MINUTES OF MEETING

*For BIS use only*

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| **BUREAU OF INDIAN STANDARDS**  **(METALLURGICAL ENGINEERING DEPARTMENT)** | |
| **FOUNDRY AND STEEL CASTINGS SECTIONAL COMMITTEE, MTD 14** | |
| **Meeting Date & Time** | 24th July 2023, Wednesday, 11:00 AM |
| **No. of Meeting** | 22nd |
| **Venue** | Virtual mode |

**Chairman:** Shri V K Raizada **Member Secretary:** Shri Kunal Kumar

**Members Present:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl No.** | **Name of the Organization** | **Name of the Member** | **Email ID of the Member** |
| 1. | BHEL (Central Foundry & Forge Plant),  Haridwar | Shri V K Raizada | [vivekkumar.raizada@bhel.in](mailto:vivekkumar.raizada@bhel.in) |
| 2. | CSIR – National Institute for Interdisciplinary  Science and Technology | Dr. T.P.D. Rajan | [tpdrajan@gmail.com](mailto:tpdrajan@gmail.com) |
| 3. | DGQA MINISTRY OF DEFENCE - Ichapur | Shri Rupesh Banait | [cqametichapur-dgqa@nic.in](mailto:cqametichapur-dgqa@nic.in) |
| 4. | Forace polymers private. limited, Haridwar | Mr. Dipak ghosh | [dghosh@foracepolymers.in](mailto:dghosh@foracepolymers.in) |
| 5. | Director, NIT Jamshedpur | Prof.Goutam Sutradhar | gsutradhar@nitjsr.ac.in |
| 6. | Indian Institute of Technology Kharagpur | Prof. Shiv Brat Singh | [sbs22@metal.iitkgp.ac.in](mailto:sbs22@metal.iitkgp.ac.in) |
| 7. | Indian Register of Shipping, New Delhi | Dr K K Dhawan | [k.dhawan@irclass.org](mailto:k.dhawan@irclass.org) |
| 8. | Indian Register of Shipping, New Delhi | S Velmurugan | [s.velmurugan@irclass.org](mailto:s.velmurugan@irclass.org) |
| 9. | Institute of Indian Foundrymen, New Delhi | Shri Dinesh Gupta | [dinesh.gupta@satyakiran.com](mailto:dinesh.gupta@satyakiran.com) |
| 10. | [Hindustan Aeronautics Limited, Bengaluru](javascript:;) | Shri K Satyendrakumar | satyendrakumar.k@hal-india.co.in |
| 11. | [Versatile Equipments Private Limited, Kolhapur](javascript:;) | Shri Pushkraj Janwadkar | pushkraj.janwadkar@gmail.com |
| 12. | Ministry of Science & Technology , New Delhi | Smt. Tamanna Arora | [tamanna.arora@gov.in](mailto:tamanna.arora@gov.in) |
| 13. | National Institute of Foundry & Forging  Technology, Ranchi | Dr Kamlesh Kumar  Singh | [kksingh\_nifft@yahoo.com](mailto:kksingh_nifft@yahoo.com) |
| 14. | National Institute of Technology Manipur | Dr. Anil Kumar Birru | [anilbirru@nitmanipur.ac.in](mailto:anilbirru@nitmanipur.ac.in) |
| 15. | Steel Cast Ltd, Bhavnagar | Shri B C Routray | [bcr1@steelcast.net](mailto:bcr1@steelcast.net) |
| 16. | The Wesman Engineering Company Private Limited, Kolkata | Shri Ranjan Guha | foundry@wesman.com |

**Item 0 GENERAL**

## Welcome remarks by HMTD, BIS

## Shri Sanjiv Maini, Sc-‘F’ (Head of Metallurgical Engineering Department-BIS) introduced and welcomed all the members and Chairman Shri V K Raizada on behalf of the Bureau to the 22nd meeting of Foundry and Steel Castings Sectional Committee, MTD 14. He also appraised the Committee about the latest policies and directives of the Bureau. He informed the members that this is first meeting of MTD 14 Technical committee in financial year 2023-24. He further informed that there were few initiatives taken by BIS to bring to the notice of the committee. He informed that earlier there were one committee meeting in a financial year but now the management has decided that there shoud be 3-4 meetings in a financial year for fast working in the field of standardization and active participation of the members. Meeting schedule for entire year should be planned in advance, so that everybody can plan and everybody is free for the meeting. Meeting can be planned virtually, it can be planned in hybrid mode (physical plus virtual) or it can be 100 % physical meeting. It is recommended to do at least one physical meeting in a year and along with physical meeting, half day seminar may be planned on latest technology, latest enhancement in foundry technology and steel casting, so that we can have lecture in the eminent field by experts. It has also been decided by the management that the standards which are quite old i.e pre-2000 standards need to be reviewed and upgraded through ARP based research work and R&D if required. Besides pre-2000 standards, all other standards too need to be reviewed every five-year considering upgradation in technology. If any standard revised, reaffirmed, archived or withdrawn, there should be basic empirical data for the same. If the technology mentioned in the standard is obsolete and not in use in India, we may withdraw the standard or we may archive for some time without reviewing the same. He further mentioned about committee composition and informed that minimum 25-30 members should be there in the committee from all the sectors with maximum one third member from manufacturing sector to maintain proper balance in the committee. He again informed that during meeting active participation of all the members are important in all the meetings of technical committee for smooth and proper functioning of standardization work. In case any member is not showing interest in standardization work, not contributing in standardization work and has not attended last three committee meeting, his membership may be withdrawn from the committee and it may be offered to other expert in the field who wanted to contribute.

## Opening remarks by the Chairman

Shri V K Raizada, Chairman, MTD-14 welcomed the members of the Committee to the 22nd TC Meeting of Foundry and Steel Castings Sectional Committee, MTD 14. During his address he requested all the members of the committee to take active participation in the activities of the Committee by contributing their experience and knowledge in preparing the Indian Standards that are at par to the International Standards for the benefit of all the stakeholders.

# Item 1 CONFIRMATION OF THE MINUTES OF THE LAST MEETING

Since, there were no comments on the minutes of 21st meeting of Foundry and Steel Castings Sectional Committee, MTD 14 held on 24th March 2023 at, The Institute of Indian Foundrymen 67, Tughlakabad Institutional Area New Delhi and Webex, the Committee confirmed the minutes as circulated on portal dated 25-04-2023 as well as vide email dated 28-04-2023.

**Item 2 Process Reforms (A)**

**2.1 Presentation on the process reforms undertaken by the BIS**

Member Secretary gave a presentation before the committee discussing about the latest process reforms undertaken by BIS under seven points as following:

1. Identification of New Areas for Standardization

2. Creating Support Structures

3. Stakeholder Management.

4. Committee Management Strategy

5. Enhancing International Footprint

6. Digital Transformation

7. Standards Promotion****

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

# 3.1 The Committee noted the information given at 3.1 of the Agenda – the following 05 documents are under printing-

|  |  |  |  |
| --- | --- | --- | --- |
| Sl No. | IS No. | Doc No. | IS Title |
| **1** | IS 8800: 1997 | MTD/14/21906 | Technical Delivery Conditions For Steel Castings Excluding Investment Castings |
| **2** | IS 9139: 1979 | MTD/14/20981 | Malleable Iron Shots And Grits For Use In Foundries - Specification |
| **3** | IS 10724: 1990 | MTD/14/21893 | Acceptance Standards For Magnetic Particle Inspection Of Steel Castings - Specification |
| **4** | IS 9565: 1995 | MTD14/20981 | Malleable Iron Shots And Grits For Use In Foundries Specification |
| **5** | IS 1987: 2002 | MTD14/20144 | High silica sand for use in foundries - Specification (Second Revision) Amendment - 1 |

# 3.2 The Committee noted the information given at 3.2 of the Agenda and decided to send the following 10 documents out of total 12 documents under WC for printing, 01 standard to withdraw and the status of remaining one under WC (IS 3343: 1965) is mentioned in Action taken report at Item 6 for pending action to be taken –

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sl No. | IS No. | Doc. No | IS Title | Status | Decision taken |
|  | **IS 5841: 1970** | **MTD/14/20988** | **Specification for fluted core cleaners for use in foundries** | **WC was done on 30.05.2023 for 30 days, No comments received so far.** | The committee after deliberation decided to send the document for printing. |
|  | **IS 6482: 1971** | **MTD/14/20980** | **Specification for tampers and rammers for use in foundries** | **WC was done on 19-06-2023 for 30 days. No comments received so far.** | The committee after deliberation decided to send the document for printing. |
|  | **IS 6788: 1973** | **MTD/14/20993** | **Specification for chromite sand for use in foundries** | **WC was done on 19-06-2023 for 30 days. No comments received so far.** | The committee after deliberation decided to send the document for printing. |
|  | **IS 6013: 1970** | **MTD/14/20976** | **Specification for trowels for use in foundries** | **WC was done on 30.05.2023 for 30 days, No comments received so far.** | The committee after deliberation decided to send the document for printing. |
|  | **IS 5850: 1970** | **MTD/14/20853** | **Specification for Star Triangular Cutters For Use In Foundries** | **WC done on 30-05-2023, No comments received.**  **.** | The committee after deliberation decided to send the document for printing. |
|  | **IS 1752: 1973** | **MTD/14/20863** | **Specification For Coal Dust For Use In Cast Iron Foundry** | **WC was done on 30.05.2023 for 30 days, No comments received so far.** | The committee after deliberation decided to send the document for printing. |
|  | **IS 5824: 1970** | **MTD/14/20997** | **Specification for lancets for use in foundries** | **WC done on 08.02.2023. Comments received from Shri Anup Chandra Gandhinagar on 27th march 2023.** | The committee after deliberation decided to send the document for printing after deleting sl. No. (iv) in Table 1. |
|  | **IS 12117: 1996** | **MTD/14/21905** | **Norms For Classification of Steel Foundries For Quality Assurance** | **P draft circulated on 08.02.2023. No comment received. Stage changed and skipped to WC draft on 06.04.2023. WC done on 07.07.2023. No comments received so far.** | The committee after deliberation decided to send the document for printing in case no comments received within the stipulated time. |
|  | [**IS 9007: 1978**](https://www.services.bis.gov.in/php/BIS_2.0/StandardsFormulationV2/Upload3.php?ID=N3Z4NzZHWDVvMHFBZXVaYXBtUDMwZz09) | **MTD/14/20769** | **SPECIFICATION FOR ZIRCON SAND FOR USE IN FOUNDRIES First Revision** | **WC done on 16.02.2023, no comment received so far.** | The committee after deliberation decided to send the document for printing. |
|  | **IS 1513: 1980** | **MTD/14/20978** | **WOODEN PATTERN EQUIPMENT FOR FOUNDRIES - SPECIFICATION** | **WC done on 05.07.2023 for 30 days, no comments received so far.** | The committee after deliberation decided to send the document for printing in case no comments received within the stipulated time. |
| **11.** | **IS 7295: 1974** | **MTD/14/20778** | **SPECIFICATION FOR CHAMOTTE First Revision** | WC complete on 18 April, No comments received so far. **In the previous meeting, It was decided to withdraw the standard as the product is no longer in use.** | The committee after deliberation decided to withdraw this standard as the product is no longer in use in foundry anywhere in India. No objection received from any member. |

# 3.3 The Committee noted the information given at 3.3 of the Agenda and decided to send the following 7 documents out of total 8 documents under P-draft stage for WC for 30 days and the status of remaining one under P-draft (IS 1918 : 1966) is mentioned in Action taken report at Item 6 for pending action to be taken –

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| --- | --- | --- | --- | --- | --- |
| Sl No. | IS No. | Doc. No | IS Title | Status | Decision taken |
| **1** | IS 11286 : 1995 | MTD/14/22414 | Corrosion resistant high alloy steel, nickel base and cobalt base investment castings for severe applications - Specification | P-Draft has been circulated to members on 04.05.2023, no comments received so far. | The committee after deliberation decided to send the document for wide circulation for 30 days. |
| **2** | IS 3018 : 1977 | MTD/14/22884 | Specification for standard silica sand for raw material testing in foundries | P-Draft has been circulated to members on 11.07.2023, no comments received so far. | The committee after deliberation decided to send the document for wide circulation for 30 days in case no comments received within the stipulated time. |
| **3** | IS 3339 : 1975 | MTD/14/21999 | Specification for silica flour for use in foundries | P-Draft has been circulated to members on 16.06.2023 for 21 days, no comments received so far. | The committee after deliberation decided to send the document for wide circulation for 30 days. |
| **4** | IS 5303 : 1974 | MTD/14/20987 | Specification for zircon flour for use in foundries (First Revision) | P-draft circulated on 19-12-2022 no comments received so far. | The committee after deliberation decided to send the document for wide circulation for 30 days. |
| **5** | IS 8228 : 1976 | MTD/14/22749 | Specification for bauxite sand | P-draft circulated on 26-06-2023 for 21 days, No comments received so far. | The committee after deliberation decided to send the document for wide circulation for 30 days. |
| **6** | IS 4843: 1968 | MTD/14/20986 | Code for designation of ferrous castings | P-draft circulated on 16-06-2023, No comments were received so far. | The committee after deliberation decided to send the document for wide circulation for 30 days. |
| **7** | IS 6366 : 1971 | MTD/14/20983 | Specification for sprue plugs for use in foundries | P-draft circulated on 26-06-2023, No comments received so far. | The committee after deliberation decided to send the document for wide circulation for 30 days. |

# 3.4 The Committee noted the information given at 3.4 of the Agenda and decided to allot the following 44 standards due for review/revision in 2023-24 to members having expertise in the related field –

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| --- | --- | --- | --- | --- |
| **Sr No** | **IS No** | **Title** | **Committee decision if R&D is required or ARP is sufficient for review** | **Decision of committee to allot the ARP to** |
| 1 | IS 10034 : 1981Reviewed In : 2019 | Basic requirements for equipment for determining moisture content in foundry sand | Committee after detail deliberation decided to review the standard through ARP. | BIS Officer/ ARP Pending |
| 2 | IS 10033 : 1992Reviewed In : 2019 | Zircon and graphite-based core and mould washes - Specification (First Revision) | Committee after detail deliberation decided to review the standard through ARP. | BIS Officer/ ARP Pending |
| 3 | IS 10091 : 1981Reviewed In : 2019 | Specification for iron oxide powder for use in foundries | Committee after detail deliberation decided to review the standard through ARP. | BIS Officer/ ARP Pending |
| 4 | IS 10498 : 1983Reviewed In : 2019 | Specification for apparatus for determining permeability of foundry sands | Committee after detail deliberation decided to review the standard through ARP. | BIS Officer/ ARP Pending |
| 5 | IS 10518 : 1983Reviewed In : 2019 | Specification for snap flask moulding boxes and jackets | Committee after detail deliberation decided to review the standard through ARP. | BIS Officer/ ARP Pending |
| 6 | IS 10979 : 1984Reviewed In : 2019 | Specification for powder resin for use in shell process in foundries | Committee informed that the product powder resin is not in use in India now. Standard may be withdrawn. | Committee after detail deliberation requested Shri D.K. Ghosh to provide data regarding product not in use all over India. Decision regarding withdrawal shall be taken in next meeting after 100 % confirmation of the product not being used anywhere in India. |
| 7 | IS 12006 : 1987Reviewed In : 2019 | Specification for metal pattern and epoxy resin pattern equipments for foundries | Committee after detail deliberation decided to review the standard through ARP. | BIS Officer/ ARP Pending |
| 8 | IS 12424 : 1988Reviewed In : 2019 | Specification for hot box resin for use in foundries | This standard is now obsolete as it not used in India.  Committee after detail deliberation decided to review the standard through ARP. | Shri D.K. Ghosh in consultation with Shri Dinesh Gupta. |
| 9 | IS 2707 : 1996Reviewed In : 2019 | Carbon steel castings for surface hardening - Specification (Fourth Revision) | Committee after detail deliberation decided to review the standard through ARP. | Shri K Satyendrakumar, [Hindustan Aeronautics Limited, Bengaluru](javascript:;) |
| 10 | IS 3444 : 1999Reviewed In : 2019  ISO 11972:2015 Corrosion-resistant cast steels for general applications | Corrosion resistant high alloy steel and nickel base castings for general applications - Specification (Third Revision) | Committee after detail deliberation decided to review the standard through ARP. | Shri S. Velmurugan, Indian Register of Shipping, New Delhi |
| 11 | IS 4269 : 1981Reviewed In : 2019 | Specification for dextrin for use in foundries (First Revision) | Committee after detail deliberation decided to review the standard through ARP. | BIS Officer/ ARP Pending |
| 12 | IS 4475 (Part 1) : 1986Reviewed In : 2019 | Specification for crane - Suspended ladles for foundries: Part 1 straight/taper sided geared ladles 0.25 to 10 tonnes for iron and steel foundries (Second Revision) | Committee after detail deliberation decided to review the standard through ARP. | Mr. Ranjan Guha & Mr.Dinesh Gupta |
| 13 | IS 4475 (Part 2) : 1986Reviewed In : 2019 | Specification for crane - Suspended ladles for foundries: Part 2 cylindrical geared ladles 0.25 to 3 - O tonnes for iron foundries (Second Revision) | Committee after detail deliberation decided to review the standard through ARP. | Mr. Ranjan Guha & Mr.Dinesh Gupta |
| 14 | IS 4475 (Part 3) : 1989Reviewed In : 2019 | Foundry - Crane suspended ladlesspecification: Part 3 straight/taper sided ladles 0.25 to 3.0 tonnes for S. G. iron foundries (Second Revision) | As per this standard ladle only up to 3 tons is specified for S.G. Iron, however now a days 10 ton ladles is used for S.G. Iron. So this standard must be reviewed and updated with modern practices.  Committee after detail deliberation decided to review the standard through ARP. | Mr. Ranjan Guha & Mr.Dinesh Gupta |
| 15 | IS 4475 (Part 4) : 1988Reviewed In : 2019 | Specification for crane suspended ladles for iron and steel foundries: Part 4 taper sided non - Geared ladles - 15 to 50 tonnes capacities for iron and steel foundries (Second Revision) | Committee after detail deliberation decided to review the standard through ARP. | Mr. Ranjan Guha & Mr.Dinesh Gupta |
| 16 | IS 10214 : 1982Reviewed In : 2019 | Methods of sampling bentonite | Committee after detail deliberation decided to review the standard through ARP. | Shri Pushkraj Janwadkar |
| 17 | IS 1280 : 1975Reviewed In : 2019 | Specification for foundry moulding boxes of steel construction (Second Revision) | Committee after detail deliberation decided to review the standard through ARP. | Mr. Dinesh Gupta/ Mr. Sanjeev Kumar from IIF with inputs from manufacturer. |
| 18 | IS 13100 : 1991Reviewed In : 2019 | Pitch powder for use in cast iron foundry | Committee after detail deliberation decided to review the standard through ARP. | Shri A.N. Sudhakar, BHEL, New Delhi |
| 19 | IS 13126 : 1991Reviewed In : 2019 | Silicon carbide chills - Specification | Committee after detail deliberation decided to review the standard through ARP. | Shri Dinesh Gupta, IIF (withdrawl proposed and requested to survey in India regarding it’s use) |
| 20 | IS 2763 : 1999Reviewed In : 2019 | Glossary of terms relating to foundry technology (First Revision) | Committee after detail deliberation decided to review the standard through ARP. | Dr. Anil Kumar Birru in consultation with IIF |
| 21 | IS 4604 : 1975Reviewed In : 2019 | Specification for pattern plates for machine moulding boxes (First Revision) | Committee after detail deliberation decided to review the standard through ARP. | Mr. Ranjan Guha in consultation with IIF |
| 22 | IS 4896 : 1992Reviewed In : 2019 | One percent chromium steel castings for resistance to abrasion - Specification (Second Revision) | Committee after detail deliberation decided to review the standard through ARP. | Shri A.N. Sudhakar |
| 23 | IS 4982 : 1984Reviewed In : 2019 | Specification for closing pins for foundry moulding boxes (Second Revision) | Committee after detail deliberation decided to review the standard through ARP. | BIS Officer/ ARP Pending |
| 24 | IS 5904 : 1978Reviewed In : 2019 | Specification for steel chaplets for use in ferrous foundries (First Revision) | Committee after detail deliberation decided to review the standard through ARP. | Shri B C Routray, Steel Cast Ltd, Bhavnagar |
| 25 | IS 5981 : 1986Reviewed In : 2019 | Specification for sleekers for use in foundries (First Revision) | Committee after detail deliberation decided to review the standard through ARP. | Shri B.C. Routray, Stee lcast ltd to review regarding its use in India and propose. |
| 26 | IS 6376 : 1986Reviewed In : 2019 | Specification for pattern lifting pins and hooks for use in foundries (First Revision) | Committee after detail deliberation decided to review the standard through ARP. | Shri B C Routray, Steel Cast Ltd, Bhavnagar |
| 27 | IS 6377 : 1971Reviewed In : 2019 | Specification for mallets for use in foundries | Committee after detail deliberation decided to review the standard through ARP. | Shri B C Routray, Steel Cast Ltd, Bhavnagar |
| 28 | IS 6378 : 1986Reviewed In : 2019 | Specification for pattern lifting and rapping plates (First Revision) | Committee after detail deliberation decided to review the standard through ARP. | Shri B C Routray, Steel Cast Ltd, Bhavnagar |
| 29 | IS 6401 : 1986Reviewed In : 2019 | Specification for dowel pins for use in foundries (First Revision) | Committee after detail deliberation decided to review the standard through ARP. | Shri B C Routray, Steel Cast Ltd, Bhavnagar |
| 30 | IS 6447 : 1986Reviewed In : 2019 | Specification for vent wires for use in foundries (First Revision) | Committee after detail deliberation decided to review the standard through ARP. | Shri B C Routray, Steel Cast Ltd, Bhavnagar |
| 31 | IS 6907 : 1992Reviewed In : 2019 | Steel castings - Mcethods of sampling (First Revision) | Committee after detail deliberation decided to review the standard through ARP. | Shri A.N. Sudhakar |
| 32 | IS 7297 : 1974Reviewed In : 2019 | Specification for olivine sand and flour for use in steel foundries | Committee after detail deliberation decided to review the standard through ARP. | Shri D.K. Ghosh |
| 33 | IS 7547 : 1987Reviewed In : 2019 | Specification for steel nails used as internal chills in steel castings (First Revision) | Committee after detail deliberation decided to review the standard through ARP. | Shri B C Routray, Steel Cast Ltd, Bhavnagar |
| 34 | IS 8246 : 1976Reviewed In : 2019 | Specification for liquid resins for use in shell process in foundries | Committee after detail deliberation decided to review the standard through ARP. | Shri D.K. Ghosh |
| 35 | IS 8250 : 1988Reviewed In : 2019 | Specification for foundry parting agents (First Revision) | Committee after detail deliberation decided to review the standard through ARP. | BIS Officer/ ARP Pending |
| 36 | IS 8779 : 1978Reviewed In : 2019 | Specification for core gums (Sodium Silicate Based) for use in foundries | Committee after detail deliberation decided to review the standard through ARP. | BIS Officer/ ARP Pending |
| 37 | IS 8785 : 1978Reviewed In : 2019 | Specification for Co2 core binder system (Binder And Break - Down Agent) for use in foundries | Committee after detail deliberation decided to review the standard through ARP. | Shri D.K. Ghosh |
| 38 | IS 8939 : 1978Reviewed In : 2019 | Code of practice for use of oxygen in iron, steel and non - Ferrous metal foundries | Committee after detail deliberation decided to review the standard through ARP . | Shri A.N. Sudhakar |
| 39 | IS 8988 : 1978Reviewed In : 2019 | Specification for bauxite powder for foundry washes | Committee after detail deliberation decided to review the standard through ARP. | BIS Officer/ ARP Pending |
| 40 | IS 9007 : 1978Reviewed In : 2019 | Specification for zircon sand for use in foundries | Committee after detail deliberation decided to review the standard through ARP. | Shri K. satyendrakumar |
| 41 | IS 9008 : 1978Reviewed In : 2019 | Specification for core repairing paste for use in foundries | Committee after detail deliberation decided to review the standard through ARP. | Dr. D.K. Ghosh |
| 42 | IS 9541 : 1987Reviewed In : 2019 | Specification for cast CTC segments (First Revision) | Committee after detail deliberation decided to review the standard through ARP. | BIS officer |
| 43 | IS 9661 : 1980Reviewed In : 2019 | Specification for hand shank ladles | Committee after detail deliberation decided to review the standard through ARP. | Shri Ranjan Guha |
| 44 | IS 9674 : 1980Reviewed In : 2019 | Test methods for fluid self hardening sands | Test Methods.  Committee after detail deliberation decided to review the standard through ARP. | Shri D.K. Ghosh |

**Item 4 ANNUAL CALENDAR OF TECHNICAL COMMITTEE MEETINGS-**

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| --- | --- | --- |
| **Meetings planned for FY 2023-24** | **Date & Time** | **Venue** |
| First Meeting | 26th July 2023 | Hybrid mode |
| Second Meeting | 23rd November 2023 (Tentative) | Physical mode (Delhi) |
| Third Meeting | 21st March 2024 (Tentative) | To be decided by the committee |

**The Committee noted the dates mentioned in annual calendar for technical committee meetings in 2023-24 and after deliberation decided to keep the next meeting in physical mode at New Delhi.**

4.1 The Committee noted the information given at 4.1 (Annexure-2) of the agenda regarding present composition of sectional committee. After detailed deliberation committee decided to send letter through Head (MTD) to the members at sl. No. 1 to 7 of the table to ensure their participation in the committee meetings. Committee decided to withdraw the membership of M/s Leader Valves Ltd., Jalandhar mentioned at Sl. No. 8 of the table as they have not participated in any of the last three meetings nor any response received through email w.r.to comments/ inputs on any Drafts/standards.

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| **Sl**  **No.** | **Name of the Organization** | **Representative Principal/Alternate** | **19th** | **20th** | **21st** | **Last three meetings attended** |
| 1 | BEML Limited, Bengaluru | Shri Mahens Kulkarni  Shri A. S. Phaneendra | N | N | N | 0/3 |
| **2** | Indian institute of Technology, Kharagpur | Prof. Sarat Ch. Panigrahi  Prof Rahul Mitra (Alternate) | N | N | N | 0/3 |
| **3** | Institute of Technology (BHU), Varanasi | Dr. Indrajit Chakrabarty  Dr. Jayant Kumar Singh (Alternate) | N | N | N | 0/3 |
| **4** | Ministry of Railway, RDSO, Lucknow | Shri C. Sengupta  Shri Raj Kishore Prasad (Alternate) | N | N | N | 0/3 |
| **5** | National Metallurgical  Laboratory, Jamshedpur | Dr. D.N Paswan  Ms. Minal Shah (Alternate) | N | N | N | 0/3 |
| **6** | Indian Ordnance Factory Board, Kolkata | Shri G. Jha  Shri A.K.Lala (Alternate) | N | N | N | 0/3 |
| **7** | CSIR-Central Mechanical  Engineering Research Institute,  Durgapur | Dr. Sudip Samantha | N | N | N | 0/3 |
| **8** | Leader Valves Ltd., Jalandhar | Smt. Purnima Beri  Shri Sarabjit Singh (Alternate) | N | N | N | 0/3 |

**The committee suggested Member secretary to write letter to the organizations mentioned in Annexure-II of the agenda for their cooption.**

**The committee noted the panel made for review of ARP.**

**MTD 14 : P6 – Panel to review ARP**

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| **Sl No.** | **Name of the Organization** | **Representative**  **Principal/Alternate** |
| 1. | BHEL, Haridwar | Shri Sudhakar A N  Shri Ranjith lakra |
| 2. | Chawla Silca Sand Trading Co. Allahabad | Shri Raju Chawla  Shri Darshan Chawla (Alternate) |
| 3. | CSIR-CMERI | Dr Sudip Samantha |
| 4. | CSIR-NIIST | Dr. TPD Rajan  Dr. M. Ravi (Alternate) |
| 5. | DGQA | Shri Ashok Kumar  Shri Rupesh Banait (Alternate) |
| 6. | Disa India Ltd, Bangalore | Shri Sunil Kumar Ghosh  Shri Suresh Kumar A (Alternate) |
| 7. | Forace Polymers Pvt Ltd, Haridwar | Shri Deepak Kumar Ghosh |
| 8. | Indian institute of Technology, Kharagpur | Prof. Sarat Ch. Panigrahi |
| 9. | Ministry of Railway, RDSO, Lucknow | Shri C. Sengupta |
| 10. | National Institute of Foundry & Forging  Technology, Ranchi | Dr. Kamlesh Kumar Singh  Dr. Amitesh Kumar (Alternate) |
| 11. | NIT, Manipur | Prof. (Dr.) Goutam Sutradhar  Dr. Anil Kumar Birru(Alternate) |
| 12. | The Wesman Engg Co. Ltd, Kolkata | Shri Ranjan Guha  Shri Partha Chatterjee |
| 13. | Versatile Equipments Pvt.Ltd, Kolhapur | Shri Pushkraj Janwadkar |

**The committee after deliberation decided to make the following panel –**

**MTD 14 : P7 – Panel to review the standards on various sands**

|  |  |  |
| --- | --- | --- |
| **Sl No.** | **Name of the Organization** | **Representative** |
| 1. | Forace Polymers Pvt Ltd, Haridwar | Shri Deepak Kumar Ghosh |
| 2. | The Wesman Engg Co. Ltd, Kolkata | Shri Ranjan Guha |
| 3. | Director, NIT Jamshedpur | Prof.Goutam Sutradhar |
| 4. | Versatile Equipments Pvt.Ltd, Kolhapur | Shri Pushkraj Janwadkar |
| 5. | BIS | Kunal Kumar (MS of MTD 14) |

**Item 5 COMMENTS ON PRINTED STANDARDS**

**5.1** No comments received. Committee noted the information.

## Item 6 ACTION TAKEN REPORT

Actions taken on most of the documents w.r.to printing, Wide Circulation and P-Draft are reflected above at 3.1, 3.2 and 3.3 and already noted and further action decided by the committee. The committee considered the summary of Actions taken on the documents those are not covered above and as given in the agenda and decided as follows:

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| --- | --- | --- | --- | --- |
| Sl No | **Subject** | **Decision of the committee during the Previous Meeting** | **Actions taken on the decisions of the last meeting** | **Decision taken** |
| 1 | **Revision of**  **IS 1918: 1966 Methods of physical tests for foundry sands** | Document was p-Circulated on 14.10.2022. An Email was circulated among members on 03-02- 2023 for review/Comment. No comments were received. Committee noted the information and decided to conduct a panel meeting with members of Panel-2 and give their justifications to changes mentioned in the standard by  Shri Pushkraj Janwadkar from M/s Versatile  Equipments Pvt. Ltd. within 3 months. | Member Secretary sent an e-mail on 3rd may 2023 regading conducting a panel meeting, No reply received. | Shri Pushkraj Janwadkar informed that panel is there and panel meeting is very much required before revision of this standard.  **Committee after deliberation requested Shri Pushkraj to conduct a panel meeting within 30 days and submit justification to the changes proposed.** |
| 2 | **Specification for Steel/Ironshot/Grit use for blast cleaning and shot peening** | Committee after detailed deliberation requested the panel - 5 to submit their views/comments within 3 months. Panel consist of following members –  i) M/s NIFFT (Dr. Amitesh Kumar)  (Convener)  ii) M/s Institute of Indian Foundrymen | Email dated 04.05.2023 and reminder dated 26.06.2023 were sent by member secretary to submit their views/comments on the draft documents. Comment from panel is awaited. | **The committee after deliberation requested Mr. Dinesh Gupta, IIF and Dr Kamlesh Kumar**  **Singh, NIIFT to review and submit their views/comments positively within 2 months.** |
| 3 | **Manufacture and testing of high chrome grinding media ball for cement mills** | The committee after deliberation decided to request again Shri Pushkaraj to submit his  recommendations within 3 month. | The project is assigned to an intern, Final year B.Tech student from IIT Kharagpur to make pre-standardization draft document through literature study, field visit to manufacturer (AIA Engineering ltd) and testing laboratory. Pre-standardization draft prepared by the intern is attached. | **The committee after going through the draft and after detailed deliberation decided to circulate the pre-Standardization document as P-draft for 21 days.** |
| 4 | **Adoption of ISO 14737: 2015** Carbon and low alloy cast steels for  general applications | The Committee reviewed the status and after  deliberations, decided to request M/s  Institute of Indian Foundrymen to review the  document and submit their views/recommendations within 6 months. An Email was Circulated among the members on 03-02-2023 to review/comment and give their  recommendations. However, the reply is still awaited.  The Committee noted the information and decided not to drop the International standard. | No progress being made. | Shri K Satyendrakumar from [Hindustan Aeronautics Limited, Bengaluru](javascript:;) informed that they are doing casting/ investment casting , so he can take up this project and review the document.    **The committee after deliberation decided to give this project as ARP to Shri K Satyendrakumar.** |
| 5 | **IS 3343: 1965**  Specification for natural moulding sand for use in foundries | WC done on 20.02.2023. No comments received. In the previous meeting, committee decided to hold a panel meeting with stake holder and Shri D.K.Goash of M/s F.P.P.L., to verify if there is few technical changes. | No panel meeting held so far. | Mr. D.K. Ghosh informed that there should be a meeting consisting of sand supplier, binder supplier for review of the existing very old standard. Mr. Ghosh will inform the detail of supplier, binders who may be included in the panel for discussion. Mr. K Satyendrakumar informed that it is very difficult to standardized sand as we are using various sand for various parts.  Mr. Ranjan Guha informed that it is true that there are different sand for different parts but we already have the standards. So we have to look how to upgrade these standards as per modern practices, international practices. sand is the most important gradient for any foundry. There are various type of sands- green sand, novex sand and different moulding practices required different sand. So, a minimum standard should be there so that they can be referred in foundry practices. special panel/sub-committee should be formed based on expertise where it can be verified and made up to date as per technical requirement. Shri Guha will provide the detail of some expert who can be added in the panel for discussion.  **The committee after deliberation requested Shri D.K. Ghosh and Shri Ranjan Guha to conduct a panel meeting that also include supplier as mentioned by shri Ghosh and expert as mentioned by shri Guha and submit recommendation within 2 months.** |
| 6 | **IS 4683 : 1968**  Specification for chilled iron shot and grit for use in foundries | The document is withdrawn after publication of merged Indian standard on **IS 4606: 1983, IS 4683: 1968 and IS 5873: 1970.**  The committee noted the information. | Merged Indian Standard not yet published. Standards shall be withdrawn after publication of the merged standard. | Standards shall be withdrawn after publication of the merged standard.    **The committee noted the information**. |
| 7 | **IS 5873 : 1970** Specification for steel cut - Wire shots for use in foundries | The document is withdrawn after publication of merged Indian standard on **IS 4606: 1983, IS 4683: 1968 and IS 5873: 1970.**  The committee noted the information. |
| 8 | **IS 11266 : 1985** Specification for flake resins for use in shell process in foundries | A working draft for revision of IS  11266 was received from Shri D  Ghosh vide email dated 20-03-  2023. It was decided in the previous meeting to hold  the panel meeting with the  following panel member, who are working on this particular  product:  a) Forace Polymers  (conveyner)  b) Gayatri Minerals  c) MMPL  d) Indoshel cast  e) Aqua sub  f) Samarth metallurgicals | Panel meeting was held on 12.05.2023. Minute of panel meeting was circulated to panel convener for approval. Approval from Shri D.K. Ghosh is awaited. Minutes of the meeting is attached. The committee may please decide. | **The committee after detail deliberation requested Shri D.K. Ghosh to submit the revised draft within 30 days.** |

# Item 7 NEW SUBJECTS FOR STANDARDIZATION

**7.1** The committee has noted the information as given in item no. **7.1** to **7.5** of the agenda of the meeting.

**7.2 Shri Ranjan Guha suggested to form a new standard as part 5 of IS 4475** **on Rotary treatment ladle. The committee after deliberation requested Shri Guha to submit new work item on formulation of Indian Standard on Rotary treatment ladle for use in foundry.**

# Item 8 WTO-TBT ENQUIRY POINT

**8.1** The committee has noted the information as given in item no. **8.1** to **8.5** of the agenda of the meeting.

# Item 9 INTERNATIONAL ACTIVITIES

* 1. The committee has noted the information given in item no. **9.1** of the agenda of the meeting.
  2. The committee has noted the information given in item no. **9.2** and after deliberation decided to transferISO/TC 25- Cast irons and pig irons committee to MTD 6.
  3. The committee noted the information given in item no. **9.3** of the agenda and after deliberation decided to harmonize all the possible standards.

**Item 10 IMPLEMENTATION OF INDIAN STANDARDS**

**10.1** The committee noted the information given in item no. 10.1 and 10.2of the agenda.

**Item 11 Research Projects to be Taken-up for Inclusion of Empirical Data and Insights**

**11.1** The committee noted the information given in item no. 11.1 and 11.2of the agenda and

**Item 12 Conducting of quarterly meetings of Sectional Committees:**

**12.1** The committee noted the information given in item no. 12.1, 12.2 and 12.3of the agenda and decided to conduct minimum 3 meetings in a year which may be extended up to 4 if required.

**ITEM 13. TASKS ASSIGNED TO THE TECHNICAL COMMITTEES BY BIS**

The committee noted the information given in item no. 13of the agenda

# Item 14 ANY OTHER BUSINESS

**14.1** During the previous meeting Shri D.K. Goash of M/s F.P.P.L. had informed that he had provided working drafts for formulating Indian Standards. The Working drafts are as follows and justification for the technical specifications are to be provided by Shri D.K. Goash of M/s F.P.P.L.or members. However, no justification received so far. The committee after detail deliberation requested Shri D.K. Ghosh and other members in the panels made for review of ARPs to review the drafts and submit justification for formulation of standard as applicable.

|  |  |  |
| --- | --- | --- |
| **Sl No.** | **Draft Indian Standard / Amendment** | **Documents** |
|  | Specifications for Liquid Phenol Formaldehyde Shell Resin for Use in Foundries |  |
|  | Specifications for Oil Based Alkyd Resin No Bake Binders for Use in Foundries |  |
|  | Specifications for Ester Cured Alkaline Phenolic Self Setting Binder System for Use in Foundries |  |
|  | Specifications for Phenolic Polyurethane No Bake (PUNB) Binders for Use in Foundries |  |
|  | Specifications for Phenol Formaldehyde Acid Cured No Bake Binders (PNB) for Use in Foundries |  |
|  | Specifications for Phenol Formaldehyde Hot Box Binder System for Use in Foundries |  |
|  | Specifications for Furan No Bake Binders for Use in Foundries |  |

**14.2 During the meeting, shri Dinesh Gupta, IIF commented that “Standard Practice” should be written in place of “code of practice” for all such standards as it gives wrong sense. He requested to record his comment in the minute.**

**14.3 During the meeting, shri Dinesh Gupta, IIF and Shri Pushkraj requested to form a cross functional panel with 5-6 members having expert from the field and members from MTD 21 to discuss on testing standards on steel casting related standards. Proposal for formation of cross functional panel shall be discussed in MTD 21 committee meeting.**

**14.4 Shri Pushkraj suggested to form a standard parallel to MSS SP-55 - Quality Standard for Steel Castings for Valves, Flanges, Fittings, and Other Piping Components. Shri Dinesh Gupta informed that since it is a visual method for evaluating surface irregularities, it comes under the purview of MTD 21 and Shri Pushkraj’s name is already suggested in cross functional panel.**

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

**15.1 The committee decided to keep next meeting in physical mode in New Delhi on the scheduled date i.e. 23 November 2023.**

**15.2 The meeting ended with a hearty vote of thanks by member secretary to the chair and members of the committee.**

**REVIEW ANALYSIS OF INDIAN STANDARD**

**(To be submitted to the Sectional Committee)**

1. **Sectional Committee No. & Title: MTD 14**

2. **IS No:**

1. **Title:**
2. **Date of review:**
3. **Review Analysis**

1. **Status of standard(s), if any from which assistance had been drawn in the formulation of this IS.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Standard**  **(No. & Title)** | **Whether the standard has since been revised** | **Major changes** | **Action proposed** |
|  |  |  |  |

1. **Status of standards referred in the IS**

|  |  |  |  |
| --- | --- | --- | --- |
| **Referred standards** **(No. & Title)** | **IS No. of this standards since revised** | **Changes that are of affecting the standard under review** | **Action proposed** |
|  |  |  |  |

1. **Any other standards available related to the subject & scope of the standard being reviewed (International/regional/other national/association/consortia, etc.**

**or of new or revision of existing Indian Standard)**

|  |  |  |
| --- | --- | --- |
| **Standard**  **(No. & Title)** | **Provisions that could be relevant while reviewing the IS** | **Action proposed** |
|  |  |  |

1. **Technical comments on the standard received, if any**

|  |  |  |  |
| --- | --- | --- | --- |
| **Source** | **Clause of IS** | **Comment** | **Action proposed** |
|  |  |  |  |

1. **Information available on technical developments that have taken place (on product/processes/practices/use or application/testing/input materials, etc)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Source** | **Development** | **Relevant clause of the IS under review**  **that is likely to be impacted**  **(Clause & IS No.)** | **Action proposed** |
|  |  |  |  |

1. **Issues arising out of changes in any related IS or due to formulation of new**

**Indian Standard**

|  |  |  |  |
| --- | --- | --- | --- |
| **Related IS and its Title**  **(revised or new)** | **Provision in the IS under review that would be impacted & the clause no. or addition of new clause/provision** | **Changes that may be necessary in the Standards under review** | **Action proposed** |
|  |  |  |  |

1. **Any consequential changes to be considered in other IS**

|  |  |
| --- | --- |
| **Related IS to get impacted** | **Requirements to be impacted** |
|  |  |

1. **Any other observation:**

1. **Recommendations:**

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