technical change required.

(l) The Committee decided to make no changes to IS 15685 : 2006 Purchaser’s data sheet for power boiler, including no editorial revision as it is not a Pre-2000 standard.

**Previously –**

(f), (g), (i), (j), (k), (l) Reminder has been sent to ESG Pragasam, M/s India Sugar and General Engineering Corporation and Mr Lakshmana Rao V., M/s Tata Consulting Engineers Limited,

Navi Mumbai dated 13 Feb 2023.

[20230223 MED01 ITEM2.1 SL2 Response from ESP.pdf](#)

[Email-](#)

[27 Mar 2023 IS 13445-P1-P2-ESG Pragasam.pdf](#)

[IS 13445 Part 1 1992-ESG Pragasam.pdf](#)

[IS 13445 Part 2 1992-ESG Pragasam.pdf](#)

[20221102 MED01 IS13445\\_P ART 1 DRAFT 0.1.docx](#)

[20221102\\_MED01\\_IS](#)

[13447\\_Part 2\\_DRAFT\\_0.1.docx](#)

[Email-](#)

[09 May 2023 Lakshman.pdf](#)

[IS 13445 Part 1 1992 - Lakshman.pdf](#)

[IS 13445 Part 2 1992- Lakshman.pdf](#)

**(f), (g)** Comments received from Mr ESG Pragasam, M/s India Sugar and General Engineering Corporation and Mr Lakshmana Rao V., M/s Tata Consulting Engineers Limited, Navi Mumbai dated 27 Mar 2023 and 09 May 2023, respectively.

**(i)** Mr Lakshmana Rao V., M/s Tata Consulting Engineers Limited, Navi Mumbai recommended withdrawal of IS 13619.

**(j)** Additionally, IS 13979 was sent to BEE for their comments on its revision. The comments received dated 14 Sep 2023.

[Email-](#)

[14 Sep 2023 Pravatanalini B EE.pdf](#)

[IS 13979.docx](#)

(k), (l) Mr Lakshmana Rao V.,  
M/s Tata Consulting Engineers  
Limited, Navi Mumbai  
confirmed no comments from  
M/s TCE.

**Background**

***Actions taken: 23rd Meeting***

- a) No comments received. Also, see Item 5.4, SI No. 2.
- b) No comments received.
- c) Comments received dated 16 Jun 2021 from M/s TBWES. Also, see Item 5.4, SI No. 4.
- d) Comments received dated 17 Jun 2021. Also, see Item 5.4, SI No. 5.
- e) Comments received dated 17 Jun 2021. No changes are required.
- f) No comments received.
- g) No comments received.
- h) Comments received dated 12 Sep 2022. Also, see Item 5.4, SI No. 8.
- i) No comments received.
- j) No comments received.
- k) No comments received.
- l) No comments received.

***Decisions: 23rd Meeting***

Committee decided to send a reminder to THERMAX again.

**Earlier**

Committee decided to send the copy of the following standards to Thermax for feedback:



	<ul style="list-style-type: none"> <li>a) IS 8596 : 1977 Recommended parameters of stationary steam boilers</li> <li>b) IS 8753 : 1977 Code for acceptance tests on stationary steam generators of the power station type</li> <li>c) IS 9330 : 1979 Terminology for parameters of waste heat boilers and boilers for special purposes</li> <li>d) IS 9332 : 1979 Recommended Parameters of Waste Heat Boilers and Boilers for Special Purposes</li> <li>e) IS 9404 : 2002 Identification of Pipelines Used in Thermal Power Plants - Colour Code</li> <li>f) IS 13445 ( Part 1 ) : 1992 Suppliers Data Sheet for Industrial Water Tube Boilers Part 1 Proposed Stage</li> <li>g) IS 13445 ( Part 2 ) : 1992 Suppliers Data Sheet for Industrial Water Tube Boilers Part 2 Post Order Stage</li> <li>h) IS 13477:1992 Industrial water tube boiler – Purchaser’s data sheet</li> <li>i) IS 13619:1993 Industrial steam and hot water boiler plants – Maintaining log and summary sheets – Recommendations</li> <li>j) IS 13979:1994 Method of calculation of efficiency of packaged steam boilers</li> <li>k) IS 13980:1995 Acceptance tests on</li> </ul>		
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		<p>industrial boilers – Code of practice</p> <p>1) IS 15685:2006 Purchaser’s data sheet for power boiler</p>		
3.		<p>The Committee decided to take up merging of IS 4049 (Part 1) : 1988, Specification for formed ends for tanks and pressure vessels: Part 1 based on outside diameter (Second Revision) and IS 4049 (Part 2) : 1996, Formed ends for tanks and pressure vessels - Specification: Part 2 inside diameter basis (First Revision) after its publication.</p> <p><b><u>Background</u></b></p> <p>BIS management has decided to identify standards of similar nature having overlapping or duplicate content and to merge such standards into a single standard.</p> <p>The Committee may consider to merge IS 4049 (Part 1) Specification for formed ends for tanks and pressure vessels: Part 1 based on outside diameter and IS 4049 (Part 2) Formed ends for tanks and pressure vessels - Specification: Part 2 inside diameter basis following this principle.</p>	<p>Both the standards have been already taken up for revision and are currently under print.</p> <p>The Committee may kindly note and decide.</p>	<p>The Committee noted the information given.</p>
4.	0.10	<p><b>Standardisation Cells in Industry Associations</b></p> <p>The Committee decided to send a reminder to Shri Lokesh Manohar Chaudhary, M/s Indian Boilers Manufacturers Association, Mumbai (IBMA) for creation of the Standardisation Cell.</p>	<p>An email dated 10 April 2024 was sent to Shri Lokesh Manohar Chaudhary, M/s Indian Boilers Manufacturers Association, Mumbai (IBMA) for creation of the Standardisation Cell.</p>	<p>The Committee deliberated on the agenda point and decided to again send a reminder to Shri Lokesh Manohar Chaudhary, M/s IBMA for creation of Standardization Cell. The Committee further suggested Shri Lakshmana</p>

		<p><b>Background</b></p> <p>BIS has formed a provision for creating Standardisation Cells in Industry Association to enable a consistent two way dialogue between BIS and Industry Association on the requirements of Industry Associations with respect to corresponding standards within their sectors. In MED 01, following is the status of Standardisation Cells:</p>	<p>However, no response has been received.</p> <p>The committee may kindly discuss and decide.</p>	<p>Rao V, M/s Tata Consulting Engineers Limited, Navi Mumbai to follow up with him.</p>								
		<table border="1"> <thead> <tr> <th data-bbox="337 709 391 779">Sl No.</th> <th data-bbox="391 709 501 779">Member</th> <th data-bbox="501 709 646 779">Status</th> <th data-bbox="646 709 1068 779">Invitation Letter</th> </tr> </thead> <tbody> <tr> <td data-bbox="337 779 391 1205">1</td> <td data-bbox="391 779 501 1205">Indian Boilers Manufacturers Association, Mumbai (IBMA)</td> <td data-bbox="501 779 646 1205">Not Created</td> <td data-bbox="646 779 1068 1205"> <a href="#">Email-IBMA-25 Oct 2023.pdf</a>  <a href="#">Training Schedule Faculty 31 Oct.docx (1).pdf</a>  <a href="#">REINFORCEMENT TRAINING FOR STANDARDIZATION CELL OF INDUSTRY ASSOCIATIONS 0001 (1).pdf</a>  <a href="#">Steps for using Stnd cell (1) (1).pdf</a> </td> </tr> </tbody> </table>	Sl No.	Member	Status	Invitation Letter	1	Indian Boilers Manufacturers Association, Mumbai (IBMA)	Not Created	<a href="#">Email-IBMA-25 Oct 2023.pdf</a> <a href="#">Training Schedule Faculty 31 Oct.docx (1).pdf</a> <a href="#">REINFORCEMENT TRAINING FOR STANDARDIZATION CELL OF INDUSTRY ASSOCIATIONS 0001 (1).pdf</a> <a href="#">Steps for using Stnd cell (1) (1).pdf</a>		
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5.	5.4, Sl no 1 & 3	<p>During the last meeting, the Committee discussed the comments received from Mr ESG Pragasam, M/s India Sugar and General Engineering Corporation, Noida, (ISGEC) and Mr Sumit Roy, M/s Regional Labour Institute, Faridabad on <b>IS 10123 ‘Data sheet for shell and tube type heat exchangers’</b>. The Committee decided to drop the draft document no. MED/01/22042 and decided to withdraw the standard. The Committee decided to take up revision of the Datasheet as part of revision of IS 4503:1967, Specification for shell and tube type heat exchangers.</p>	<p>As decided, the editable copy of IS 4503 along with a copy of IS 10123 was circulated among the Mr Lakshmana Rao, M/s Tata Consulting Engineers Limited, Navi Mumbai and Mr Tarun Kumar, M/s Engineers India Limited, New Delhi seeking their views/comments.</p> <p>However, inputs are still awaited.</p> <p>The Committee may kindly note and decide.</p>	<p>Mr Lakshmana Rao, M/s Tata Consulting Engineers Limited, Navi Mumbai and Mr Tarun Kumar, M/s Engineers India Limited, New Delhi kindly agreed to provide their comments/views within 15 days.</p> <p>The Committee noted the above and decided that after the receipt of the comments, MS to modify the draft revision and circulate among the members for further suggestions/views. If no comments received till last</p>								

		Further, the Committee decided to send IS 4503:1967, Specification for shell and tube type heat exchangers in word and PDF format to Mr Lakshmana Rao, M/s Tata Consulting Engineers Limited, Navi Mumbai and Mr Tarun Kumar, M/s Engineers India Limited, New Delhi to review the existing standard and provide revised draft with changes highlighted in word file. The revised draft is to be discussed in the next meeting.		date, then document will be sent into wide circulation for 60 days in consultation with the Chairperson.
6.	5.4.1 , SI No. 1	The Committee decided to circulate IS 10470: 1983, Specification for air cooled heat exchangers to committee members for review and provide their comments for revising the standard within one month. Comments from Mr Sumit Roy, M/s Regional Labour Institute, Faridabad to be circulated along with. The document to be discussed in the next meeting.	As decided, the editable copy of IS 10470 was circulated to Mr Sumit Roy, M/s Regional Labour Institute, Faridabad seeking their views/comments.  However, inputs are still awaited. Further, it may be also noted that this standard has been also allocated to Shri Chirag Jain, NIT Bhopal for review under internship program of BIS.  The Committee may kindly note and decide.	The Committee noted the information given and decided that IS 10470 will be taken for revision on the basis of the report to be submitted by Shri Chirag Jain, NIT Bhopal. Further, it also requested the members to share their views/suggestions, if any.
7.	Item 3, SI no. 3.2.1	<b>Solar Powered Hybrid Boilers</b> The Committee appreciated the report of internship presented by Mr Aman De Sarkar from NIT, Calicut on the subject Solar Powered Hybrid Boilers. The Committee discussed the possibility of developing a new standard or modifying an existing	No Panel meetings have been conducted till date.  The Committee may kindly note and decide.	The Committee noted the information given and requested Convenor, Panel to conduct panel meeting at the earliest in the month of June 2024.  Shri Rohinton R. (Convenor) Engineer, M/s Industrial Boilers Limited,

	<p>standard for integrating solar power as a source of energy for boilers. The Committee also discussed the possibility of solar powered boilers application on large marine vessels. The Committee formulated a panel for further discussion on formulation of a draft standard as well as Terms of Reference for R&amp;D Project on the same subject:</p> <p>a) Mr Rohinton R. Engineer, Industrial Boilers Limited, Nehru Place, New Delhi <b>(Convener)</b></p> <p>b) Mr Lakshmana Rao, Tata Consulting Engineers Limited, Navi Mumbai</p> <p>c) Mr Karthik T, L&amp;T-Sargent &amp; Lundy Limited, Vadodara</p> <p>d) Mr Rahul T. Bhat, Indian Register of Shipping, Mumbai</p> <p>e) Mr Lokesh Manohar Chaudhary, Indian Boilers Manufacturers Association, Mumbai</p> <p>f) Mr Sathyan V, Bharat Petroleum Corporation Limited, Mumbai</p> <p>g) Mr Aman De Sarkar, Intern, BIS</p> <p>h) Member Secretary, Bureau of Indian Standards (MS)</p> <p><b><u>Background:</u></b></p> <p>Mohd. Zakaria Khan, Technical Advisor (Boilers) [Ex-Chairperson] while taking stock of work of the Committee from Member Secretary suggested that an emerging area under subject Solar Powered Hybrid Boilers</p>		<p>New Delhi kindly agreed to have a meeting in the month of June 2024 for having the discussion among the members and submit the working draft to the Committee by 31 July 2024.</p>
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		<p>could be considered for taking up for formulation of a new Indian Standard.</p> <p>Also, the same subject was provided to an intern from Mr Aman De Sarkar, NIT Calicut undergoing internship at BIS for preparing a standardisation report.</p>		
8.	<p><b>Item 3, Sl no. 3.2.2</b></p>	<p><b>Pressure vessels for storage/transport of Green Hydrogen</b></p> <p>The Committee appreciated the report of internship presented by Mr Hemant Naresh Sadawana from IIT Roorkee on the subject <i>Pressure vessels for storage/transport of Green Hydrogen</i>. The Committee formulated a panel for further discussion on formulation of a draft standard as well as Terms of Reference for R&amp;D Project on the same subject:</p> <ul style="list-style-type: none"> <li>a) Mr Lakshmana Rao, Tata Consulting Engineers Limited, Navi Mumbai (<b>Convener</b>)</li> <li>b) Mr Tarun Kumar, Engineers India Limited, New Delhi</li> <li>c) Mr Naba Kumar Baishya, Oil Industry Safety Directorate, Noida</li> <li>d) Mr Sathyan V, Bharat Petroleum Corporation Limited, Mumbai</li> <li>e) Mr Hemant Naresh Sadawana, Intern, BIS</li> </ul>	<p>No Panel meetings have been conducted till date.</p> <p>The Committee may kindly note and decide.</p>	<p>The Committee deliberated on the agenda point and was of the view that it is required to have a literature survey on Pressure vessels for storage/transport of Green Hydrogen.</p> <p>The Committee further also requested to explore and suggest the name of some manufacturers of pressure vessels for purposes of green hydrogen for onboarding them in the Panel. Chairperson suggested the name of Dr. Suhas P. Deshmukh for inclusion in the Panel. The Committee agreed for the same.</p> <p>Shri Lakshmana Rao, M/s Tata Consulting Engineers Limited, Convener (Panel) kindly agreed to have a meeting in the month of June 2024 for having the discussion among the members and submit the working draft to the Committee by 31 July 2024.</p>

	<p>f) Member Secretary, Bureau of Indian Standards (MS)</p> <p><b><u>Background</u></b></p> <p>This subject was received from the Ministry of New and Renewable Energy under National Green Hydrogen Mission for consideration of formulation/adoption of an Indian Standard on the subject.</p> <p><a href="#">Email TED 12 JUL 2023 PRA SOON SIR MAIL.pdf</a>  <a href="#">C-01 Letter from Secreatry MNRE.pdf</a>  <a href="#">C-02 Email - DO Letter from Secretary MNRE.pdf</a>  <a href="#">C-03 e-office File.pdf</a></p> <p>Also, the same subject was provided to an intern from Mr Hemant Naresh Sadawana, IIT Roorkee undergoing internship at BIS for preparing a standardisation report.</p>		
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#### **ITEM 4 DOCUMENTS UNDER PUBLICATION/PRINT**

The Committee noted the information given in the agenda.

#### **ITEM 5 REVIEW OF PUBLISHED INDIAN STANDARDS**




The Committee discussed and decided to re-affirm the following standards for a further period of 5 years or till their revised version is published, whichever is less:

<b>Sl No.</b>	<b>IS No.</b>	<b>Title</b>	<b>Reaffirmation Details</b>	<b># Amds</b>
1.	IS 13979 : 1994	Method of calculation of efficiency of packaged steam boilers	April, 2019	-



2.	IS 13980 : 1995	Acceptance tests on industrial boilers - Code of practice	April, 2019	-
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## ITEM 6 PRE-2000 DOCUMENTS UNDER REVIEW BY TECHNICAL DEPARTMENT

The Committee noted the information given in the agenda and decided as given below:

Sl No.	IS No.	IS Title	Reaffirmation Details	Degree of Equivalence	Remarks	Decision in 27 <sup>th</sup> Meeting.
1	IS 2825 : 1969	Code for unfired pressure vessels	February, 2022	Indigenous	Pls see Sl No. 1	Pls see Item no 3, Sl no. 1 for decision
2	IS 4503 : 1967	Specification for shell and tube type heat exchangers	September, 2018	Indigenous	 IS 4503_Kundan (1).docx Pls see Item No 3, Sl no 5	Pls see Item no 3, Sl no. 5 for decision
3	IS 13979 : 1994	Method of calculation of efficiency of packaged steam boilers	April, 2019	Indigenous	 IS 13979.docx Pls see Item no 3, Sl No. 2 (j)	The Committee decided to revise the standard with editorial corrections and requested MS to prepare the draft revision and put up into wide circulation for 2 months.
4	IS 10470 : 1983	Specification for air cooled heat exchangers	July, 2020	Indigenous	 IS 10470 (NEW).docx Pls see Item No 3, Sl no 6	Pls see Item 3, Sl no 6 for decision.
5	IS 13619: 1993	Industrial steam and hot water boiler plants - Maintaining of log and summary sheets - Recommendations	April, 2019	Indigenous	Pls see Item no 3, Sl No. 2 (i) <b>(Decision to withdraw)</b>	The Committee noted the information given and requested MS to do the needful for the withdrawal of IS 13619.
6	IS 13980 : 1995	Acceptance tests on industrial boilers -	April, 2019	Indigenous	Pls see Item no 3, Sl No. 2 (k)	The Committee decided to revise the



		Code of practice				standard with editorial corrections and requested MS to prepare the draft revision and put up into wide circulation for 2 months.
7	IS 13445-1:1992	Suppliers Data Sheet for Industrial Water Tube Boilers: Part 1 Proposed Stage	February, 2022	Indigenous	 MED 01 (IS 13445 P1)WC.docx  Pls see Item no 3, SI No. 2 (f)	<p>The Committee noted the information given and decided to circulate the copy of IS 13445-1 among the committee members for 10 days seeking their views/comments on the standard.</p> <p>Shri ESG Pragasam kindly agreed to share his comments.</p>
8	IS 13445-2:1992	Suppliers Data Sheet for Industrial Water Tube Boilers: Part 2 Post Order Stage	February, 2022	Indigenous	 MED 01 (IS 13445 P2)WC.docx  Pls see Item no 3, SI No. 2 (g)	<p>The Committee noted the information given and decided to circulate the copy of IS 13445-1 among the committee members for 10 days seeking their views/comments on the standard.</p> <p>Shri ESG Pragasam kindly agreed to share his comments.</p>
9.	IS 8596 : 1977	Recommended parameters of stationary steam boilers	February, 2022	Indigenous	Pls see Item no 3, SI No. 2 (a)	The Committee noted the information given and requested Shri Lakshmana Rao V.,

						<p>M/s TCE Ltd. to provide his inputs/views within 15 days.</p> <p>Shri Lakshmana Rao kindly agreed to do the same.</p>
10.	IS 9330 : 1979	Terminology for parameters of waste heat boilers and boilers for special purposes	February, 2022		 <p>IS 9330 MED 01 NK WC NEW 4.docx</p> <p>Pls see Item no 3, SI No. 2 (c)</p>	<p>MS informed the committee that provisions of IS 9330 has been already incorporated in IS 8595 in its revision. The Committee noted the same and agreed to withdrawn IS 9330. Further, it requested MS to do the needful for withdrawal of IS 9330.</p>
				Indigenous		
11.	IS 9332 : 1979	Recommended parameters of waste heat boilers and boilers for special purposes	February, 2022		 <p>IS 9332.docx</p> <p>Pls see Item no 3, SI No. 2 (c)</p>	<p>The Committee noted the information given and requested Shri Lakshmana Rao V., M/s TCE Ltd. to provide his inputs/views within 15 days.</p> <p>Shri Lakshmana Rao kindly agreed to do the same.</p>
				Indigenous		

## ITEM 7 POSITION OF WORK

The Committee noted the information given in the agenda.

## ITEM 8 SELECTIONS OF SUBJECTS

The Committee noted the information given in the agenda and requested the **Convenor, Panel** to have a meeting at the earliest for exploring the possibility of new subjects for standard formulation and submit its recommendations to the Committee.

## **ITEM 9 STANDARDS WITH RESEARCH**

The Committee noted the information given and appreciated this initiative of BIS for supporting the R&D projects. Further, it also requested Shri Rahut Bhat, M/s IRS to provide Terms of References (ToR) for R&D project for formulation of draft standard on **‘Pressure Vessels for Human Occupancy’** within one week.

## **ITEM 10 INTERNATIONAL ACTIVITY**

**10.1** The Committee noted the information given in the agenda.

**10.2** The Committee noted the information given in the agenda.

**10.3** The Committee noted the information given in the agenda and was of the view that it is highly required that Indian experts are involved in setting of the International standards on boilers and pressure vessels, so they can put up India specific requirements and views during meetings. Hence, the Committee approved the nominations of following members for their addition as expert member in ISO/TC 11:

- (A) Shri Karthik T., L&T Sargent & Lundy Limited, Vadodara
- (B) Shri Kishor Pandurang Dongare, M/s Thermax Ltd, Pune
- (C) Shri Jayvant G. Pingale, M/s Godrej & Boyce Manufacturing Company
- (D) Mr Lakshmana Rao, Tata Consulting Engineers Limited, Navi Mumbai
- (E) Mr Rohinton R. Engineer, Industrial Boilers Limited, New Delhi

## **ITEM 11 RECENT INITIATIVES IN THE STANDARD DEVELOPMENT PROCESS OF BIS**

### **11.1 Green Initiative by BIS**

The Committee noted the information given in the agenda.

### **11.2 Interaction with SDO**

The Committee noted the information given in the agenda.

### **11.3 Training of Committee Members**

The Committee noted the information given in the agenda.

**ITEM 12 GUIDELINES FOR MEMBERS OF TECHNICAL COMMITTEES**

The Committee noted the information given in the agenda.

**ITEM 13 GUIDELINES FOR INTENSIFYING PARTICIPATION OF STAKEHOLDERS  
IN BIS TECHNICAL COMMITTEE MEETING**

The Committee noted the information given in the agenda.

**ITEM 14 SUSTAINABILITY PERSPECTIVE IN INDIAN STANDARDS**

The Committee noted the information given in the agenda.

**ITEM 15 DATE AND PLACE FOR THE NEXT MEETING**

The date and place of the meeting will be decided in consultation with the Chairperson, MED 01.

**ITEM 16 ANY OTHER BUSINESS**

There being no other business, the meeting ended with a hearty vote of thanks of the chairperson and the members present in the meeting.

**ANNEX A**  
**(Attendance)**

<b>Sl. No</b>	<b>Organization</b>	<b>Member</b>	<b>Email ID</b>
1.	Department for Promotion of Industry and Internal Trade, New Delhi	Shri Sandeep Sadanand Kumbhar ( <i>Chairperson</i> )	sandeep.kumbhar7@gov.in
2.	Bureau of Energy Efficiency, New Delhi	Shri Priyaranjan ( <i>Alt</i> )	pranjan09@beeindia.gov.in
3.	Bharat Heavy Electricals Limited, Haridwar	Shri Rahul Kumar Chandra	rahulkumar.chandra@bhel.in
4.	Bharat Heavy Electrical Limited, New Delhi	Shri S. Subba Rao ( <i>Alt</i> )	subbarao@bhel.in
5.	Bharat Petroleum Corporation Limited, Mumbai	Shri Sathyan V. ( <i>Alt</i> )	sathyanv@bharatpetroleum.in
6.	CSIR - Central Mechanical Engineering Research Institute, Durgapur	Dr. Atanu Saha	atanu@cmeri.res.in
7.	Directorate General Factory Advice Service and Labour Institutes, Mumbai	Shri Ramesh Singh Rawat	ramesh.rawat28@dglasli.nic.in
		Shri Amit Gola ( <i>Alt</i> )	amit.gola@dglasli.nic.in
8.	DNV Business Assurance India Pvt. Ltd., Mumbai	Shri Shankar Shivaratri	shankar.shivaratri@dnv.com
		Shri Pramod Chabbi ( <i>Alt</i> )	pramod.chabbi@dnv.com
9.	Engineers India Limited, New Delhi	Shri Tarun Kumar	kumar.tarun@eil.co.in
10.	Godrej & Boyce Manufacturing Company Limited, Mumbai	Shri Jayvant G. Pingale ( <i>Alt</i> )	jaivant@godrej.com
		Shri Ibrahim ( <i>Representative</i> )	iamulla@godrej.com
11.	GE Power India Limited (Alstom Project India Limited), Noida	Shri Veermani S ( <i>Alt</i> )	veeramani.shanmugam@ge.com
12.	Indira Gandhi Centre for Atomic Research, Kalpakkam	Dr B. K. Sreedhar	bksd@igcar.gov.in
13.	India Sugar and General Engineering Corporation, Noida	Shri ESG Pragasam ( <i>Alt</i> )	esgpragasam@isgec.co.in
14.	Indian Register of Shipping, Mumbai	Shri Siddhesh Prabhu ( <i>Alt</i> )	siddhesh.prabhu@irclass.org
15.	Industrial Boilers Limited, Nehru Place, New Delhi	Shri Cyrus R. Engineer	cyrus@indboilers.com
		Shri R. R. Engineer ( <i>Alt</i> )	rohinton@indboilers.com
16.	L&T-Sargent & Lundy Limited, Vadodara	Shri Karthik T. ( <i>Alt</i> )	karthik.t@Lntpower.com

17.	Lloyd Register Asia, Mumbai	Shri Thirumal Valavan	Thirumal.valavan@lrqa.com
18.	NTPC Limited, New Delhi	Shri Anubhav Dahiya Shri Vivek Gangwar ( <i>Alt</i> )	anubhavdahiya@ntpc.co.in vivekgangwar@ntpc.co.in
19.	Oil Industry Safety Directorate, Noida	Shri Shivendra Singh Parihar ( <i>Alt</i> )	ssprihar.oisd@gov.in
20.	Project and Development India Limited, Noida	Shri. Rajeev Ranjan Kumar ( <i>Alt</i> )	rranjank@pdilin.com
21.	Reliance India Limited, Mumbai	Shri Sanjiv Prasad	sanjiv.prasad@ril.com
22.	Tata Steel Limited, Kolkata	Shri Braj B. Prasad	bbpdqa@tatasteel.com
23.	Tata Consulting Engineers Limited, Navi Mumbai	Shri Lakshmana Rao V	lakshmanaraov@tce.co.in
24.	Welding Research Institute, Tiruchirappalli	Dr. B. Shanmugarajan K. Ganesh Kumar ( <i>Alt</i> )	bsrajan@bhel.in kkganesh@bhel.in

**Speical Invitee:**

25. Shri Chirag Jain, NIT Bhopal (intern, BIS)

**BIS Directorate:**

26. Shri Lokraj Meena, Sc. C/Deputy Director, MED, BIS HQ, New Delhi