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**PROCEEDINGS**

**THIRTY SECOND MEETING**

**OF**

**METALLURGICAL ENGINEERING**

**DIVISION COUNCIL, MTDC**

**Tuesday, 19 NOVEMBER 2024**

**(HYBRID MODE)**

**METALLURGICAL ENGINEERING DEPARTMENT**

**BUREAU OF INDIAN STANDARDS**

**MANAK BHAVAN,**

**9 BAHADUR SHAH ZAFAR MARG,**

**NEW DELHI 110002**

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|  **PROCEEDINGS** |

**THIRTY SECOND MEETING**

**OF**

**METALLURGICAL ENGINEERING DIVISION COUNCIL, MTDC**

|  |  |
| --- | --- |
| **DATE** | **:** Tuesday, 19 November 2024 |
| **VENUE** | **:** Hybrid : Green Room, BIS, New Delhi |
| **CHAIRPERSON** | **:** Shri Raman |
| **MEMBER SECRETARY** | **:** Shri Sanjiv Maini |
| **MEMBERS PRESENT** | : List attached (Annex 1) |

**Item 0 GENERAL**

* 1. **Welcome Address by DDG (Standardization)**

Shri Sanjay Pant, Deputy Director General (Standardization-II), welcomed the Chairperson of the Council, members of the Council and Chairpersons of various Sectional Committees to the 32nd meeting of the Metallurgical Engineering Division Council, MTDC. He thanked the Chairperson and expressed gratefulness for his continued support, advice and timely approvals for publishing new standards, revisions and amendments. He also thanked the members for sparing their valuable time out of their busy schedule for attending the meeting. He expressed satisfaction on holding the meeting of MTDC in eight months’ time and mentioned that increasing the frequency of meeting will enhance the speed and effectiveness in the standardization process, ensuring a more streamlined and dynamic approach.

He emphasized that standards have become an imperative tool for all kinds of development whether it is industrial, infrastructure, human or societal development, including the inclusive development. He mentioned that Standards are the tools that enable us to resolve most of these situations like accessibility for persons with disabilities through universal accessible design, environmental sustainability, energy conservation, water and energy efficiency and consumer protection.

Shri Pant further emphasized on the timely revision and upgradation of standards. The review of standards are to be taken up as action research projects and can be taken up by individual committee members or a working group can be constituted for the same. He also mentioned that BIS has taken up the task for revision of all Pre-2000 standards and expressed satisfaction on the progress made by MTD in this regard. He stated that BIS now laid more stress on the research based standards development, for which R&D projects are being allotted by BIS. In addition, stakeholder consultation with ministries, department with industry associations, NGOs Civil Societies, Consumer Groups and educational institutions are being held regularly to understand gaps in standardization and deeply involving them in the process. He also informed that BIS has entered into MOU with about 92 premier educational institutions all over India and is extensively engaging with them accordingly. The research facilities available in these institutes may be utilized by the technical committees under the Council for standards formulation.

Shri Pant mentioned that BIS is also inviting interns from various institutes wherein, while they learn about standards, they also contribute to the cause of standardization. In 2024-25 around 19 students from various BIS – MoU institutes had undertaken internship in MTD and 24 students are being taken up for internship in 2025-26. He also informed the Council about the appointment of consultants, executive assistants and young professionals to assist the technical committees.

Shri Pant updated the Council on the Standards National Action Plan (SNAP-2022-27). He requested the Council members to review the subject areas enlisted in SNAP as related to MTDC and work towards completing the remaining tasks before the stipulated time.

He further mentioned that another aspect is dissemination and outreach activities wherein MTD has conducted various seminars/ webinars and also held guest lectures in educational institutions. He also mentioned about number of Quality Control Orders issued in Steel, Aluminium and Copper sector and emphasized need for identifying gaps and urgent upgradation of the standards, wherever required.

Finally, he stressed for increasing the participation in standards formulation at international level by participating in ISO Technical Committees, working groups and proposing new work items. He informed the members that MTD has organized meeting of ISO committee ISO/TC5/SC 2 ‘Cast iron pipes, fittings and their joints’ at Jaipur last year and a meeting ISO/TC17/SC9 ‘Tinplate and blackplate’ is proposed to be held in India next year.

He urged the members to actively participate in the work of the Council and give suggestions for further improving the work under the Council.

**0.2 Opening Remarks by Chairperson**

Chairperson, Shri Raman welcomed Shri Sanjay Pant, DDG (Standardization-II), Head (MTD), and Chairpersons of the twenty-one Sectional Committees and members of the Council to the 32nd meeting of the Council and thanked Shri Sanjay Pant for explaining the importance of standardization activity and for apprising the members of the Council about the initiatives taken by BIS.

He mentioned that the progress of the work of the technical committees working under the Council is satisfactory and he appreciated the Chairpersons and members of the Sectional Committees for their efforts in taking timely actions. He stated that about 85 standards have been published since last meeting of the Division Council held in March 2024 and in the current financial year 2024-25, till date 84 standards have been published under MTDC, out of which 25 are new standard and 59 are revisions, which shows the hard work done by all the committees and appreciated the same.

Shri Raman apprised the new initiatives taken by BIS and said that these will go a long way in making the standardization process more efficient. He also mentioned that beside active participation of committee members in the domestic Standardization, increased participation in standardization activities at international level at ISO/IEC is also desired and requested the chairpersons to nominate experts in new work items being formulated at international level. He also laid stress on the R&D projects and informed that till date 19 R&D projects have been commissioned by MTD on various topics and many more are in pipeline.

Shri Raman informed that based on the interactions held with the relevant Ministries, Industries, Associations, BIS licenses, etc. MTD has also prepared its Annual Programme for Standardization for 2024-25 which is being actively pursued and the meeting schedules prepared are being adhered.

Shri Raman informed that about 200 standards formulated under this Council are under mandatory certification and many more standards of the Council are under consideration with various Ministries of the Government of India to bring them under mandatory certification of BIS. Hence, the responsibility of the Sectional Committees of the Council will increase and in order to overcome this, they have to be strengthened with more and relevant technical personnel.

He requested all the members of the Council and the Chairpersons of the technical committees to promote the usage of the standards formulated by the Council in their respective organizations and disseminate the information about the Indian Standards with their stakeholders.

Finally, he requested all the members of the Council to actively participate in the activities of MTDC and give guidance to the Sectional Committees under the Council in achieving its objectives.

**0.3** Shri Sanjiv Maini, Member Secretary, MTDC made a brief presentation on the new initiatives taken by BIS for making the standards formulation process more efficient. The presentation made is attached below:



**Item 1 CONFIRMATION OF THE PROCEEDINGS OF THE LAST MEETING:**

**1.1** There being no comments, the Council confirmed the proceedings of the last (Thirty First) meeting of the Council as circulated vide BIS letter No.: MTDC/A-2.31 dated 02 April 2024.

**Item 2 ACTION TAKEN REPORT**

**2.1** The Council reviewed the actions taken and the following decisions were taken:

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl** **No.** | **Description** | **Action taken** | **Decision taken** |
| 1. | Composition ofMTDC | As decided in the 31st meeting of MTDC, an email dated 30 October 2024 was sent to the following organizations who have not attended the last meeting of MTDC informing about their absence from the meeting and seeking fresh nominations:1. Engineers India Limited, New Delhi
2. INSDAG, Kolkata
3. Jindal Stainless limited, Hissar
4. Mazagaon Dock limited, Mumbai
5. Directorate of Standardization, New Delhi
6. RDSO, Lucknow
7. NALCO, Bhubneshwar
8. National Test House, Kolkata

Reply received from1. Director, Directorate of Standardization, New Delhi wherein he has directed D (Std)/ Gp Capt (Std) to depute suitable representatives from Dte of Standardization or concerned Standardization Sub – Committee of MoD, as applicable, to attend the subject meeting.
2. INSDAG – Wherein they have mentioned that now they don’t have the expertise of metallurgical engineer in their institute and requested withdrawal from the Council.

Reply is awaited from other organizations.**The Council may decide.** | 1. After deliberation the Council decided to withdraw the membership of INSDAG from Metallurgical Division Council as per their request.
2. The Council decided to follow up with the following organization, and in case members from these organizations do not participate in the next meeting, their membership may be considered for withdrawal:
3. Engineers India Limited, New Delhi
4. Directorate of Standardization, New Delhi
5. RDSO, Lucknow
6. NALCO, Bhubneshwar
7. National Test House, Kolkata
 |
| 2. | Appointment of Chairperson of various Sectional Committees | As decided in the 31st meeting of MTDC, letters were sent to the respective Chairpersons and their management, informing reappointment of Chairperson for the following Technical Committees:MTD 03, MTD 11, MTD 22, MTD 24 and MTD 25.Letters were also sent to Shri Sandip Kumar Kar, Executive Director, RDCIS SAIL informing him about his appointment as the Chairperson of the MTD 04 and to Shri Parag Goel, General Manager, EIL informing him about his appointment as the Chairperson of the MTD 19, which has been accepted by them. | The Council noted the information. |
| 3 | Suggestion from Dr Anish Upadhyaya, Chairperson MTD 25 | Dr Anish Upadhyaya, suggested for formulation of standards on small arms and ammunition. The same was communicated to the respective committee of PGD and a panel has been constituted under Arms and Anamunition for Civilian use Sectional Committee, PGD 28 committee for formulation of these standards  | The Council noted the information. |

**Item 3 SCOPE AND COMPOSITION OF METALLURGICAL ENGINEERING DIVISION COUNCIL, MTDC**

**3.1** The Council noted the composition of MTDC reconstituted by the Standards Advisory Committee (SAC) and its scope as given at Annexure-1 of the Agenda. The Council agreed to withdraw the membership of Institute for Steel Development & Growth (INSDAG), Kolkata as requested by them. The same will be put to Standards Advisory Committee in its next meeting.

3.2 The Council noted the decision taken by SAC Committee Meeting held on 06 December 2023, as given at **Item 3.2** of the agenda.

**Item 4 SCOPE AND COMPOSITION OF SECTIONAL COMMITTEES OF MTDC:**

**4.1** The Council noted the information as given in the **Items 4.1 to 4.4** of the agenda.

**4.2** The Council reconstituted Sectional Committees **MTD 06, MTD 08, MTD 10, MTD 13, MTD 14, MTD 15, MTD 16, MTD 21, MTD 26, MTD 33 and MTD 34** for a period of three years after incorporation of the decisions as mentioned in, **Items 4.4 and 4.5** of these Proceedings.

**4.3** **Chairpersonship of Sectional Committee**

**4.3.1** The Council noted the information given in **Item 4.7.1** of the agenda and decided to extend the tenure for another term of three years for the Chairpersons for Sectional Committees **MTD 06, MTD 07, MTD 08, MTD 10, MTD 13, MTD 15, MTD 16 and MTD 33.**

**4.3.2** The Council was informed that vide email dated 15 November 2024, Shri V.K. Raizada, Chairperson MTD 14 has requested to relieve him from his duties of chairperson. The Council after deliberation decided to appoint **Dr A.N. Sudhakar**, Bharat Heavy Electricals Ltd, Hyderabad as the next Chairperson of the MTD 14 Committee. The Council placed on record the excellent work done by Shri V.K. Raizada as Chairperson of MTD 14.

**4.3.3** The Council noted the information given in **Item 4.7.1** of the agendaand agreed to appoint **Dr Manish Kumar, SAIL CET** as the next Chairperson of MTD 26 Committee. The Council placed on record the excellent work done by Shri Ajay Kumar as Chairperson of MTD 26.

**4.3.4** Based on above decisions of the committee, the updated list of Chairpersons of the Sectional Committees under MTD is placed below

**Chairpersons of the Sectional Committees**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **TC No.**  | **Chairperson Name**  | **Organization** | **Date of appointment** | **Date of reappointment** |
| **MTD 03** | Dr Vikas Kumar | In Personal Capacity | 25 August 2011 | 06 October 2023 |
| **MTD 04** | Shri Sandip Kumar Kar | Steel Authority Of India Limited (SAIL), Research & Development Centre for Iron & Steel, Ranchi | 20 March 2024 | − |
| **MTD 05** | Dr M. Vasudevan | Indira Gandhi Centre for Atomic Research, kalpakkam | 14 September 2023 | − |
| **MTD 06** | Shri A K Hazra | Metal & Steel Factory Indian Ordnance factory, Ministry of Defence (West Bengal) | 20 December 2021 | 20 December 2024 |
| **MTD 07** | Dr Kali Sanjay | CSIR-IMMT | 16 February 2022 | 16 February 2025  |
| **MTD 08** | Dr. D. De Sarkar | Indian Copper Development Centre, Kolkata | 20 December 2021 | 20 December 2024 |
| **MTD 09** | Dr Abhilash | CSIR - National Metallurgical Laboratory, Jamshedpur | 14 September 2023 | − |
| **MTD 10** | Shri Paravjeet Singh | Geological Survey of India | 20 December 2021 | 20 December 2024 |
| **MTD 11** | Shri Shaju K Albert | In personal capacity (EX- IGCAR) | 25 August 2011 | 06 October 2023 |
| **MTD 13** | Shri Rajan Kumar | NMDC, Hyderabad | 20 December 2021 | 20 December 2024 |
| **MTD 14** | Dr A.N. Sudhakar | Bharat Heavy Electricals Ltd, Hyderabad | 19 November 2024 | − |
| **MTD 15** | Dr Arup Kumar Chattopadhyay | SKG Refractories, Kolkata (earlier National Refractories which was taken by SKG Refractories) | 20 December 2021 | 20 December 2024 |
| **MTD 16** | Shri T Muthukumar | Mishra Dhatu Nigam Limited, Hyderabad | 20 December 2021 | 20 December 2024 |
| **MTD 19** | Shri Prag Goel | Engineers India Limited, New Delhi | 20 March 2024 | − |
| **MTD 21** | Dr B. Venkatraman | Indira Gandhi Centre for Atomic Research, Kalpakkam | 20 June 2022 | − |
| **MTD 22** | Dr Amit Bhattacharjee | Defence Metallurgical Research Laboratory, Ministry of Defence, Hyderabad | 25 March 2021 | 25 March 2024 |
| **MTD 24** | Dr U.Kamachi Mudali | Homi Bhabha National Institute (HBNI), Mumbai | 25 August 2011 | 06 October 2023 |
| **MTD 25** | Dr Anish Upadhyaya | IIT, Kanpur | 25 October 2019 | 24 October 2022 |
| **MTD 26** | Dr Manish Kumar |  SAIL CET  | 19 November 2024 | − |
| **MTD 33** | Dr Venu Gopal Achanta | CSIR-NPL, New Delhi | 20 December 2021 | 20 December 2024 |
| **MTD 34** | Dr Sanchita Chakravarty | CSIR-NML, Jamshedpur | 13 June 2022 | − |

**4.4 Co-options by Sectional Committees**

**4.4.1** The Council agreed to the co-options made by various Sectional Committees as given in **Annex-6** of the Agenda and the same is reproduced below.

**Co-option of different organizations in TCs**

|  |  |  |
| --- | --- | --- |
| **TC no** | **TC Name** | **Organizations to be co-opted** |
| **MTD 03** | Mechanical Testing of Metals Sectional Committee | 1. Dr Srihari Dodla, Assistant Professor, Department of Mechanical Engineering, IIT(BHU) Varanasi |
| **MTD 05** | Ferro Alloys Sectional Committee | 1. National Institute of Technology, Rourkela |
| 2. National Institute of Technology, Tiruchirapalli |
| 3. Nuclear Fuel Complex, Hyderabad |
| 4. Steel Authority Of India Limited (SAIL), Research & Development Centre for Iron & Steel, Ranchi |
| 5. Steel Authority of India Limited (SAIL) - Salem Steel Plant, Salem |
| 6. IIT, Madras |
| **MTD 06** | Pig iron and Cast iron Sectional Committee Sectional Committee | 1. IIM Mumbai |
| **MTD 07** | Ores and Feed Stock for Aluminium Industry, its Metals/Alloys and Products Sectional Committee | 1. Aluminium Extrusion Manufacturers Association of India  |
| 2. Federation of All India Aluminium Utensils Manufacturers (FAIAUM). |
| **MTD 08** | Ores and Feed Stock for Copper Industry, its Metals/ Alloys and Products Sectional Committee | 1. Bombay Metal Exchange Limited, Mumbai |
| 2. Kutch Copper Limited, Ahmedabad |
| 3. MetTube Copper India Private Limited, Ahmedabad |
| 4. Polycab India Limited, Mumbai |
| 5. Winding Wires Manufacturers Association of India |
| **MTD 09** | Ores and Feed Stock for Non-Ferrous (Excluding Aluminium and Copper) Industry, their Metals/ Alloys and Products Sectional Committee | 1. Phoenix Industries Limited, Masat |
| **MTD 13** | Ores and Feed Stock for Iron and Steel Industry Sectional Committee | 1. National Institute of Technology, Tiruchirappalli |
| **MTD 15** | Refractories Sectional Committee | 1. All India Induction Furnaces Association Sustainable Steel Manufacturers Association, New Delhi |
| **MTD 16** | Alloy Steels and Forging Sectional Committee | 1. M/s L&T Special Steels Heavy Forgings Pvt LTD |
| 2. M/s National Institute of Technology, Tiruchirapalli |
| 3. M/s RDSO Lucknow |
| 4. M/s BARC |
| **MTD 22** | Metallography and Heat-Treatment Sectional Committee  | 1. Caterpillar India Private Limited, Chennai |
| 2. Indian Institute of Technology Delhi, New Delhi |
| 3. Indian Institute of Technology, Indore |
| 4. PSNA College of Engineering & Technology, Kothandaraman Nagar |
| 5. Siemens Limited, Vadodara |
| **MTD 25** | Powder Metallurgical materials and Products Sectional Committee | 1. Emitec Technologies India Private Limited Pune |
| 2. INDO-MIM |
| **MTD 26** | Industrial Fuel-Fired Furnaces Sectional Committee | 1. Indian Institute of Technology Delhi, New Delhi |
| **MTD 33** | Nanotechnologies Sectional Committee | 1. Indian Institute of Technology, Roorkee |

**4.5 Withdrawals from Sectional Committees**

**4.5.1** The Council considered for the withdrawal of organizations recommended by various Sectional Committees, as given in **Annex-7** of the agenda and agreed for the same. The list is reproduced below:

**Withdrawal of organizations from TCs**

|  |  |  |
| --- | --- | --- |
| **TC no** | **Organizations proposed for withdrawal from committee** | **Reason for withdrawal** |
| **MTD5** | Indian Metals and Ferro Alloys Limited, Bhubaneswar | non participation in last three meetings |
| **MTD6** | Lokesh Foundries Pvt Ltd, VijayawadaPublic Health Engineering Department, Government of Haryana | non participation in last three meetings |
| **MTD9** | 1.Gravita India Ltd, Jaipur2.DMRL, Hyderabad3.M/s High Energy Projectile Factory4.Amara Raja Batteries; Andhra Pradesh5.Directorate General of Aeronautical Quality Assurance, Ministry of Defence, New Delhi6.Mishra Dhatu Nigam Limited (MIDHANI), Hyderabad | 1. As the organizations listed from Sl No.1 to Sl No. 4 are not responding to the multiple co-option request send to them via mail, hence the committee in its previous (23rd) meeting held on 27th May 2024 after deliberation recommended to withdraw their nomination.2.The committee in its previous (23rd) meeting held on 27th May 2024 deliberated that the organizations listed from Sl No.5 to Sl No. 6 are not participating in the committee meetings consequently and are also not responding to the multiple active participation request mail sent to them, hence recommended to terminate them as per the office order No. PNC09/18/2023-PNC-BIS dated 05-09-2023.  |
| **MTD10** | Consumer Education and Research Centre, Ahmedabad  | non participation in last three meetings |
| **MTD13** | 1.M.N. Dastur & Co. Ltd (Kolkata) Wb 2.National Institute Of Secondary Steel Technology(Nisst), Mandi, Gobindgarh,Kolkata  | The committee in its previous (25th) meeting held on 20 September 2024 after deliberation recommended to terminate them as per the office order No. PNC09/18/2023-PNC-BIS dated 05-09-2023 as both the organization is not participating in the committee meetings consequently and are also not responding to the multiple active participation request mail sent to them.  |
| **MTD15** | 1.Tata Steel Ltd, Jamshedpur2.Rashtriya Ispat Nigam Ltd, Vishakhapatnam3. RHI Magnesita Private Limited, Gurugram4.BHEL, Hyderabad 5.Sigma Test and Research Centre Delhi | 1. As the organizations listed from Sl No.1 to Sl No. 2 are not participating in the committee meetings consequently and are also not responding to the multiple active participation request mail sent to them, hence the committee recommended to terminate them as per the office order No. PNC09/18/2023-PNC-BIS dated 05-09-2023. 2.The committee in its previous (29th) meeting held on 26 July 2024 deliberated that the organizations listed from Sl No.3 to Sl No. 5 is not responding to the multiple co-option request sent to them via mail and hence recommended to withdraw their nomination. |
| **MTD16** | Bharat Heavy Electricals Ltd, HPEP Trichy | non participation in last three meetings |
| **MTD19** | RITES Limited, GurugramFederation of Industries of India, Maharashtra | non participation in last three meetings |
| **MTD21** | Centre for Design and Manufacture BARC, Mumbai and NTPC , Delhi | non participation in last three meetings |
| **MTD25** | Mishra Dhatu Nigam Ltd, Hyderabad;  | non participation in last three meetings |
| **MTD26** | 1 Indian Seamless Metal Tubes Limited, Jaipur2) CSIR - Central Glass and Ceramic Research Institute, Kolkata3) Durgapur Steel Plant, Sail Durgapur4)Tata Steel Limited, Jamshedpur5) Shri Saurav Ghosal, In personal capacity | non participation in last three meetings |

 **Item 5 REVIEW OF TECHNICAL ACTIVITIES OF MTDC**

**5.1** **Standards Formulation**

**5.1** The Council noted the progress made on various activities since its last meeting as given under the **Item 5.1.1 and 5.1.2** of the Agenda.

**5.2** **New Subjects/ Proposals for Standardization**

**5.2.1** The Council considered the proposals for new subjects as given in **Item 5.2 and Annex-8** of the Agenda. The Council approved all the new subject proposals given in Annex-8 of the Agenda. The approved list is reproduced below.

**New Subjects for Standardization**

|  |  |
| --- | --- |
| **TC no** | **New Subjects for standardization** |
| **MTD 04** | 1.IS for Pre-Painted Aluminium Zinc Alloy Metallic Coated Hi RIB Profile Roofing Sheet, Tiles Profile and Profile Accessories  |
| 2.Pre-Painted Zinc-Aluminium-Magnesium Alloy Coated Steel sheet and strip |
| 3. Carbon and Low Alloy Steel for Submerged Arc and Gas Shielded Arc Welding Electrodes - Specification |
| 4. Zn-Al Coated Steel Wires |
| 5. Steel wire rod for bridge cable wire |
| 6. Electroplated Zn-Ni Steels |
| 7. Standard Specification for Hot Dip Aluminium-Silicon Coated Steel Sheet and Strip |
| 8. Standard Specification for Steel Sheet and Strip for Hot Stamping Applications |
| 9. Pre painted EG base |
| 10. Hot-rolled medium and high carbon steel sheets, plates and strip |
| 11. Pre-material Specification to Produce Fully Processed Grain Oriented Electrical Steel |
| 12. New Standard on Tyre Cord |
| **MTD 07** | 1. Aluminium Cladding : Specification |
| 2. Aluminium lithographic stock and High security registration Plate |
| 3. Aluminium Closure Stock |
| 4. Specification of Aluminium, Composite panel stock |
| 5. Specification for Molten aluminium |
| 6. Billets and Slabs of Aluminium and Aluminium alloys: Specification |
| 7. Aluminium and Aluminium Alloy Scrap: Specification |
| 8. Specification for Aluminium hard alloy Plates sheets and coils |
| 9.Specification of Aluminium Fin stock |
| **MTD 08** | 1. Copper scrap and Copper alloy scrap |
| 2. Copper wires for electrical purposes |
| **MTD 09** | 1. New standard on solder paste |
| 2. New standard on flux classification and performance used in solders. |
| **MTD 11** | 1. Welding consumables Tubular cored electrodes and rods for gas shielded and non-gas shielded metal arc welding of stainless and heat-resisting steels Classification |
| 2. Welding consumables - Solid wire electrodes, solid wires and rods for fusion welding of magnesium and magnesium alloys - Classification |
| 3. Welding consumables - Solid wire electrodes, tubular cored electrodes and electrode-flux combinations for submerged arc welding of high strength steels - Classification |
| 4. Welding consumables - Solid wire electrodes, tubular cored electrodes and electrode-flux combinations for submerged arc welding of creep-resisting steels - Classification |
| 5. Welding consumables - Tubular cored electrodes for gas-shielded and non-gas-shielded metal arc welding of high strength steels - Classification |
| 6. Brazing - Specification and qualification of brazing procedures for metallic materials |
| 7. Welding consumables - Tubular cored electrodes for gas shielded metal arc welding of creep-resisting steels - Classification |
| 8. Brazing - Qualification testing of brazers and brazing operators. |
| 9. Welding consumables - Tubular-cored electrodes for gas-shielded and non-gas-shielded metal arc welding of nickel and nickel alloys - Classification |
|  | 10. Welding - Arc-welded joints in aluminium and its alloys - Quality levels for imperfections |
| 11. Welding - Fusion-welded joints in steel, nickel, titanium and their alloys (beam welding excluded) - Quality levels for imperfections |
| 12. Welding consumables - Fluxes for submerged arc welding and electroslag welding – Classification |
| 13. Welding - Measurement of preheating temperature, interpass temperature and preheat maintenance temperature |
| 14. Welding consumables - Covered electrodes for manual metal arc welding of creep-resisting steels – Classification |
| 15. Welding consumables - Solid wire electrodes, tubular cored electrodes and electrode/flux combinations for submerged arc welding of non alloy and fine grain steels – Classification |
| **MTD 15** | 1. New standard on Testing Procedures for Dry Vibratable Masses. |
| 2. New standard on Silica ramming mass manufactured from quartz and quartzite. |
| **MTD 19** | Hot finished seamless pipes for high temperature application |
| 2. Stainless steel pipes for decorative application |
| 3. Stainless steel pipes for water applications |
| 4. Hot finished seamless pipes for low temperature applications |
| **MTD 22** | 1. MTD/22/25480 (Identical To: ISO 2624:1990) - Copper and copper alloys - Estimation of average grain size |
| **MTD 24** | 1. ISO 17081:2014 Method of measurement of hydrogen permeation and determination of hydrogen uptake and transport in metals by an electrochemical technique |
| 2. ISO 10587:2000 Metallic and other inorganic coatings — Test for residual embrittlement in both metallic-coated and uncoated externally-threaded articles and rods — Inclined wedge method |
| 3. Embrittlement Testing for Hydrogen Piping and Storage Bullets |
| 4. Test Methods For Evaluating Material Compatibility In Compressed Hydrogen Applications – Metals (ANSI/CSA CHMC-1: 2014) |
| **MTD 34** | 1. New subject for Determination of Boron in Steel ISO 10153:1997; Steel Determination of Boron Content- Curcumin spectrophotometric method |
| 2. New subject for Determination of Aluminum in Steel by AAS I SO 9658:1990; Steel - Determination of aluminium Content – Flame atomic absorption spectrometric method. |
| 3. New subject for Determination of Vandium in Steel ISO 4942:2016; Steels and Irons – Determination of Vandium content – N- BPHA spectrophotometric method. |
| 4. New subject for Determination of Cobalt in Steel, AAS ISO 11652:1997; Steel and Iron – Determination of cobalt content – Flame atomic absorption spectrometric method. |
| 5. New subject for Determination of Titanium in Steel ISO 10280:1991; Steel and Iron – Determination of titanium content - Diantipyrlmethane spectrophotometric method. |

**5.2.2** Dr Shaju K Albert, Chairperson MTD 11 suggested a new subject on ‘Qualification & Certification of a Welding Coordinator’. The Council approved the subject and requested him to take the subject further in the respective Sectional Committee.

**5.3** **Withdrawal of Standards**

**5.3.1** The Council noted the information as given in **Item 5.3.1 and Annex 9** of the Agenda, regarding the withdrawal of the standards and approved for their withdrawal. However it was advised that all standards in which these standards are cross-referred also need to be updated.

**Withdrawal of Standards**

|  |  |  |
| --- | --- | --- |
| **TC No.** | **Standards proposed for withdrawal (IS no and title)** | **Reason for Withdrawal** |
| **MTD 10** | IS 6683 : 1998 Diameters of wires for platinum group metals and their alloys | This Standard contains no Cross Referenced Indian or International Standard. No national or international standards are available on diameter of platinum wires. This Indian Standard is referred only in one Indian standard i.e. IS 8018:1976 in Cl.4. However, diameter and tolerances are also mentioned in IS 8018:1976 and hence the reference of this standard is not required. IS 6683:1998 has not been used by any manufacturers till date (No licenses issued and not referred in any other Indian standard). Moreover, it only gives information about the standard diameters and tolerances only which may vary for application to application which can easily be provide in the product standard itself. Hence, it is recommended to withdraw this standard. |
| **MTD 13** | IS 11283: 1985 "Method for determination of softening point of iron oxides (In Powder Form); lump ore, sinter and pellets". | As the determination of softening point of iron oxide in powdered form is now not relevant and obsolete, also this standard gets merged with IS 9660:2001 and gets superseded. Hence the committee after deliberation decided to withdraw the standard and supersede it with IS 9660. |

**5.4 Transfer of Indian Standards**

**5.4.1** The Council discussed on the recommendation of technical committee as mentioned at **Item 5.4.1** of the agenda and after deliberation agreed for the following:

1. Transfer of IS 4368 : 1967 Specification for alloy steel billets, blooms and slabs for forging for general engineering purposes from Alloys Steel and Forgings Sectional Committee MTD 16 to Wrought steel sectional committee, MTD 04.
2. Transfer of IS 13306 : 1992 Oil and gas fired thermic fluid heaters - Method of calculation of film temperatures from Chemical Engineering Plants and related equipment Sectional Committee, MED 17 to Industrial Fuel-Fired Furnaces Sectional Committee, MTD 26.

**5.5 Standards Published**

**5.5.1** The Council noted the information regarding standards published since last meeting of the Council as given in **Annex-10** of the Agenda.

**5.6 Review of Standards**

**5.6.1** The Council appreciated the initiative taken by BIS for updation of all pre-2000 year standards and requested all TC Chairperson to actively undertake the same in their technical committees.

**Item 6 PROMOTION OF STANDARDS**

**6.1** The Council noted the information as given in **Item 6.1 and 6.2** of the Agenda regarding the promotion of the standards of the Council by the officers of MTD and placed on record its appreciation of the efforts being made.

**Item 7 STANDARDS OF MTDC UNDER MANDATORY BIS CERTIFICATION**

**7.1** The Council noted the information as given in **Item 7.1 and ANNEX -13 & 14** of the Agenda regarding the standards of MTDC that are under mandatory BIS certification.

**Item 8 INTERNATIONAL ACTIVITES**

**8.1** **Interaction with ISO**

The Council noted the information regarding the interaction of Sectional Committees of the Council with ISO and their status in various Sectional Committees of ISO as given in **Item 8.1.1 and 8.1.2** of the Agenda.

**8.2 ISO Ballots and Outcome**

**8.2.1** The Council noted the information as given at **Annex-16** to the Agenda.

**8.3 Harmonization of Indian Standards with International Standards**

**8.3.1** The Council noted the information with respect to the status of harmonization of Indian Standards with International Standards as given in **Item 8.4.1** of the Agenda.

**8.4 Participation in ISO/TC Meetings**

**8.4.1** The Council noted the details of participation of members of the Sectional Committees of the Council in the technical committee meetings of the ISO as given at **Annex-17** of the Agenda and endorsed the same.

**8.4.2** The Council also appreciated the efforts made by TC in proposing four NWIP to ISO as mentioned in **Item 8.5.2** of Agenda and noted the current status of the NWIP’s.

**8.5 Participation in South Asian Regional Standards Organization (SARSO)**

**8.5.1** The Council noted the details as given in **Item 8.6.1 and 8.6.2** of agenda.

**Item 9 TBT NOTIFICATION AND WTO-TBT ENQUIRY POINT**

**9.1** The Council noted the information as given in **Item 9.1 to 9.6** of the Agenda.

**Item 10 BIS CERTIFICATION SCHEMES**

**10.1** The Councilnoted the information regarding various Certification Schemes of BIS as given in **Item 10.1 and 10.2** and at **Annex-18** of the Agenda.

**Item 11 INITIATIVES TAKEN BY BIS MANAGEMENT IN STANDARDS DEVELOPMENT ACTIVITY**

**11.1** The Council noted the information related to the new initiatives taken by BIS management in standards development activity, as given in **Item 11.1 to 11.4** of the Agenda.

**11.2 MOU with Eminent Institutes**

**11.2.1** The Council noted the information as given in **Item 11.5.1** of the agenda and may also add some private institutions also.

**11.3 Training to Technical Committee Members on Standardization Processes and Procedures**

**11.3.1** The Council noted the information related to the **Item 11.6.1** of the agenda.

**11.4 Standards National Action Plan (SNAP)**

**11.4.1** The Council noted the information about the Standards National Action Plan (SNAP) evolved by BIS as given in **Item 11.7.1** of the Agenda and noted the current status of the subjects as mentioned in Annex 19 of agenda. The Council requested the Chairpersons to take up the subjects identified in SNAP on priority in their sectional committees.

**11.5 National System of Standardization**

**11.5.1** The Council noted the information as given in **Item 11.8.1 to 11.8.3** of the Agenda.

**11.6 Declaration on Gender Responsive Standards**

**11.6.1** The Council noted the information as given in **Item 11.9.1 to 11.9.3** of the Agenda.

**11.7 Engagement of consultants in Technical Committees**

**11.7.1** The Council noted the information as given in **Item 11.10.1** of the Agenda.

**11.8 Formation of Search Committee**

**11.8.1** The Council noted the information as given in **Item 11.11.1 to 11.11.3** of the Agenda. The Council requested to hold a meeting of search committee for identification of experts.

**11.9 Development of Strategic Road map by all Division Councils**

The Council noted the information as given in **Item 11.12.1 to 11.12.2** of the Agenda.

**11.10 Reforms in Standardization**

The Council noted the information and as given in **Item 11.13.1** of the Agenda.

**11.11 Creation of Standardization Cells**

The Council noted the information as given in **Item 11.14.2** of the Agenda.

**11.12 Funding Travel and Stay Expenses of BIS Technical Committee Members**

The Council noted the information and as given in **Item 11.15.1 to 11.15.4** of the Agenda.

**ITEM 12 RESEARCH AND DEVELOPMENT ACTIVITIES**

**12.1** The Council noted the information as given in **Item 12.1** of the Agenda.

**12.2** The council noted the current status of 9 R&D projects under MTD which have been allotted in Phase 1 and 10 projects which have been allotted in Phase 2, as given in **[ANNEX-23](#Annex23)** of the agenda.

**Item 13 DATE AND PLACE OF NEXT MEETING**

The Council decided to have the next meeting in March 2025.

**Item 14 ANY OTHER BUSINESS**

**14.1** The Council decided to refer the comments received from Dr Nirmalya Karar form CSIR-NPL vide email dated 5 November 2024 related to testing to MTD 34 and comments related to IS 1786 to Civil Engineering Department (CED) for further action.

**14.2** At the end of the meeting, DDG, Shri Sanjay Pant requested the Technical Committees to formulate more Codes of Practice Standards as these standards will be a very good resource for the Metallurgical Engineering students. He also mentioned that, the MTD can also think of preparing Special Publications like done in civil engineering as National Building Code of India or done in electrical engineering as National Electric Code .

**14.3** There being no other business to transact, the meeting ended with a hearty vote of thanks to the Chair.

**Annexure-1**

**LIST OF PARTICIPANTS PRESENT:**

**Chairperson:** Shri Raman (In Personal Capacity)

**Member Secretary:** Shri Sanjiv Maini, Head (MTD), BIS

**Member of the Council:**

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| --- | --- | --- | --- |
|  **Sl** **No.** | **Representative organization** | **Name of the Nominated Person** | **Mode of attending** |
|  | Aluminium Association of India, Bangalore | Dr Vilas Tathavadkar | Virtual |
|  | Bhabha Atomic Research Centre, Mumbai | Dr RN Singh | Virtual |
|  | CSIR-Institute of Minerals & Materials Technology, Bhubaneswar | Dr Kali Sanjay  | Virtual |
|  | CSIR- National Metallurgical Lab, Jamshedpur | Dr Jagannath Pal | Virtual |
|  | Geological Survey of India | Dr Sanjay Kumar Sharma | Virtual |
|  | Indira Gandhi Centre for Atomic Research, Kalapakkam | Dr Chittaranjan DasDr Utpal Borah | Virtual |
|  | Jindal Stainless Ltd., Hissar | Shri Arjit Saha Poddar | Virtual |
|  | Mazagon Dock Ltd, Mumbai | Shri Vinod KumarShri Harshin Dave | Virtual |
|  | Ministry of Defence, DMRL, Hyderabad | Dr Amit Bhattacharjee | Virtual |
|  | Ministry of Defence (DGQA), Ichapur W.B. | Shri Bikas Mondal | Virtual |
|  |  NABL | Shri Siribabu Shri Neeraj Verma | Virtual |
|  | National Institute of Advance Manufacturing Technology, Ranchi | Dr Ghanshyam Das | Virtual |
|  | Nuclear Fuel Complex | Shri Phool Babu Chaudhary | Virtual |
|  | Nuclear Power Corporation of India, Mumbai | Shri SK Mandal | Virtual |
|  | Yantra India limited, Ordinance Factory, Ambajhari(Earlier Ordinance Factory board, Kolkata) | Shri B.V. Rao | Virtual |
|  | Rashtriya Ispat Nigam Ltd, Vishapatnam | Smt Ruchira GuptaShri T Goutham | Virtual |
|  | SAIL, Research & Development Centre of Iron & Steel, Ranchi | Shri AK MistryShri P. Banerjee | Virtual |
|  | Tata Steel Ltd, Jamshedpur | Dr Anup KumarShri Souvik Das | Virtual |
|  | The Institute of Indian Foundrymen | Shri Dinesh Gupta | Physical |
|  | The Indian Institute of Metals, Kolkata | DR U Kamachi Mudali | Virtual |

**2. Chairpersons of the Sectional Committees:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl. No** | **Name of the chairperson** | **Organizing Representing** | **Chairman of Technical Committee** | **Mode of Attending** |
|  | Dr Vikas Kumar,  | In personal capacity | MTD 03 | Virtual |
|  | Shri Sandip Kumar Kar |  Steel Authority Of India Limited (SAIL), Research & Development Centre for Iron & Steel, Ranchi | MTD 04 | Virtual |
|  | Shri AK Hazra | Metal & Steel Factory Indian Ordnance factory, Ministry of Defence (West Bengal) | MTD 06 | Virtual |
|  | Dr Kali Sanjay  | CSIR-IMMT Bhubaneswar | MTD 07 | Virtual |
|  | Shri Paravjeet Singh | Geological Survey of India | MTD 10 | Virtual |
|  | Dr Shaju K Albert | In personal capacity | MTD 11 | Virtual |
|  | Shri Prag Goel | Engineers India Limited, New Delhi | MTD 19 | Virtual |
|  | Dr Amit Bhattacharya | DMRL, Ministry | MTD 22 | Virtual |
|  | Dr U Kamachi Mudali | Homi Bhabha National Institute (HBNI) | MTD 24 | Virtual |
|  | Shri Ajay Kumar | In personal capacity  | MTD 26 | Virtual |
|  | Dr Sanchita Chakarvarty | CSIR-NML, Jamshedpur | MTD 34 | Virtual |

**3. BIS Officials**

|  |  |  |
| --- | --- | --- |
| **Sl. No.** | **Name of the Officer** | **Designation** |
|  | Shri Sanjay Pant | Deputy Director General (Standardization-II) |
|  | Shri Kunal Kumar | Scientist “E”, MTD |
|  | Shri Ashish Prabhakar Wakle | Scientist “D”, MTD |
|  | Shri Vishal Kumar Rana | Scientist “C”, MTD |
|  | Shri Ram Sai Kumar Gedela | Scientist “C”, MTD |
|  | Smt Challakonda Vidisha | Scientist “C”, MTD |
|  | Shri Ajay Kumar Soni | Scientist “C”, MTD |