

MINUTES OF MEETING

BUREAU OF INDIAN STANDARDS

(METALLURGICAL ENGINEERING DEPARTMENT)

ALLOY STEELS AND FORGING SECTIONAL COMMITTEE, MTD 16

Meeting Date 21 October 2024, (Monday)
& Time 10:30 AM
No. of Meeting 29th TC Meeting
Venue Hybrid Meeting (Blue room, New Delhi)

Chairman: Shri T. Muthukumar

Member Secretary: Mr. G. Ram Sai Kumar

Committee Attendance:

Physically

Sl. No.	Organization Name	Member Name
1.	Mishra Dhatu Nigam Limited, Hyderabad	Mr. T. Muthukumar
2.	Indian Stainless Steel Development Association, Gurugram	Mr. Rohit Kumar Mr. A K Sharma
3.	Jindal Stainless Limited, Hisar	Ms. Nisha Goel Mr. V. Narasimha Rao Komiseti Mr. Sanjiv Dala
4.	L&T Special Steels Heavy Forgings pvt. Ltd., surat	Mr. Kavita Bhatia
5.	Schaeffler India Limited, Vadodara	Mr. Anshuman Ganeriwala Mr. Hardik Solanki
6.	Steel Authority of India Limited (SAIL), Research & Development Centre for Iron & Steel, Ranchi	Mr. P. Kumar
7.	BIS	Mr Sanjiv Maini, H(MTD)

Virtually

Sl. No.	Organization Name	Member Name
1.	Atomic Energy Regulatory Board, Mumbai	Mr. Jagannath Mishra
2.	Atomic Minerals Directorate For Exploration And Research, Hyderabad	Dr. Smeer Durani
3.	BEML Limited, Bengaluru	Mr. B. H. Madhusudhan
4.	Bharat Forge Limited, Pune	Mr. Sagar Bapat
5.	CSIR - National Metallurgical Laboratory, Jamshedpur	Mr. Ravi Kumar
6.	Defence Metallurgical Research Laboratory, Ministry of Defence, Hyderabad	Dr. R. Veerababu
7.	Directorate General of Quality Assurance, Ichapur, West Bengal	Dr. Manoj Kr Srivastava
8.	Indira Gandhi Centre for Atomic Research, kalpakkam	Dr. Diptimayee Samantaray
9.	L&T Special Steels Heavy Forgings pvt. Ltd., surat	Mr. Amol Dange
10.	Mahindra Sanyo Special Steel Private Limited, Khopoli	Mr. Sachin Bhambure
11.	Mishra Dhatu Nigam Limited, Hyderabad	Mr. A Pani Kishore
12.	Mukand Limited, Thane	Mr. Dominic Savio
13.	National Institute of Technology, Tiruchirapalli	Prof. Sankara Raman Sankaranarayanan
14.	RITES Limited, Gurugram	Mr. Sandeep Gupta
15.	Society Of Indian Automobile Manufacturers (Siam), Delhi	Mr. Kanishka Chana

16.	Star Wire (India) Limited, Faridabad	Ashok Narula Neeraj Pandey
17.	Steel Authority of India Limited(SAIL), Visvesvaraya Iron and Steel Plant (VISL), Bhadravathi	Mr. Ravi Kiran
18.	Steel Authority of India Limited (Sail) - Salem Steel Plant, Salem	Mr. P. Govindrajan Dr. P. Saravanan
19.	Sundram Fasteners Limited, Chennai	Dr. P. Sanmugam
20.	Tata Motors Limited, Pune	Mr. Hemant More
21.	Tata Steel Limited, Jamshedpur	Mr. T Bhaskar
22.	Viraj Profiles Ltd	Mr. K.R.K. Murthy
23.	Bureau Of Indian Standard (CMD 2)	Mr. Shivam Ahuja (Invitee)

Absent

Sl. No.	Organization Name	Member Name
1.	All India Stainless Industries Association, Mumbai	Sh Hitendra Bhalaria Sh Jay Kumar Bansal (Alt)
2.	Bharat Heavy Electricals Ltd, HPEP Trichy	Sh Antony Harison MC Sh Venkateswarlu Ala (Alt)
3.	Nuclear Fuel Complex , Hyderabad	Sh Y. Balaji Rao

Item 0 GENERAL

1.1 Welcome remarks by HMTD

Shri Sanjiv Maini (HMTD) welcomed Chairman Shri T. Muthukumar, and all the members to the 29th TC Meeting of MTD 16. He informed about latest reforms of BIS and requested to hold quarterly meetings with at least 3 meeting in a year. He mentioned that, in addition to TC Meeting, a seminar/Workshop can be organized at educational/academic institution to educate students and research scholars about the importance of standardization, and requested to plan next meeting in physical mode in any one of the MoU colleges of BIS or any industry or industry association. He also informed that, if any member fails to attend two consecutive meetings, then membership of the organization can be terminated from the committee. He stated that not only physical participation, there is a requirement of active participation in providing views/comments on P-draft, WC or any other needs by the members. He mentioned that number of stainless steel standards has been revised and upgraded but there is still lot of work to be done in alloy steel sector standards. He also requested all the committee and panel members to complete the work allotted to them in time. He also requested the committee members to actively participate in the standardization related work at ISO.

0.2 Opening Remarks by the Chairman

Shri T. Muthukumar, the Chairman of the Committee, MTD-16 welcomed the members of the Committee to the 29th TC meeting of Alloy Steels and Forgings Sectional Committee, MTD 16. He thanked all the members for taking time out of their busy schedule and attending the meeting. During his address, he requested all the members of the Committee to take active participation in the activities of the Committee to ensure that the Indian Standards are at par with International Standards.

Item 1. CONFIRMATION OF MINUTES OF LAST MEETING

There was one comment received from ISSDA on the minutes of 28th TC meeting of Alloy Steels and Forging Sectional Committee held on 14 May 2024 however since this comment was related to certification , it was decided to forward these comments to BIS CMD-2 department.


With these changes, Committee **confirmed the minutes** of 28th TC meeting.

Item 2. ACTION TAKEN REPORT

The Committee considered the summary of Actions taken as given in Annexure-I of the agenda of the Meeting and decided as follows:

Sl No	Subject	Decision of the committee in the Previous Meetings	Action taken on the decision of the committee during its last meeting	Decision of Committee
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(1)	(2)	(3)	(4)	(5)
1.	<p>Amendment No.2 to IS 15997:2012 <i>Low Nickel Austenitic Stainless Steel Sheet and Strip for Utensils and Kitchen Appliances— Specification</i></p> <p>MTD 16 24625</p>	<p>We were in receipt of draft amendment No.2 to IS 15997:2012 from the Panel convenor with an intention for including the material of thickness beyond 4 mm and /or supplied without solution annealing.</p> <p>Draft amendment is placed at Appendix-2 (Pg 32-37) of the agenda of 26th meeting.</p> <p>The Committee examined the contents of the amendment and observed that the changes were suggested to expand the scope to include plates, material of thickness beyond 4mm and material supplied in conditions other than solution annealed.</p> <p>Further, the Committee was informed by the panel convenor Shri Rohit Kumar that the above changes were needed to address the supply chain in the country thereby making the standard relevant to both patta industry and re-rollers.</p> <p>The Committee in-principle agreed to the changes and requested the panel convenor to submit the final draft of the amendment within 7 days from the date of finalization of the minutes.</p> <p>Also, the Committee examined the request from CMD-2 on representation from ISSDA and stated that it has no comments to offer as the extension on implementation date was sought on the basis of changes that were desired to the standard for expanding its scope and not on the basis of the any anomalies contents of the standard in its current form. However, it was decided that CMD-2 may also be informed about the changes being pondered to IS 15997:2012 for expanding its scope and relevance.</p> <p>Meeting of Panel 1 was held on 20 Oct 2023.</p> <p>Also, we were in receipt of request from M/s Suncity and others to add BA finish to IS 15997 and IS 5522.</p> <p>On the basis of recommendation of Panel 1 , with prior approval of TC chairperson, draft amendment No.1 to IS 15997:2012 was sent for wide</p>	<p>The draft document was sent for printing on 13 June 2024. Document was published in 19 August 2024. The published amendment was placed in given link: https://drive.google.com/file/d/1dhsJMePCPxNFJkl_eVrVRu8dUzGqBWb3/view?usp=sharing</p>	<p>Committee Noted the Information</p>

		<p>circulation on 11 Jan 2024 inviting comments till 10 Feb 2024.</p> <p>Through the amendment, the desired changes as decided by the committee during its last meeting and BA finish were being incorporated to IS 15997:2012.</p> <p>Committee in its 27th TC Meeting, Committee noted the information and decided to send the document MTD 16 (24625) for printing in the absence of any comments on the draft during WC period to be ended on 10 Feb 2024.</p> <p>Comments received from more than 10 various organisation.</p> <p>Hence panel meeting was held on 2 April 2024 and discussed on the comments received. As the comments were general in nature rather than technical , thus panel did not approve any changes in Amendment No.2 to IS 15997:2012.</p> <p>The Amendment No.2 for finalization is placed below or Appendix 1:</p> <div style="text-align: center;">  <p>Draft Amendment No 2 to IS 15997.doc</p> </div> <p>In 28th TC meeting Committee, Committee observed the minutes of the panel meetings. Committee agreed to the changes proposed during the Panel meeting held on 23 Feb 2024. Further, Committee approved the minutes of panel meeting held on 2 April 2024 as comments placed against the amendment are not technically justified and any national or international reference is not provided.</p> <p>Committee after detailed deliberation agreed to the recommendation of the panel and decided to send the document for printing.</p>		
2.	Revision of IS 6528:1995 <i>Stainless Steel Wire</i>	<p>Comments received from CMD 2 as mentioned in item 4.3 of agenda were discussed and after deliberation the committee mentioned that classification of grade designations in table 1 as ferritic, martensitic, austenitic grades is mentioned in Annex B of the standard. However as the standard are being reviewed and new grades are proposed to be put in</p>	<p>The draft document was sent for printing on 21 June 2024.</p> <p>The finalized document for printing was placed in given link: https://drive.google.com/file/d/1qFuuCFoDdkmGDn8f8</p>	Committee Noted the Information

the standard, the same shall also be indicated in table 1 by amendment when the new grades are included.

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The committee after deliberation agreed that IS 6528 brought under mandatory certification needs to be updated.

The following **panel 4** was constituted for revision of the above mentioned standards and was requested to put up the preliminary draft within one month time The draft received shall be sent for circulation between the committee members for 21 days and if no comments are received the same shall be sent for wide circulation for one month

Panel 4 held meetings on 27/5/2019 and 20/1/2020. The draft provided by the Panel for revising IS 6528 was circulated among members on 23 Apr 2020 inviting comments till 14 May 2020. The comments received were disposed of by Panel and submitted modified draft on 20.01.2021, which could not be examined due to paucity of time.

On behalf of Panel Convener, Sh Rohit Kumar from ISSDA member of Panel informed the Committee that they were revising IS 6528 by deriving assistance from ISO 16153 Pt.2.

In this regard, Member Secretary, proposed that the existing version of ISS may be considered as template instead of ISO and technical changes from ISO may be considered on the template by adding grades, appropriate dimensional tolerances etc.

Based on the proposal of Member Secretary, recommendations of Panel Convener and deliberations therein, the Committee decided the following:

1. IS 6528 can be revised deriving assistance from ISO 16163 Pt.2.
2. Panel should submit the modified drafts, considering IS as template for making modifications deriving assistance from corresponding ISOs, to MTD within 15 days.
3. Subsequently, drafts for revisions should be circulated among committee members, giving 21 days

for providing comments. In case of no comments received from members, the draft should be sent for wide circulation for one month. 4. List of users to be shared with MTD by ISSDA so that the draft in WC stage could be circulated to them for wider out reach.

Given the Pandemic, Panel Convener sought two more weeks' time from Committee through ISSDA to submit the working draft. The committee agreed to the request of the Panel Convener.

The Committee took note of the status and requested Panel convener to ensure that working drafts to be provided to be in 14 days with consent of the panel members.

The Committee viewed that progress on the matter was not seeing light despite giving multiple opportunities to the panel.

Accordingly, the Committee requested the panel convener to submit the report and P- draft by 15 Sep 2022 with out failing as it contributes significantly to both to ensure quality of imports used by downstream units and effective implementation of QCO.


Meeting of the panel was held on 28 Sep 2022. Report is awaited from Panel.

Panel Convenor Sh R K Murthy was requested to submit the report by 05 Jan 2023, given the exigency associated with it for ensuring timely completion of periodic review, which needs to be completed by March 2023 and warranting publication of revised IS 6528 by March 2023.

Panel report dated 25 Jan 2023 along with draft standard was endorsed by Panel convener on 25 March 2023. Subsequently, those documents circulated to members on 27 March 2023.

Consent of members and Chairman was obtained through e-mail for sending the document for WC for a period of one month.

Committee noted the information that the document is being sent for wide circulation for 30 days.

		<p>Report from the panel and the modified draft is given at Appendix-2(See Pg 51-52) and Appendix-3 (See Pg 53- 76) respectively.</p> <p>Members were requested to examine the same. It was agreed to send the document to wide circulation for 30 days.</p> <p>Committee in its 27 TC meeting held on 29 Jan 2024, Committee noted the information and requested the member secretary to send the document for WC within 15 days from the date of finalization of the minutes.</p> <p>Draft document was circulated among the committee members as Wide Circulation on 9 April 2024 and No comments were received till date. The draft Document is placed given link: https://drive.google.com/file/d/1J9mqiLp3HTXyh-ZxNczTe7_5KOO_Txj8e/view?usp=sharing</p> <p>In 28th TC meeting, the committee decided to send the draft document for printing.</p>		
3.	<p>i) Inclusion of grades J-1 and J-3 in IS 6911:2017</p> <p>Stainless steel plate, sheet and strip</p> <p>MTD 16 (24809)</p>	<p>The Wide circulation of Amendment-5 to IS 6911 is completed on 18 March 2024. Comments were received from various association informing dilution of Indian standard and also requesting to increase Carbon content in N5, N6. & N7 Grades.</p> <p>Accordingly, panel meeting to finalize the draft amendment was held on 18 April 2024 and discussed on the comments received. As the comments were general in nature and without any technical justification, thus panel did not approve any changes. Minutes of meeting are given below:</p> <div style="text-align: center;">  <p>minutes IS 6911 (18-04-2024).pdf</p> </div> <p>After Panel meeting, comments received from Shri anish bansal of M/s AB Inox, New Delhi on 24 April 2024. Comment is given below:</p> <p>“While samples for grades with higher carbon content, Lower chrome & Manganese were not tested due to availability, we need to mention that there were no findings to indicate that these grades are sub-standard or not</p>	<p>The draft document was sent for printing on 02 July 2024.</p> <p>The finalized document for printing was placed given link: https://drive.google.com/file/d/1lmf-z5gbyvXfavyaWhX-MF-8-SvOrKjK/view?usp=sharing</p>	<p>Committee Noted the Information</p>

		<p>suitable for the designated application in IS 6911. Baseline for these elements has been set based on the chemistry of the samples tested.”</p> <p>One more important comment from All India Cold rollers association which is given in the report attached below/Appendix 4:</p> <div data-bbox="619 412 671 472" data-label="Image"> </div> <p>views from Indian stainless steel cold r</p> <p>In 28th TC meeting, There was proposal not to include N5, N6. & N7 Grades into IS 6911 as the grades are already referred in IS 15997. Committee informed that, IS 15997 consists of grades for only utensils. However, N5, N6. & N7 are being used for other general engineering purposes as well. Further, these three grades are tested and validated before being included in IS 6911 and IS 15997.</p> <p>Secondly, regarding increase of number of number of new grades into IS 6911 committee requested organization to provided details of composition and informed to validate the grades using testing before including them into IS 6911.</p> <p>Regarding misuse of BIS license by some foreign manufacturers, ISSDA and other manufacturers are requested to share details with FMCD and CMD as the issue is regarding certification.</p> <p>Based on the above discussion, committee decided to send the document for printing without making any technical changes to Wide circulation draft.</p>		
4.	ii) Amendment for adding grade 410 DB and 420S4 to IS 6911:2017 <i>Stainless steel plate, sheet and strip</i>	<p>Regardless of its high import value, the grade 410 DB was not considered in proposed amendment as it being a proprietary grade and not referred in any national/international standard. However, given its importance in automobile sector for manufacturing disk brakes and that now domestic manufacturers were supplying these grades, the Committee decided to form Panel 10 as under for the task to decide on plan of work for further action:</p>	<p>A Joint Panel meeting was held with MED33 and few more 17 May 2024 and following points were raised:</p> <ol style="list-style-type: none"> 1. Grades given in IS 5522 and IS 15997 are exactly similar to IS 6911 in terms of chemical composition and physical properties. Scope of IS 6911 should allow those grades to be used in utensils. 	<p>Based on the suggestions from Joint meeting and Panel-9, committee agreed to include 410DB into the standard through amendment. Further, for 420S4 Mr. Rohit from M/s ISSDA informed that all these grades 420 S1-S3 were overlapping from ASTM Standard. As discussed in panel meeting, chemistry and</p>

	<p>1.Sh B.H.Madhusudhan (Convener) 2.Sh P Govindarajan 3.Sh Rohit Kumar 4.JSL (Nomination to be sought) 5.SIAM (Nomination to be sought) 6.Bajaj automobiles(Details to be obtained from SAIL/JSL in pursuance of Nomination) 7.Honda Motors (Details to be obtained from SAIL/JSL in pursuance of Nomination) 8. Users (Disk Brake Manufacturers - Details to be obtained from SAIL/JSL in pursuance of Nomination)</p> <p>The committee decided to give the task for adding the grade 420S4 (0.56-0.65) and another Martensitic grade of carbon range (0.46-055) to Panel 10, already dealing with adding grade 410DB to IS 6911.</p> <p>The Committee requested JSL and SIAM to provide nominations at the earliest, enabling further action by the Panel.</p> <p>The Committee requested JSL/SAIL-SSP to help Member Secretary in getting nominations from the disc brake manufacturers.</p> <p>The Committee requested the Panel Convener to submit the report within two months from the date of finalization of the minutes.</p> <p>Report is awaited from Panel.</p> <p>The Committee noted the status and requested representative from both JSL and SAIL-SSP to share contact details of disc brake manufacturers for having them on board of the panel.</p> <p>Further, the committee requested the panel convener Sh B H Madhusudan to submit the report within 15 days from the date of finalization of the minutes.</p> <p>The salient features of the report were briefed to the committee by convener Sri B H Madhusudan (BEML Kolar).</p> <p>On the concerns expressed by Chair, it was informed by the member secretary that additional requirements were usually insisted on the disc brake made out of the steel and the requirements on steels supplied usually comprises of similar requirements mentioned in IS 6911.</p>	<p>2. It also requested the Member Secretary, MTD 16 to bring an amendment to IS 15997 & IS 5522 for including SS vacuum flasks/potable water bottles/insulated flask in its scope along with utensils to avoid the confusion & anomaly.</p> <p>It is requested by member secretary to discuss on revision of Indian standard along with amending.</p> <p>4th Panel meeting was held on 4 July 2024 and decided to</p> <ol style="list-style-type: none"> Regarding inclusion of grades 410 DB and 420S4. In case of 410DB, validation has been conducted by ISSDA using the samples given by Jindal stainless and it is informed that, Samples from SAIL-Salem for validation are yet to be submitted. 410DB is highly used by automotive industry for Disc break applications. In case of 420S4, reference will be given by Jindal stainless from international standards/journals. The primary application of 420S4 is in transformer, bus, switches and may be surgical blades. <p>Panel agreed to amend the standard and include 410DB and 420S4. However, Chemical composition of 420S4 is yet to be received.</p> <p>Minutes of the panel meeting is placed below:</p>  <p>16360_11072024104_539_0.docx</p> <p>Further, requesting the rohit of M/s ISSDA and Nirsimha rao of M/s JSL for providing the chemical composition of above grades.</p>	<p>required properties for 420S4 to be provided by Jindal stainless for inclusion into amendment.</p> <p>Committee after discussion informed that grades 420 S1- 420 S4 may be merged into a single grade.</p> <p>Further, Committee requested member secretary to send a proposal to TED for making the new standard on Stainless Steel for Disc Brake or refer to 410DB for disc brake.</p> <p>As per the discussion held in the meeting, the Committee requested Panel-10 to prepare the amendment-6 to IS 6911 and forward the same to BIS within 15 days. BIS will then, send this draft amendment as P-draft for 21 days and incase no comments are received, the same may be sent for wide circulation for one month after taking permission of the Chair.</p> <p>As IS 6911: 2017 already has 5 amendments, committee decided to revise the standard after publishing the amendment-6.</p> <p>The committee constituted WG-5 for revision of IS 6911:</p> <ol style="list-style-type: none"> Sh P Govindarajan-SAIL, Salem (Convener) Sh B.H.Madhusudhan Sh Rohit Kumar-ISSDA Sh. V. Narasimha Rao- Jindal Stainless Ms. Kanishka Chana- SIAM <p>The committee requested the working group to sub</p>
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Subsequently, the Committee accepted the recommendations of the report and agreed to go ahead with testing and validation.

In this regard, the Committee requested ISSDA to bear testing charges for corrosion requirements as other tests could be carried out BIS lab for free of cost. Also, the Committee agreed to carry out the corrosion test at any NABL accredited lab as test method is as per ASTM standard.

Further, Member Secretary was requested to take it up with BIS lab for testing of samples.

It also took into account the suggestion from panel convenor on improvised version of grade 410DB and requested Member Secretary to get feedback from disc brake manufacturers.

Consent from ISSDA to bear testing charges for corrosion requirements is still awaited.

Testing at free of cost for all other requirements at BIS lab is being taken up with concerned department of BIS by Member Secretary.



During the meeting, ISSDA representative Shri Rohit Kumar shared consent for bearing the testing charges for corrosion test of the samples.

Also, Member Secretary was advised to get necessary action for getting the samples tested at BIS Labs for all other tests.


In 27th TC Meeting, Committee agreed with the proposal and requested ISSDA for coordinating with the industry for arranging the samples for testing within one month from the date of finalization of the minutes.

Subsequently, as decided by the TC earlier, samples to be tested at BIS Lab for all requirements except corrosion resistance, which would be tested at Spectro Analytical Lab (OSL) and to be funded by ISSDA.

mit the draft in-corporating the amendments within one month to BIS. Committee also requested the working group to study and inform the committee, if any other changes are required in IS 6911.

		In 28 th TC meeting, Committee requested Shri Rohit of M/s ISSDA to arrange the testing samples for all new grades to be included in the standard and coordinate with industry to validate samples. Further, to discuss on progress of testing, committee requested Panel 10 to hold the panel meeting in the 2 nd week of June.		
6.	Revision of IS 5517:1993 <i>Steel for hardening and tempering</i>	<p>For revision of IS 5517:1993 Steel for hardening and tempering, the following panel 7 was constituted</p> <p>The panel was requested to put up the preliminary revised draft within one month. The draft received shall be sent for circulation between the committee members for 21 days and if no comments are received the same shall be sent for wide circulation for one month.</p> <p>Nominations for panel were received from most of the organizations, lately by Jan 2021. Nominations were received from all members of Panel except ASPA and Vardhaman Steel.</p> <p>The Committee decided to nominate (Sunflag Steel) as Panel Convener.</p> <p>The Panel was requested by to provide the P-draft within two months, which would be circulated among committee members inviting comments for 21 days. In case of no comments received from members, the draft should be sent for wide circulation for one month.</p> <p>Committee requested Panel Convener, Sh KK Barriar to provide the draft within a months' time.</p> <p>Reply is awaited from the Panel Convener.</p>	<p>Word files of IS 5517 are enclosed below:</p> <p> 5517 typed.docx</p> <p> ISO grades on steels.docx</p> <p>As no views/comments were received from panel members. IS 5517 is allocated as ARP to Smt. Beauty Kumari Jha (BIS officer). The ARP report is yet to be submitted.</p> <p>Further, It is observed that, Shri KK Barriar is superannuated. Nomination from Sunflag is yet to be received.</p>	<p>Committee after deliberation decided to include the following members to the WG-4.</p> <ol style="list-style-type: none"> 1. Mr. Kishore Khedkar of M/s Sunflag 2. Mr. A. Pani Kishore of M/s Midhani 3. Mr. Anshuman Ganeriwala of M/s Schaeffler India Limited, Vadodara <p>The following members constitute WG-4:</p> <ol style="list-style-type: none"> 1. A.Pani Kishore of M/s Midhani (Convener) 2. Mr. B M Hasan of M/s JSW Selam 3. Mr. Sachin Bhambure of M/s Mahindra Sanyo Special Steel Private Limited 4. Mr. M M Rao of M/s Mukand Limited, Thane 5. Mr. Prashanta Biswal of M/s Saarloha Advanced Materials Private Limited, Pune 6. Dr. T Bhaskar of M/s Tata Steel Limited, Jamshedpur 7. Mr. Kishore Khedkar of M/s Sunflag 8. Mr. Anshuman Ganeriwala of M/s Schaeffler India Limited <p>The committee requested the working group to study and identify the gaps in the existing standard and suggest the grades which needs to be included in the standard. The committee also requested the working group to study t</p>

				he data received from ministry of steel for inclusion of new grades. The working group was requested to submit their recommendations within one month to BIS.
7.	Revision of IS 12045:1987 <i>Specification for alloys used in electrical resistance metallic heating elements</i>	<p>As decided by the committee to take up task of reviewing the standards in tranches of 5 on the basis of proposals from Members on designated proforma, the following 05 Indian standards were identified IS 5489, IS 9516, IS 12045, IS 11952 and IS 12146.</p> <p>The details in designated format were shared for the IS 12045 and a proposal to form a Panel are as follows:</p> <ol style="list-style-type: none"> I. Dr. VC Srivastava of M/s National Metallurgical Laboratory, Jamshedpur (Convenor) II. Mr. Areez Rooshad Patel of M/s Hi Tech Resistors Private Limited, Nagpur III. Mr. Dr. Tapan Desai & Mr. Anil Sharma of M/s JLC Electromet Pvt. Ltd. IV. Mr. Abishek Jain of M/s M. Lall and Sons, Delhi V. Mr. Sathish kumar & Mr. Jothimurugan of M/s Sandvik Asia Private Limited, Hyderabad <p>The Committee requested the Panel to review the standard and provide the working draft to the committee for deciding on further action.</p> <p>In addition, the committee decided to entrust the panel with providing technical assistance to the committee for dispose of the comments contemplated on the draft at various stages.</p> <p>Panel meetings were held on 31 Aug 2021 and 25 Oct 2021.</p> <p>Working draft would be circulated to the committee by 15 Jan 2021.</p> <p>The Committee took note of the status as mentioned by Member Secretary on behalf of convenor Dr. V C Srivastava, Senior Principal Scientist, NML.</p> <p>Report awaited. The Committee noted the status and decided to discuss the item during next meeting.</p>	<p>3rd Panel meeting is held on 23 Sept 2024. The following decision were taken during meeting:</p> <ol style="list-style-type: none"> 1. The representative from Sandvik Asia Private Limited, Hyderabad (Mr. Vinothkumar.K and Mr. Debabrata Roy) requested member secretary to update their organisation as Alleima india private limited, tamil nadu. 2. Panel agreed to the changes proposed by Dr. Anil sharma of JLC Electromet Pvt. Ltd. by taking the reference from ASTM B 344. 3. In additional, panel suggested to only use grade designation in place of Type 1 to type 7. 4. Panel convenor recommended to review JIS C 2520:1986, ASTM B 344, BS EN 10269, ASTM B 603, JIS C 2520, ISO 9723, and EN 10095 for adding other grades. 5. It is informed by the panel members that, some grades which are being imported to India may be substandard as the steel could not able sustain as high temperatures. 6. Further, Panel requested Mr. Debabrata Roy and Mr. Anil Sharma to provide details of any other grades that are needed to be included in the standard along with references. 	<p>During the panel meeting, 2 new members were joined (Mr. Vinothkumar.K and Mr. Debabrata Roy of M/s Alleima india private limited, tamil nadu.) and requested for more time to review the standard. Committee after detailed deliberation and decided to include the Prof SankaraRaman Sankaranarayanan of M/s National Institute of Technology, Tiruchirapalli.</p> <p>The following members constitute WG-8:</p> <ol style="list-style-type: none"> 1. Dr. VC Srivastava of M/s NML, Jamshedpur (Convenor) 2. Mr. Areez Rooshad Patel of M/s Hi Tech Resistors Private Limited, Nagpur 3. Mr. Dr. Tapan Desai & Mr. Anil Sharma of M/s JLC Electromet Pvt. Ltd. 4. Mr. Abishek Jain of M/s M. Lall and Sons, Delhi 5. Mr. Vinothkumar.K and Mr. Debabrata Roy of Alleima india private limited, tamil nadu. 6. Mr. Sathish kumar & Mr. Jothimurugan of M/s Sandvik Asia Private Limited, Hyderabad 7. Prof SankaraRaman Sankaranarayanan of M/s NIT, Tiruchirapalli

		<p>Report is awaited from Panel. The panel convenor was requested to submit the report within 30 days from the date of finalization of the minutes.</p> <p>Committee noted the information that report is awaited from the Panel.</p> <p>Committee noted the information that report is awaited from the Panel.</p> <p>It requested the Panel convenor to expedite action and submit the report at the earliest.</p> <p>Committee in its 27th TC Meeting, committee requested the Panel convenor to expedite action and submit the report within two months from the date of finalization of the minutes.</p>	<p>7. Panel at end of the meeting requested Mr. Vinothkumar.K and Mr. Debabrata Roy of M/s Alleima india private limited to suggest other manufacturing organization to include in the panel so that standard can completely cover all the aspects.</p> <p>8. Panel members are once again requested to review the following standards (EN 10095,ASME BPVC 2015, ISO 9723 : 1992, EN 10269 : 2013, ASTM B344, JIS C 2520 : 1999)</p> <p></p> <p>3rd Panel meeting minutes IS 12045.do</p>	<p>Committee requested the working group to submit the working draft within one month to BIS.</p>
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<p>8.</p>	<p>Changes to IS 4398:1994 <i>Carbon - Chromium steel for the manufacture of balls, rollers and bearing races – Specification</i></p> <p>IS 17111/ ISO 683-17 : 2023 – <i>‘Heat-Treatable Steels, Alloy Steels and Free-Cutting Steels— Part 17: Ball and Roller Bearing Steels’</i></p>	<p>The Committee also deliberated on other comments of both sunflag and Mahindra sanyo Steels. Among the comments of Sunflag the committee agreed to modify cl 4 of IS 4398 to ensure that produce through con-cast route is also covered as the word each ingot emphasizing suitable reduction ratio on billets, to delete Cl 10.3 by referring its constituents in Cl 11.3 and include the missing word ”deviation” in note under Tabel-1 of IS 4398. Accordingly, the Committee requested K.K Bariar (Sunflag Iron and Steels) and A.Phadke (Mukand Steel) to draft an amendment and submit to Member Secretary, which would be circulated among committee members for 21 days to be followed by wide circulation for one month period in case of no comments from the Committee members on the draft.</p> <p>The Committee requested Sh KK Barriar to expedite action and provide the Draft amendment in one month time.</p> <p>Report awaited.</p> <p>The Committee noted the status and decided to discuss the item during next meeting.</p> <p>Report is awaited from Panel.</p> <p>Shri Anshuman briefed the members about the contents of ISO 683-17:2023 and proposed include three grades of IS 4398 to ISO 683-17 and for doing away with IS 4398.</p> <p>In this regard, the Committee examined the proposal and the grades suggested from IS 4398 were overlapping with existing grades of ISO 683-17 and few of them were redundant. As a result, it opined that ISO 683-17 should be the lone standard for bearing steels given its prevalence among bearing manufacturers and suggested for doing away with IS 4398 without making any changes to ISO 683-17 which could be adopted identically for revising IS 17111.</p> <p>In this regard, the Committee desired to get views of concerned committee under PGD for may please note.</p> <p>It also decided that in case PGD agreed with their proposal for withdrawing IS 4398, it advised Member Secretary to put up the document for revision of IS 17111 as identical adoption of ISO 683-17 for</p>	<p>Aniket Yerawar of M/s NRB Engineering Centre, has review the grades of the IS 4398 & ISO 683-17 and confirmed that all grades of IS 4398 available on ISO 683-17.</p> <p>Further, Draft document was circulated as WC on 19 June 2024.</p> <p>Draft document is placed given link: https://drive.google.com/file/d/1rUN2rzK6cohsmR1utp5o5Q3DELBJfY3m/view?usp=sharing</p>	<p>Committee after detailed deliberation decided to send the document for printing.</p>
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<p>9.</p>	<p>Amendments to 09 IS to update cross reference standards: IS 2004:1991 IS 9683:1980 IS 4367:1991 IS 12390:1988 IS 12391:1988 IS 12549: 1988 IS 12881:1990 IS 12882:1990 IS 12836:1989</p>	<p>The Committee agreed for issuing amendments for 09 standards for updating cross reference standards and requested Member Secretary to take up further action as it was done previously on 15 ISS brought under mandatory BIS certification.</p> <p>The Committee requested Member Secretary to prepare the draft amendments and send them for WC for one month, within one month from the date of circulation of the minutes.</p> <p>The Committee considered the request of member secretary and advised to send the draft amendment involving updating of referred standards for WC within 14 days of circulation of the minutes.</p> <p>Documents were being sent for wide circulation.</p> <p>The Committee noted the status and requested Member Secretary to send the documents for WC by 30 Sep 2022.</p> <p>Documents were being sent for wide circulation.</p> <p>The Committee was informed that the 09 standards were being considered for incorporating them into Steel QCO by Ministry of Steel.</p> <p>Further, it was informed that IS 2004 and IS 4367 were allotted under action research and reports were awaited from officers of BIS concerned. Also that the report on action research of IS 9683 was received and allotted to M/s Bharat Forge to review and submit their recommendation which is still awaited.</p> <p>In this regard, the committee decided not to issue amendments to the standards and indeed consider updating cross reference standards through revision for the remaining 06 standards (Ni/CO based alloys and Carbon Chromium steels for grinding media) and accordingly requested Member Secretary to send the resultant drafts for wide circulation for 30 days.</p> <p>Committee noted that ARP report is</p>	<p>The draft documents (IS 12390, IS 12391, IS 12549, IS 12881, IS 12882, IS 12836, IS 3445) was sent for printing on 28 June 2024.</p>	<p>Committee Noted the Information.</p>
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awaited for IS 2004. Also, the Committee agreed to examine the ARP report on IS 4367 within 30 days from the date of finalization of the minutes.

Also, the Committee noted that draft for revision of IS 9683 is being sent for wide circulation.

Further, the Committee agreed for sending the drafts for revision of IS 12390, IS 12391, IS 12881, IS 12882, IS 12836 & IS 12549, circulated by email to members on 07 May 2023, for wide circulation for a period of 30 days.

ARP report of IS 2004 is still awaited. No comments received on ARP report for IS 4367.

Draft for revision of IS 9683 is being sent for wide circulation.

Drafts for revision of IS 9683, IS 12390, IS 12391, IS 12881, IS 12882, IS 12836 & IS 12549 were being sent for wide circulation. Also, IS 3445 and IS 11185 were being sent for wide circulation.

Committee noted the following:

a) ARP report of IS 2004 is still awaited. No comments received on ARP report for IS 4367. As IS 4367 is subsequent standard to IS 2004 decision on its review is kept on hold till the time being.


b) Draft for revision of IS 9683 is under preparation and the same would be sent for wide circulation in due course.

c) Drafts for revision of IS 9683, IS 12390, IS 12391, IS 12881, IS 12882, IS 12836, IS 12549, IS 3445 and IS 11185 were being sent for wide circulation.


In 27th TC Meeting


Committee noted the information and requested the member secretary to send the following documents for wide circulation of 30 days, within two months from the date of finalization of the minutes:

		<p>i) revision of IS 9683 & 2611</p> <p>ii) revision of IS 12390</p> <p>iii) revision of IS 12391</p> <p>iv) revision of IS 12881</p> <p>v) revision of IS 12882</p> <p>vi) revision of IS 12836</p> <p>vii) revision of IS 12549</p> <p>viii) revision of IS 3445</p> <p>ix) revision of IS 11185</p> <p>Drafts amendment of IS 12390, IS 12391, IS 12549, IS 12881, IS 12882, IS 12836, IS 3445, were sent for Wide Circulation.</p> <p>However, IS 2004, IS 9683, IS 11185 are taken up for revision, thus were not sent for WC.</p> <p>In 28th TC meeting, Committee decided as the amendments are only to update the reference and does not consists of technical changes in the standard, Committee decided to send the draft documents (IS 12390, IS 12391, IS 12549, IS 12881, IS 12882, IS 12836, IS 3445) for printing.</p> <p>Further, committee decided to drop IS 2004, IS 9683, IS 11185 for amending.</p>		
10.	IS 5522 : 2014 Stainless steel sheets and strips for utensils - Specification (Third Revision)	<p>Many members of the committee accepted the merger of IS 5522 and IS 15997. However, for the time being an amend to IS 5522 can be issued. Comments were received on IS 5522 from Smt. Nisha Goel of M/s Jindal Stainless as follows:</p> <p>Amendment is P-Circulated via portal. Gaps are is addressed by Jindal stainless. However, reference/justification for the limits specified are yet to be provided. Changes/limits suggested by Jindal stainless are as follows:</p>	<p>Amendment is P-Circulated via portal. Gaps are addressed by Jindal stainless. However, reference/justification for the limits specified are yet to be provided.</p> <p>Panel meeting was held on 9/10/2024 and discussed on the comments received. Minutes of the meeting is placed below: https://drive.google.com/file/d/1CujMEGlo4Jj1JYszGvrzX68M0QBaNK5/view?usp=drive_link</p>	<p>Committee after detailed deliberation and decided to circulate the draft amendment -3 as WC for 1 month. In case no comments received, the document can be sent for printing.</p> <p>Further, Committee after detailed deliberation agreed that, both IS 5522 and IS 15997 are stainless steel for utensils, and decided to merge IS 5522 & IS 15997. Committee requested the WG-1, whose composition is given below to review and provide the revised draft merging the two standards to BIS within 2 months. The composition of WG-1 is given below:</p> <p>1) Sh Rohit Kumar (Convener)</p>

				<p>2) Sh. Hitendra Bhalaria of M/s AISIA</p> <p>3) Shri M K Shrivastav of M/s DGQA</p> <p>4) Sh. V. Narasimha Rao of M/s Jindal stainless</p> <p>5) Sh. Vikas jain of M/s nanobots</p> <p>6) Sh. S. Srikanth of M/s SAIL, RDCIS</p> <p>7) Sh P Govindarajan of M/s SAIL, Salem</p>
11.	Formulation of new standard on Induction Tempered Spring Steel Wire.	<p>Committee during its 20th agreed to formulate a standard on the subject and constituted Panel 12 as under:</p> <ol style="list-style-type: none"> 1) B.H.Madhusudhan-BEML(convenor) 2) Krishna Kumar Barriar-Sunflag 3) Shivarama Kumble-Ramesh SunWire Pvt Ltd 4) Punith Reddy, Stumpp, Schuele & Somappa Springs Pvt Ltd 5) P D Kulkarni Endurance Technology Limited 6) Prasad Phale-ARAI <p>Committee advised the member secretary to pursue with ARAI for getting the nomination from them. Nomination was received from ARAI. The Panel its first meeting on 19th May 2022.</p> <p>The Committee noted the status and requested the panel convenor to submit report by 31 Oct 2022.</p> <p>The Committee was informed by the member secretary that our proposal to establish ISO standard was accepted by ISO TC SC 17 and we were allotted time slot to give a presentation during its meeting scheduled in May 2023.</p> <p>The Committee requested the Panel Convenor to submit their report at the earliest.</p> <p>The Committee agreed with the recommendations of the panel in the report and requested the panel to go ahead with testing and validation and share their report on the same in due course for formulation of an Indian Standard.</p> <p>Member secretary was requested to coordinate and ensure timely action as the subject is also being taken with</p>	<p>Panel meeting was held on 8 July 2024. Minutes of the meeting is placed below:</p> <p> 16422_11072024105749_0 (3).docx</p> <p>Sample was sent to ATMY lab on 18 July 2024 from Ramesh Sun Wire for the retesting purposes.</p> <p>Awaited of test report from ATMY Lab & In house test result of M/s Ramesh sun wire and M/s Tata Steel Wiron.</p> <p>ToR may be prepared for R&D.</p>	<p>Member secretary explained the details of test results. Product failed as per specifications in decarburization test at Atmy lab. However, Ramesh Sunflag and TATA Steel Wiron informed that, the product had passed same test at in-house testing, So Requested to ATMY Lab for retest the samples received from Ramesh Sunflag and Tata Wiron. However, results of retest are still awaited.</p> <p>Mr. B.H.Madhusudhan-BEML requested to review on testing procedure and also one expert from the TATA and Ramesh Sun wire may be present during the testing process.</p> <p>After detailed deliberation, committee decided to prepare the ToR for conducting an R&D project and circulate through the BIS-Website for the funding the testing and validation to formulate a New Standard.</p> <p>Committee after detailed deliberation requested to member secretary to prepare the ToR and circulate among members for their views and suggestions.</p>


	<p>ISO TC 17 SC 17 for formulation of an ISO standard.</p> <p>Samples for testing were received from M/s Ramesh sunwire Ltd and still awaited from M/s Tata wiron Ltd.</p> <p>Also, our request for making a presentation during the 32nd meeting of ISO TC 17 SC 17 on 08 June 2023 was not agreed to.</p> <p>The Committee noted the information and requested the Member Secretary to follow-up with M/s Tata Wiron Ltd and get the samples tested at the earliest.</p> <p>Also, advised Member Secretary to follow-up with ISO TC 17 SC 17 for considering NWIP on the subject ITW wire.</p> <p>Samples were received from M/S Tata Wiron Ltd.</p> <p>Samples under test at M/s Atmy Labs Pvt Ltd , Faridabad for all tests except chemical Composition.</p> <p>Samples would be deposited for testing of chemical composition at CL, BIS.</p> <p>Also, revised proposal would be shared with ISO TC 17 SC 17.</p> <p style="text-align: center;">In 27th TC Meeting</p> <p>Committee noted that the samples were under test at M/s Atmy Labs Pvt Faridabad.</p> <p>Also, that the samples were also being sent to BIS lab for verification of chemical composition.</p> <p>The Committee also requested the panel convenor Shri B H Madhusudhan(BEML) to examine the test reports and submit their report in due course.</p> <p>A draft report was received from laboratory to check the format and tests done in which the following observations were made</p> <ol style="list-style-type: none"> 1. Hardness test has been reported in Rockwell instead of micro hardness test. 2. Specified values for decarburization and other tests is not mentioned <p>Atmy Labs via email and Telephone,</p>		<p>Also, T. Baskar of M/s Tata Steel long products has been included in working group. The composition of Working group (WG-7) is given below:</p> <ol style="list-style-type: none"> 1) Dr. Sandip Ghosh Chowdhury of M/s NML (Convener) 2) Shri B Bhav Singh & Bidyapati Mishra of M/s DMRL 3) Shri Gp Capt M K Pani of M/s DGQA 4) Shri Abhishek Jain & Aarif Kamal of M/s Jindal stainless 5) Shri Devraj Verma & Shri A Pani Kishore of M/s Midhani 6) Sh P. Chandrasekhar of M/s Ordinance factor. 7) Shri Chirag Sharma & Shri Neeraj Panday of M/s starwire
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		<p>has been advised to submit the report in required format.</p> <p>In 28th TC meeting Committee noted the issues raised and requested member secretary to follow-up with the Lab and expedite the process of testing. Based on the lab report Panel may provide their views to committee.</p>		
12.	Formulation of New Standard on Armour Steel.	<p>Committee during its 20th agreed to formulate a standard on the subject and constituted Panel 13 as under:</p> <ol style="list-style-type: none"> 1) Dr Sandip GhoshChowdhury- CSIR-National Metallurgical Laboratory(Convenor) 2) Dr. Arijit Saha Podder-JSL 3) Dr.P.Rama Subba Reddy(DMRL) 4) Neeraj pandey- Starwire 5) P.Chandrasekhar-OFB , Medak 6) Shri Phani Kishore- MIDHANI, Hyderabad <p>The Committee requested the Panel Convenor to submit their recommendation within two months' time.</p> <p>The Panel held its first meeting on 17th June 2022.</p> <p>Report is placed at Appendix-4 (Pg 52).</p> <p>The Committee noted the status and agreed to the recommendation of the panel to induct additional members comprising of the following:</p> <ol style="list-style-type: none"> i.Prof. Naresh Bhatnagar, Centre of Excellence on Personal Body Armour, IIT Delhi ii.Sh B K Sohail, Ex-controller, CQM ET,Ichapur iii. CQA(I), Ichapur <p>Report is awaited from Panel. The Committee requested the panel to submit their report at the earliest.</p> <p>Committee noted the information that report is still awaited from the panel.</p> <p>Panel meeting was held on 20 Sep 2023.</p> <p>Report of the panel was circulated as addendum to the agenda.</p> <p>Members examined the report and did</p>	<p>Panel meeting was held on planned on 01 Oct 2024. Panel after detailed deliberation decided to drop the standard based on following views:</p> <ol style="list-style-type: none"> 1. Maintaining Hydrogen content to less than 2ppt is critical in armour steel. 2. There is no data available on ballistic test and round robin test, etc. 3. There are no proposal from ministry of defence to formulate an Indian standard. 4. Armor steels need to have a high hardness to resist penetration, yet maintain toughness to prevent cracking under impact. Defining standardized mechanical properties like hardness, tensile strength, and toughness is difficult. 5. Establishing standardized test protocols for ballistic performance under various conditions (angles of impact, projectile types, velocities, etc.) is complex. Different countries or organizations may require specific test conditions. <p>Thus, Panel vouched for doing away with the need for formulation of an Indian Standard on Armour steel.</p> <p></p> <p>Minutes for sixth Panel Meeting-01-10</p>	<p>Based on the points placed by the panel during its meeting held on 01 Oct 2024. Committee after deliberation decided to drop the document from the formulation of New standard on Armor Steels. Since, ASPA has been requesting for addition of various defence grades in Indian standards, it was decided to have views of ASPA on the above decision of panel..</p>




		<p>not agree with the views expressed by the panel, as there was considerable import of the armour steels under various brand names. ISSDA agreed to share the import details with Member Secretary.</p> <p>Also, Member Secretary was requested to share the import details with the panel, which was further advised to re-examine the proposal in light of the considerable imports of armour steel.</p> <p style="text-align: center;">In 27th TC Meeting</p> <p>Details of imports were received from ISSDA on 28 Jan 2024.</p> <p>The Committee requested the member secretary to share the information with Panel and suggested them to re-visit their previous recommendation on account of the information being shared.</p> <p style="text-align: center;">In 28th TC meeting</p> <p>Committee decided to include Shri A phani Kishore of MIDHANI into the panel-13.</p> <p>Committee after requested Panel-13 to conduct the panel meeting by 2nd week of June.</p>		
13.	Review of Pre-2000 Standards (ARP received)	<p>i) IS 12146 : 1987 Specification for carbon manganese steel forgings for pressure vessels BIS officer Vipul Bohara was reviewed the standard as ARP and submitted on 15 Aug 2021. Accordingly draft document was prepared by Arun Pucchakayala. Typed document was prepared by member secretary and placed below:</p> <p style="text-align: center;"> 12146 (21-03-2024).docx</p> <p>Awaited for the recommendation/suggestion/proposal for the changes.</p> <p>ii) IS 2611: 1964 & IS 9683 to be merged into IS 2611 : 1964 in line with BS EN 10222-2. BIS officer Challakonda Vidisha was reviewed the standard as ARP and submitted on 15 Aug 2021.</p> <p>Yet to be prepared the Draft document.</p> <p>iii) IS 12145 : 1987 Specification for</p>	Member secretary has reviewed the standards and draft document was under preparation, recommendation is required from the committee members for the sending the draft document for the WC. Thus, no WC has been carried out.	<p>Committee after detailed deliberation constituted the following working groups for the revision of given standards are as follows :</p> <p>i) IS 12146 : 1987 Specification for carbon manganese steel forgings for pressure vessels. Working group (WG-12) is mentioned below:</p> <ol style="list-style-type: none"> 1) Mr. Sagar Bapat of M/s Bharath Forge 2) Mr. Amol Subhash Dange of M/s L&T <p>ii) IS 2611: 1964 & IS 9683 to be merged into IS 2611 : 1964 in line with BS EN 10222-2.</p> <ol style="list-style-type: none"> 1) Mr. Neeraj Pandey of M/s Starwire india

		<p>carbon manganese steel forgings for pressure vessels</p> <p>BIS officer Pyla Deshick has reviewed the standard as ARP and submitted on 02 March 2023. Amendment of IS 12145 has been published on 02-07-2024.</p> <p>Yet to be prepared the Draft document.</p> <p>iv) IS 4431 : 1978 Specification for carbon and carbon manganese free cutting steels (First Revision) BIS officer V Ramesh was reviewed the standard as ARP and submitted on 16 Sept 2021. Typed document was prepared by member secretary but the recommendation from the sunflag and Mukand still awaited.</p> <p>v) IS 9516 : 1980 Specification for heat resisting steels BIS officer Beauty Kumari Jha was reviewed the standard as ARP and submitted on 15 Sept 2021. Draft document/recommendation was pending from JSL & Star wire.</p> <p>vi) IS 11946 : 1987 Specification for soft magnetic iron strips BIS officer Ramakanth Sagar Muthlaya was reviewed the standard as ARP and submitted on 04 March 2022. Draft document yet to be prepared.</p> <p>vii) IS 11947 : 1987 Specification for soft magnetic iron rods, bars, flats and sections. BIS officer Saurabh Verma was reviewed the standard as ARP and submitted on 23 Jan 2022. Draft document yet to be prepared.</p> <p>viii) IS 11952 : 1986 Specification for steels for piston pins BIS officer Harsh Sonkar was reviewed the standard as ARP and submitted on 26 Nov 2023. Draft document yet to be prepared.</p>		<p>pvt. Ltd.</p> <p>iii) IS 12145 : 1987 Specification for carbon manganese steel forgings for pressure vessels. Working Group (WG-13) is mentioned below: 1) Mr. Sagar Bapat of M/s Bharath Forge 2) Mr. Amol Subhash Dange of M/s L&T</p> <p>iv) IS 4431 : 1978 Specification for carbon and carbon manganese free cutting steels (First Revision) Working Group (WG-14) is mentioned below: 1) Mr. Kishore Khedkar of M/s Sunflag 2) Mr. Dominic Savio of M/s Mukund</p> <p>v) IS 9516 : 1980 Specification for heat resisting steels Working Group (WG-15) is mentioned below: 1) Mr. V. Narasimha Rao of Jindal stainless 2) Mr. Neeraj Pandey of M/s Starwire india pvt. Ltd.</p> <p>vi) IS 11946 : 1987, IS 11947 & IS 11952 Working Group (WG-16) are mentioned below: 1) ISSDA will provide nominations</p> <p>All the above 5 working groups and Shri Neeraj Pandey were requested to submit the revised draft within 45 days to BIS.</p>
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14.	<p>Proposal to develop an Indian Standard on <i>Higher-Strength Stainless Steel Plate, Sheet and Strip for Bridge and Other Structural Applications-Specification.</i></p>	<p>Committee desired that a working group comprising of ISSDA and experts in structural steels to study the proposal. In this regard, committee advised member secretary to request ISSDA and member secretary CED 54 to get their nominations for working group, which could study the proposal and submit their recommendation along with modified draft, if desired, to the committee in due course enabling it decide on further course of action. Working group is being constituted in coordination with CED 7 and ISSDA.</p> <p>The Committee noted the status and agreed to the recommendation of the ISSDA to formulate a panel comprising of the following members:</p> <p>RDSO – CED 7 representative SAIL-SSP JSL Viraj Profiles Structural engineering expert</p> <p>The members were requested to examine the proposal of ISSDA and submit their recommendation within two months from the date of finalization of the minutes. Report is awaited from Panel. The Committee requested the Panel to submit their report at the earliest.</p> <p>Nomination was received from RDSO nominating ED (M&C) Further CED 7 was requested to nominate an expert. ISSDA has informed that ED (Bridges and Structures) of RDSO in the Panel to have good technical input to the standard, as suggested by ED (M&C). Committee agreed with the request of ISSDA to induct ED (Bridges and Structures) into the panel and requested to expedite action on the matter.</p> <p>Matter is being taken up with ED (Bridges and Structures).</p> <p>In view of recent R&D guidelines of BIS, Committee may please consider for preparing terms of reference for inviting bids for the same.</p> <p>The Committee examined the proposal and agreed to draft the ToR. The task was entrusted to the panel</p>	Allocated as R&D project	<p>During the meeting, Mr.Rohit of M/s ISSDA informed that, to complete the R&D project within the Time frame and to monitor the progress of the project, a working group has to be constituted.</p> <p>Committee after detailed deliberation constituted the following working group(WG-17):</p> <ol style="list-style-type: none"> 1) Mr Rohit kumar of M/s ISSDA (Convenor) 2) RDSO -Lucknow (need nominations) 3) Mr. P Govindrajan of M/s SAIL-SSP 4) Mr. V. Narasimha Rao of Jindal stainless 5) Mr. K.R.K. Murthy of M/s Viraj Profile <p>It was decided that this working group (WG-17) will hold a meeting with the project leader within 15 days to speedup the process of R&D project.</p>
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		<p>and requested them to submit the same by 18 Oct 2023.</p> <p>Members were requested to examine the same and share their views on receipt of it from the member secretary.</p> <p>In 27th TC Meeting ToR was finalized during special meeting held on 08 Nov 2023.</p> <p>Action is pending with Screening committee of BIS coordinated by SCMD.</p>		
15.	<p>IS 14698:1999</p> <p>Carbon and low alloy steel billets, blooms, slabs and bars for manufacture of shell bodies and proof shots used in defence services – Specification</p>	<p>Comments were shared with officer handling ARP for IS 14698. The Committee was informed by Member Secretary that the standard was due for reaffirmation by March 2023 and the action research project for reviewing the standard was allotted to Sh Manodip bag, Sc-D(KKBO-I).</p> <p>Also, it was informed that a request to submit the report on action research by 15 Jan 2023 was sent to Sh Manodip Bag for ensuring timely updating of the standard.</p> <p>ARP report was circulated to members on 27 march 2023, seeking consent for sending the draft for wide circulation.</p> <p>Document is being sent for WC.</p> <p>The Committee noted the information that the document is being sent for wide circulation.</p> <p>The draft was discussed during special meeting held on 08 Nov 2023.</p> <p>Draft is being modified and being sent for WC.</p> <p>27th TC Meeting Committee noted the information and agreed to send the document for WC.</p> <p>It requested the member secretary to send the document for WC within 15 days from the date of finalization of the minutes.</p> <p>The draft was discussed during special meeting held on 08 Nov 2023.</p> <p>Draft is being reviewed by Member secretary and will be sent for WC.</p> <p>28th TC meeting As decided in previous meeting, committee requested the members</p>	<p>Draft Document was prepared by member secretary based on comments given by Tata Steel Long products.</p> <p>Justification/ reference is requested for the following changes:</p> <p> IS 14698 (01-08-2024) WC.doc</p> <p>Technical discussion held on 04-10-2024 with T Bhaskar & Subhasis das gupta. During the meeting, importance/reference/justification is required for the following clauses:</p> <p>1. In clause 4.1.6, A minimum reduction ratio of 6 : 1 shall apply to con-cast material measured by cross section of the cast product to the stock. Higher or lower reduction ratios for specific applications can be agreed to at the time of enquiry and order between the purchaser and the manufacturer.</p> <p>2. In Clause 4.1.10, Unless otherwise agreed, the steel when tested for grain size as per IS 4748, shall have a grain size number of 5 or finer.</p> <p>Further, member secretary is requested to approach M/s MIDHANI and M/s Star Wire to find the mechanical properties for the grade 26Mo1.</p>	<p>Committee after detailed deliberation decided to constitute the following working group(WG-18):</p> <ol style="list-style-type: none"> 1) T. Bhaskar of M/s TATA Steel long products (Convener) 2) A. Pani Kishore of M/s MIDHANI 3) Neeraj Pandey of M/s Star wire <p>The committee requested the working group to submit the revised draft within one month to BIS.</p>

<p>16. IS 11169 (Part 1) : 2022</p> <p>Specification for steels for cold heading or cold extrusion applications: Part 1 wrought carbon and low alloy steels</p>	<p>Panel 5 was recommended to adopt ISO 4954-1 to revise IS 11169 Part 1:2022 after ballots received from ISO/TC 17/ SC 4 after printing ISO 4954-1.</p> <p>It is informed to the committee that ISO 4954 – 1 is under finalization stage. After the publication of ISO 4954-1, National foreword will be sent for WC.</p> <p>In 28th TC meeting Committee noted the information and agreed for Wide circulation of ISO 4954-1 as proposed by Panel-5.</p>	<p>Member secretary had reviewed IS 11169 (Part 1) & ISO 4954-1. Observations are placed below:</p> <p></p> <p>Comparison between IS 11169 ar</p> <p>All the grades of IS 11169 (Part 1) not covered on ISO 4954-1.</p>	<p>Committee after detailed deliberation decided to constitute the following working group(WG-3):</p> <ol style="list-style-type: none"> 1) T. Baskar of M/s Tata Steels (convener) 2) Pani Kishore of M/s MIDHANI 3) Dr. P. Sanmugam of M/s Sundaram fasteners 4) Mr. B M Hasan of M/s JSW Selam 5) Sh. M M Rao of 6) Other relevant companies to be collected from ISSDA <p>Committee requested working group to provide their views on observations made by member secretary on IS 11169-Part1 w.r.t ISO 4954-1 with in one month.</p>
<p>17. IS 3748 : 2022</p> <p>Tool Steels - Specification</p>	<p>Comments were received from M/s Sunflag on IS 3748:2022 were shared with ISO as part of SR ballot and casted vote on 02 Sep 2023. During the last meeting, the committee agreed to issue an amendment to IS 3748:2022 to align 10 grades with corresponding ASTM standard, ASTM A 681.</p> <p>Further, report on participation of the ISO meeting held on 22-23 Nov 2023 was shared with TC vide email dated: 28 Jan 2024.</p> <p>As ISO had not agreed to review Iso 4957, it is proposed that we may consider amendment to IS 3748:2022 in isolated as national annex to ISO 4957:2018.</p> <p>Committee in its 27th TC Meeting and requested to prepare a draft amendment as decided in last meeting to align 10 grades of IS 3748:2022 with corresponding ASTM standard, ASTM A 681.</p> <p>ToR is uploaded in portal. No Research Project Proposals received till date.</p> <p>Email was send to the panel-6 to prepare a draft amendment to align 10 grades. Recommendations are still awaited.</p>	<p>Panel meeting was held on 08 Aug 2024 and finalize the draft amendment. Draft Amendment 1 was placed below:</p> <p></p> <p>IS 3748_202231-7-24.d</p>	<p>Committee after detailed deliberation and decided to constitute a working group (WG-19) of following group members:</p> <ol style="list-style-type: none"> 1) Mr. Pani Kishore, Midhani (Convenor) 2) Mr. Sagar Bapat of M/s Bharath Forge 3) Mr. Kishore Khedkar of M/s Sun flag 4) Mr. Amol Subhash Dange of M/s L&T. 5) Mr. T. Baskar of M/s Tata Steels. <p>The working group was requested to review the list of grades forwarded by MoS and suggest for their inclusion in IS 3748 within one month to BIS.</p> <p>Further, for the amendment already drafted, as given below, the committee requested working group to review</p>

		<p>The 10 grades given are as given below/Appendix 5:</p> <p style="text-align: center;"> SR_ISO_4957_India_comments.doc</p> <p>A letter was received from Ministry of steel comprising of over 200 grades to be included in IS 3748 : 2022 as given below:</p> <p style="text-align: center;"> doc00630120240507125223.pdf</p> <p>However, chemical composition of these grades are yet to be received. As Grades cannot be identified with the help of industry specific designation.</p> <p style="text-align: center;">In 28 TC meeting</p> <p>Committee after detailed deliberation and requested from Shri Pramjeet of M/s Ministry of steel to share the compositions of all the grades and also requested panel-6 to hold a meeting within 2 month to finalize which all grades needs to be considered for inclusion.</p> <p>Further, During the last meeting, the committee agreed to issue an amendment to IS 3748:2022 to align 10 grades with corresponding ASTM standard, ASTM A 681.</p>		<p>the amendment once again and provide their views, if any, on the same within 15 days to BIS. In case of non-receipt of any comments, the draft amendment which has already completed P-draft and no comments were received on them, will be sent for Wide circulation for a period of one month.</p> <p style="text-align: center;"> IS 3748_202231-7-24.d</p>
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Item 3 PROCESS REFORMS (A)

3.1 The committee had noted the information as given in item **3.1, 3.2, 3.3 & 3.4** of the agenda of the meeting.

3.2 Annual Calendar of Technical Committee meetings

3.2.2 The committee decided to hold the next TC meetings of MTD 16 as Physical/Hybrid/Virtual meetings are given below:

Sl No.	Meetings planned for FY 2024-25	Date & Time	Venue
1.	First Meeting	14 May 2024, 10:30 AM	BIS HQ (Manak Bhavan), New Delhi (Virtual)
2.	Second Meeting	21 Oct 2024	BIS HQ (Manak Bhavan), New Delhi (Hybrid)
3.	Third Meeting	29 Jan 2025	Physical meeting at BIS MoU institute.
4.	Fourth Meeting (if possible)	Yet to be decided	Yet to be decided

Item 4 SCOPE AND COMPOSITION OF SECTIONAL COMMITTEE, MTD 25


- 4.1** The committee had noted the information given in Items **4.1** to **4.4** of the agenda of the meeting.
- 4.2** The committee had noted the information given in Items **4.4.1** & **4.4.2** of the agenda of the meeting and after detailed deliberation decided to withdraw/terminate ‘Nuclear fuel complex, Hyderabad’ from the Committee also issue the termination letter.
- 4.3** The committee had noted the information given in Item **4.4.3** of the agenda of the meeting and after deliberation decided to issue the warning letter who was not present in 29th TC meeting.
- 4.4** The committee noted the information given in Items **4.6** of the agenda of the meeting and after deliberation decided to co-opt the following organisations into the sectional committee MTD 16 (Bharat Heavy Electricals Ltd, HPEP Trichy, Steel Authority of India Limited, RDCIS, Ranchi). M/s Rajasthan stainless steel re rollers association to be included in the Working group – MTD 16 : WG1 revision to merge IS 15997 and IS 5522 into IS 15997”. In case of M/s Proterial India Private Limited will be included in relevant working groups of IS 9294, IS 7494 and IS 3748.
- 4.5** The committee noted the information given in Items **4.7** & **4.7.1** of the agenda of the meeting and after deliberation committee requested Mr Rohit Kumar of M/s Indian Stainless Steel Development Association, Gurugram to take the nomination from M/s RDSO, Lucknow; Also, Member secretary will seek interest of M/s BARC into the MTD 16.
- 4.6** The committee noted the information given in Items **4.8** of the agenda of the meeting and after deliberation committee approved the proposal as given in Items **4.8** of the agenda.

Item 5 LIST OF INDIAN STANDARDS

- 5.1** The committee had noted the information as given in item **5.1** of the agenda of the meeting.

Item 6 COMMENTS ON PRINTED STANDARDS

- 6.1** The committee had noted the information as given in item **6.1** of the agenda of the meeting. Committee after detailed deliberation and take a decision on comments are as follows;

Indian Standard	Comments	Action Taken	Committee Decision Taken
IS 9294 : 2023 Cold-Rolled Stainless Steel Strips For Razor Blades - Specification (First Revision)	Comments received from Ms. Nisha Goel of M/s Jindal Stainless Limited. Comments are given below:  IS 9294 Amendment(JSL Con	Comments were circulated to the committee members along with agenda.	Committee after detailed deliberation constituted the following Working group(WG-9): 1) Mr. Rohit of M/s ISSDA (convener) 2) Mr. Hitendra Bhalaria of M/s AISIA 3) Mr. M. K Srivastava of M/s DGQA 4) Mr. V. Narasimha Rao of M/s Jindal stainless 5) Mr. S. Srikanth of M/s SAIL-RDCIS 6) Mr. P. Govindrajan of M/s SAIL-Salem Committee requested panel to review the comments and prepare the amendment within 1 month.
IS 15997: 2012 - Low nickel austenitic stainless-steel	Comments received from Ms. Nisha Goel of M/s Jindal Stainless Limited to include the following footnote under the Table 1 by taking	As IS 5522 and IS 15997 are proposed to merge as IS 5522. The footnote may be included during	Committee after detailed deliberation constituted the following Working group(WG-1): 1) Mr. Rohit of M/s ISSDA

plate, sheet, and strip for utensils and kitchen appliances	reference from IS 6911: 2017. “Stainless steel of Grade X07Cr14Mn10CuNiN (N7) may be supplied with Ni content 0.20-1.25, if agreed to between the manufacturer and the purchaser.”	revision in case committee approves.	(convener) 2) Mr. Hitendra Bhalaria of M/s AISIA 3) Mr. M. K Srivastava of M/s DGQA 4) Mr. V. Narasimha Rao of M/s Jindal stainless 5) Mr. S. Srikanth of M/s SAIL-RDCIS 6) Mr. P. Govindrajan of M/s SAIL-Salem Committee requested working group to prepare the amendment within 1 month.
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Item 7 REVIEW OF INDIAN STANDARDS

7.1 The Committee had noted the information as given in items **7.1, 7.2, 7.3,** and **7.4** of the agenda of the 29th TC meeting.

Item 8 NEW SUBJECTS FOR STANDARDIZATION

8.1 The Committee had noted the information as given in item **8.1 to 8.3** of the agenda of the 29th TC meeting.

8.2 The Committee had noted the information as given in item **8.4** of the agenda of the meeting and after detailed deliberation requested member secretary to seek justification for new standard proposal. In case, there is no justification received by the proposer, the proposal may be rejected/stands withdrawn.

Item 9 WTO-TBT Enquiry Point

9.1 The Committee had noted the information as given in item **9.1 to 9.6** of the agenda of the 29th TC meeting.

Item 10 INTERNATIONAL ACTIVITIES

10.1 The Committee had noted the information as given in item **10.1.1 to 10.1.3** of the agenda of the meeting after detail deliberation and decided are as follows:

Sl. No.	Document number	Background	Action taken	Decision of the Committee
1.	ISO 683-3:2022/AWI Amd 1 — Heat-treatable steels, alloy steels and free-cutting steels — Part 3: Case-hardening steels — Amendment 1	ISO 683-3 case hardening steels is being taken up for revision. The Committee nominated the following as experts for revision of ISO 683-3: b) Dr Dipti (IGCAR) c) Shri Anshuman (Schaeffler) d) Shri Shashi Bhushan Prasad (Tata Steel)	An email is sent on 10 Oct 2024 to the panel to give their views/recommendations. Panel informed that, they will be providing information. Recommendations are still awaited.	Committee after detailed deliberation requested Shri Mr. Anshuman of M/s Schaeffler to give his views within 2 weeks.

10.2 The Committee had noted the information as given in item **10.1.4** of the agenda of the 29th TC meeting.

10.3 The Committee had noted the information as given in item **10.2 to 10.4** of the agenda of the 29th TC meeting and after deliberation Committee nominate the following organisation as given below:

1. ISO/TC 17 /SC 4 : Heat treatable and alloy steel ('P' – Member)

Sl. No.	Type	Reference	Voting		Decision of the committee
			Start Date	End Date	
1	SR	ISO 15510:2014 Stainless steels — Chemical composition	15-07-2024	02-12-2024	Committee Nominated the following experts to provide their views: 1. Mr. V. Narasimha Rao of M/s Jindal stainless, 2. Mr. P. Govindrajan SAIL, Salem
2.	SR	ISO 16143-1:2014 Stainless steels for general purposes — Part 1: Corrosion-resistant flat product	15-07-2024	02-12-2024	Committee Nominated the following experts to provide their views: 1. Mr. V. Narasimha Rao of M/s Jindal stainless, 2. Mr. P. Govindrajan SAIL, Salem
3.	SR	ISO 16143-2:2014 Stainless steels for general purposes — Part 2: Corrosion-resistant semi-finished products, bars, rods and sections.	15-07-2024	02-12-2024	Committee Nominated the following experts to provide their views: 1. Mr. K.R.K. Murthy, Viraj profiles, 2. Dominic Savio, Mukund.
4.	SR	ISO 16143-3:2014 Stainless steels for general purposes — Part 3: Wire	15-07-2024	02-12-2024	Committee Nominated the following experts to provide their views: 1. Mr. K.R.K. Murthy, Viraj profiles, 2. Dominic Savio, Mukund.

1. ISO/TC 17 /SC 4 : Heat treatable and alloy steel ('P' – Member)

Sl. No.	Type	Reference	Voting		Decision of the committee
			Start Date	End Date	
1	SR	ISO 10679:2019 Steels — Cast tool steels	15-07-2024	02-12-2024	Committee Nominated the following experts to provide their views: 1. Mr. Pani Kishore, Midhani 2. Mr. Amol Subhash Dange, L&T Special Steels

10.4 The Committee had noted the information as given in item **10.5** of the agenda of the 29th TC meeting.

10.5 The Committee had noted the information as given in item **10.6** of the agenda of the 29th TC meeting after detailed deliberation requested once again requested M/s Bharat Forge Ltd to help the committee in modifying the draft standard on basis of comments received from Srilanka on draft SARS Standard (SARS 0028-5 - Glossary Of Terms Relating To Iron And Steel Part 5 Forging (Including Drop Forging)). Also, committee requested member secretary to circulate the modified draft to the members after taking views from M/s Bharat Forge Ltd.

Item 11 IMPLEMENTATION OF INDIAN STANDARDS

11.1 The Committee had noted the information as given in item **11.1** of the agenda of the meeting.

Item 12 BIS Initiatives

12.1 The Committee had noted the information as given in item 12.1 to 12.4 of the agenda of the meeting.

Item 13 R&D PROJECTS FOR ESTABLISHMENT/REVISION OF INDIAN STANDARDS

13.1 The Committee had noted the information as given in items 13.1 & 13.2 of the agenda of the meeting.

13.2 The Committee had noted the information as given in items 13.2.1 & 13.2.3 of the agenda of the 29th TC meeting and after deliberation committee decided as given below:

Sl. No	Project	Current status	Decision of the committee
1.	Study of quality requirements of grades of Hot-rolled and cold-rolled Stainless Steels used for structural purposes	9 Proposals received and Screening committee had shortlisted Dr. Jay Praksh muruges of IIT Indoor. Total Project cost is Rs. 8.52 lacks. Further, An amount of Rs. 230040 is released as 1 st instalment.	Committee after detailed deliberation constituted the following working group (WG-20) to assist the project leader: 1) Mr Rohit kumar of M/s ISSDA (Convenor) 2) RDSO -Lucknow (need nominations) 3) Mr. P Govindrajan of M/s SAIL-SSP 4) Mr. V. Narasimha Rao of Jindal stainless 5) Mr. K.R.K. Murthy of M/s Viraj Profile
2.	IS 3261:1980 - Study of quality requirements of carbon steel forgings for shipbuilding industry.	3 Proposals received and Screening committee Screening committee had shortlisted Dr Kuntal Maji, NIT Jamshedpur. Total Project cost of Rs. 9 lacks. However, funding is not released.	Committee after deliberation and formulate the following working group (WG-21) which look after the progress of report: 1. Mr. Sagar Bapat of M/s Bharath Forge 2. Mr. Amol Subhash Dange of M/s L&T Specialty steel 3. Mr. Pani Kishore of M/s Midhani

13.3 The Committee had noted the information as given in item 13.2.2 of the agenda of the 29th TC meeting.

Item 14 ANY OTHER BUSINESS

14.1 The following members will be awarded with a certificate of appreciation for their contributions towards standardization in MTD16:

Sl. No.	Name and organization	Work done in last one year (formulation/revision/amendment/comments)
1)	Mr. B. H. Madhusudhan of M/s BEML Limited, Bengaluru	IS 6911, Induction Tempered Spring Steel Wire, IS 963:1958. In addition, inputs have been provided during clarification have been sought on standard.
2)	Mr. P. Govindrajan of M/s Steel Authority of India Limited (SAIL) - Salem Steel Plant, Salem	Structural stainless steel, IS 6911, IS 5522, IS 15997. In addition, inputs have been provided during clarification have been sought on standard.

3)	Mr. Rohit Kumar of M/s Indian Stainless Steel Development Association, Gurugram	Structural stainless steel, IS 6911, IS 5522, IS 15997, etc. In addition, inputs have been provided during clarification have been sought on standard.
4)	Mr. V. Narasimha Rao Komiseti of M/s Jindal Stainless Limited, Hisar	Structural stainless steel, IS 6911, IS 5522, IS 15997, etc. In addition, inputs have been provided during clarification have been sought on standard.

14.2 The committee after detailed deliberation decided to provide the data collected by the BIS-intern to WG-11 for their views and suggestions.

14.3 The meeting ended with vote of thanks to the Chair and members of the committee.

BUREAU OF INDIAN STANDARD