

For BIS use only.



भारतीय मानक ब्यूरो | BUREAU OF INDIAN STANDARDS

MINUTES

| Meeting | Date & Time | Venue |
|--|---|---------------------------------|
| 11 th Meeting of Safety of Machinery Sectional Committee, MED 40 | 23 September 2024 (Monday) at 11:00 h | Virtual (BIS Webex Platform) |
| Meeting Link: https://bismanak.webex.com/bismanak/j.php?MTID=m12a0e4449bcceda0ab89b7e3e2ae59a7 | | |
| Meeting No. : 2510 509 1445 | | |
| Meeting Password : MED@123 | | |
| Chairperson: Shri Vikas Dogra, Director, Ministry of Heavy Industries and Public Enterprises, Department of Heavy Industry, New Delhi | | |
| Member Secretary: Ms Ankita Vidhyarthi, Scientist 'D'/Joint Director, Mechanical Engineering Department, Bureau of Indian Standards, New Delhi | | |

ITEM 0 OPENING REMARKS BY CHAIRPERSON/CONVENER

0.1 Head, Mechanical Engineering Department welcomed all the members of the committee in the meeting. He explained that this committee is distinct, as it does not focus on specific products but instead addresses the safety aspects of machinery across all sectors of manufacturing. Its scope encompasses a broad range of topics related to industrial safety. He informed the committee of the recently launched IRD portal and urged them to actively participate in the standardization activities of the Bureau, through the meetings and through their comments on the WC drafts, P-drafts and ballots on the BIS portal.

0.2 The chairman welcomed the members in the meeting. He emphasized that the recent Quality Control Orders (QCOs) on Omnibus Technical Regulations introduced by the Ministry of Heavy Industries will serve as a significant advancement for the industrial sector. MED 40 is expected to play a pivotal role in this development. Furthermore, he recommended that the committee prioritize the development of indigenous standards tailored to India's specific conditions and contexts.

0.3 Shri Rakesh Kumar, Scientist-D, CMD-III, and guest invitee, addressed the committee to discuss the implementation of the Omnibus Technical Regulations (OTR). He outlined the key aspects of the regulations, including their scope and applications, and noted that any issues encountered during implementation may be directed to the regulatory body, i.e., the Ministry of Heavy Industries (MHI). He further explained that OTR will be covered under BIS Scheme-X, wherein all manufacturers are required to obtain a BIS license, and in the case of batch production, a Certificate of Conformity. Additionally, training programs are being organized for BIS officers and manufacturers to ensure proper compliance. A portal is also being developed for the registration of manufacturers with BIS, and stakeholders will be notified once it is operational, at which point certification activities will commence. Any machinery manufactured, sold, or imported in India that falls under the scope of the Omnibus Technical Regulations (OTR) must comply with mandatory BIS certification.

ITEM 1 CONFIRMATION OF THE MINUTES OF THE LAST MEETING

1.1 The *Committee CONFIRMED the minutes.*

ITEM 2 SCOPE, COMPOSITION AND PROGRAMME OF WORK OF THE COMMITTEE

2.1 Scope

The Committee PROPOSED the scope to remain as -

Standardisation of safety of machines in airborne hazardous substances, fire, access to machinery, control systems, design and construction, risk reduction.

2.2 Composition of Committee

2.2.1 *The committee noted the information.*

2.2.2 *The committee noted the information.*

2.2.3 *The committee noted the information.*

2.3 Co-options and the revised nominations

2.3.1 Co-options/Revised nominations recommended during previous Meetings-

| SI No. | Organisation/Individual | Committee Decision during the last meeting | Action Status | Decision during the 11th meeting. |
|--------|-------------------------|---|---|--|
| 1 | CLW, ICF RCF and MCF | Mr Vijay Kumar Goel, Research Designs and Standards Organization (RDSO), Lucknow suggested that representation from Production Units of Railways including MCF and ICF will be more appropriate as they are using various types of machines and can give inputs regarding requirements of safety of machines. Consequently, Mr Vijay Kumar Goel provided contact details of the relevant departments and officials. | a) Chittaranjan Locomotive Works nominations have been received. b) Email sent to ICF on 02 Feb 2024 and 22 May 2024 Email ICF 22 MAY 2024.pdf Response awaited from ICF c) Email sent to RCF on 02 Feb 2024 and 22 May 2024 d) Email RCF 22 MAY 2024.pdf Response awaited from RCF | <i>The committee accepted that No response has been received from ICF, RCF and MCF. However, the committee decided that one more e-mail may be sent to these firms for their representation in BIS. If no further response is received, they may be removed from further agenda items.</i> |

| | | | | |
|---|---|---|---|---|
| | | | <p>d) Email sent to MCF on on 22 May 2024</p> <p>Email MCF 22 MAY 2024.pdf</p> <p>Response awaited from MCF.</p> | |
| 2 | M/s International Centre for Automotive Technology (iCAT) | In accordance with the directions from the Chairperson, the Committee decided on the co-option of iCAT. | <p>Regarding Co-option, Nomination proforma sent vide Email dated 24 July 2023 and 22 May 2024</p> <p>Email ICAT 22 MAY 2024.pdf iCAT Nomination request Dated 24 July 2023 Email.pdf</p> <p>Response is awaited from iCAT.</p> | <i>The committee accepted that No response has been received from iCAT. However, the committee decided that one more e-mail may be sent to them for their representation in BIS. If no further response is received, they may be removed from further agenda items.</i> |

2.3.2 New Co-option requests received

| Sl No. | Organisation Name | Members | Other Information | Remark |
|--------|---|--|---|---|
| 1. | Gudel India Pvt Ltd, Pune | <p>Name: Neeta Bodas Designation: Director Engineering Mob: 9552579968 Email: neeta.bodas@in.gudel.com</p> <p>Name: Shri Sunil Inamdar Designation: General Manager – Design & Development Mob: 9850827004 Email: sunil.inamdar@in.gudel.com</p> | <p>The Interest from the Organisation to join MED 40 was received during the Seminar on Machine Safety in September 2023.</p> <p>Committee decided to co-opt the organisation.</p> <p>Reminder for nomination was sent on 05 Jul 2024. EMAIL REMINDER MED 40 GUDEL.pdf</p> <p><i>No reply received.</i></p> | <i>Shri Sacheendra Bapat, V-Same engineering and Sh. Prodip Sarkar, Rockwell Automation informed of contacting Gudel India representatives on behalf of the committee for their nomination.</i> |
| 2. | URS Verification Pvt. Ltd and Trio Technologies | <p>Name: Mr Mahesh Dave Designation: Associate Director – Products, Strategy & Global Regulatory Affairs</p> | <p>Co-option request received on 10 Aug 2022. CV is enclosed.</p> <p>MED 40 CV Mahesh Dave.pdf</p> | <i>The committee accepted that No response has been received from Mr. Mahesh Dave. However, the committee decided that one more e-mail may be sent to them for their</i> |

| | | | | |
|----|---|---|---|---|
| | | <p>Email: maheshkumardave@gmail.com Phone- 9810330717</p> | <p>Committee decided to co-opt the individual. Reminder for nomination were sent on 05 Jul 2024.</p> <p>EMAIL REMINDER ME D40 URS.pdf</p> <p><i>No reply has been received.</i></p> | <p><i>representation in BIS. If no further response is received, they may be removed from further agenda items.</i></p> |
| 3. | In Personal Capacity | <p>Name: Mr Amol Sangekar Designation: Human Factors and Ergonomics Consultant Email: asangekar73@gmail.com ergonomics@indiaergo.com</p> | <p>Co-option request received on 30 September 2022. CV is enclosed.</p> <p>MED 40 CV Dr. Amol Sangekar.pdf</p> <p>Committee decided to co-opt the individual. Reminder for nomination was sent on 05 Jul 2024.</p> <p>EMAIL REMINDER ME D40 AMOL.pdf</p> <p>No reply has been received.</p> | <p><i>The committee accepted that No response has been received from Mr. Amol Sangekar. However, the committee decided that one more e-mail may be sent to them for their representation in BIS. If no further response is received, they may be removed from further agenda items.</i></p> |
| 4. | Shell India Markets Private Limited, Mumbai | <p>Name: Mr Arulmani Arunachalam Designation: Senior Marine Engineer Email: A.Arunachalam@shell.com</p> | <p>Co-option request received on 30 December 2022. CV is enclosed.</p> <p>MED 40 CV Arulmani Arunachalam.pdf</p> <p><i>Committee could not come to a consensus in the meeting and decided to hold the decision till the next meeting.</i></p> | <p><i>The Committee accepted the nomination.</i></p> |
| 5. | In Personal Capacity | <p>Name: Mr Sanjay Bhure Designation: Senior Marine Engineer Email: bhuresanjay@gmail.com</p> | <p>Co-option request received on 30 May 2023. CV is enclosed.</p> <p>MED40-SANJAY BHURE.pdf</p> <p><i>Committee could not come to a consensus in the meeting and decided to hold the decision till the next meeting.</i></p> | <p><i>The Committee accepted the nomination.</i></p> |

| | | | | |
|----|--------------------------------|---|--|---|
| 6. | Skylark India Elevator Company | Name: Mr Subodh mehrra Designation: Director Email: sieco1@hotmail.com | Co-option request received on 25 December 2023. CV is not enclosed. Reminder for CV was sent on 17 Sep 2024. EMAIL REMINDER ME D40 SUBODH MEHRA.pdf Reply awaited. | <i>The Committee decided that a reminder may be sent to him for nomination and if no reply received, they may be removed from further agenda items.</i> |
|----|--------------------------------|---|--|---|

2.4 Programme of Work

The present programme of work of the Safety of Machinery Sectional Committee, MED 40 is attached below. (No. of Published Standards is **34**)

[POW MED40](#)

The committee noted the information.

2.4.1 Standards under Certification

As on date, none of the product standards have operating conformity assessment licences against them.

The committee noted the information.

ITEM 3 DRAFT STANDARDS/AMENDMENTS UNDER DEVELOPMENT

| S. No | Document Number | Document Title | Doc. Type | Document Stage |
|-------|--|---|-----------|--|
| 1 | MED/40/24378 (Identical To: ISO/TR 24119:2015) | Safety of machinery - Evaluation of fault masking serial connection of interlocking devices associated with guards with potential free contacts | New | Under Publication |
| 2 | MED/40/24382 (Identical To: ISO/TR 22053:2021) | Safety of machinery Safeguarding supportive system | New | WC draft Pending for approval from MEDC. |
| 3 | MED/40/24376 (Identical To: ISO 11161:2007) | Safety of machinery Integrated manufacturing systems Basic requirements | New | Under Publication |
| 4 | MED/40/24388 (Identical To: ISO/TR 22100-5:2021) | Safety of machinery Relationship with ISO 12100 Part 5: Implications of | New | WC draft Pending for approval from MEDC. |

| | | | | |
|----|--|---|----------|--|
| | | artificial intelligence machine learning | | |
| 5 | MED/40/24379 (Identical To: ISO/TS 19837:2018) | Safety of machinery Trapped key interlocking devices Principles for design and selection | New | Ready for gazette |
| 6 | MED/40/24373 IS/ISO/TR 22100 : Part 3: 2013 (Identical To: ISO/TR 22100-3 : 2016) | Safety of machinery Relationship with ISO 12100 Part 3: Implementation of ergonomic principles in safety standards | Revision | WC-Draft floated on 31-07-2024. No comments received yet. |
| 7 | MED/40/24384 (Identical To: ISO/TR 22100-1:2021) | Safety of machinery Relationship with ISO 12100 Part 1: How ISO 12100 relates to type-B and type-C standards | New | WC draft Pending for approval from MEDC. |
| 8 | MED/40/24377 (Identical To: ISO/TR 14121-2:2012) | Safety of machinery Risk assessment Part 2: Practical guidance and examples of methods | New | Ready for gazette |
| 9 | MED/40/24381 (Identical To: ISO 20607:2019) | Safety of machinery Instruction handbook General drafting principles | New | WC draft Pending for approval from MEDC. |
| 10 | MED/40/24375 (Identical To: ISO Guide 78:2012) | Safety of machinery Rules for drafting and presentation of safety standards | New | Under Publication |
| 11 | MED/40/24386 (Identical To: ISO/TR 22100-4:2018) | Safety of machinery Relationship with ISO 12100 Part 4: Guidance to machinery manufacturers for consideration of related IT-security cyber security aspects | New | WC draft Pending for approval from MEDC. |

The Committee noted the information.

ITEM 4 Standards due for Review 2024 - 2025

| SI No. | IS No | Title | Status |
|--------|-------------------------------------|---|-----------------|
| 1 | IS 16817 : 2020 ISO 13851:2019 | Safety of Machinery — Two-Hand Control Devices — Principles for Design and Selection (First Revision) | <i>Reviewed</i> |
| 2 | IS 16807 : 2020 ISO 19353 : 2019 | Safety of Machinery — Fire Prevention and Fire Protection (First Revision) | <i>Reviewed</i> |

The Committee noted the information.

ITEM 5 INTERNATIONAL ACTIVITIES

India has membership on ISO committees as listed below, related to MED 40. Being a P-member, it is obligatory for India to vote on all the documents. The documents received from time to time are being sent to committee members for comments and voting is done accordingly.

Standards published by ISO Committee

| | | |
|--|--|--|
| 44 Total ISO Standards | 32 Latest version of ISO adopted | 1 Older version of ISO adopted |
| 11 ISO standards not adopted | 0 Indigenously developed Standards | 0 Amendment issued by ISO, not adopted |

5.1 The list of active various working group working under ISO/TC 199 in liaison with MED 40 Sectional Committee is as under-

| SI No. | ISO/TC | Title |
|--------|------------------|--|
| 1) | ISO/TC 199 | Safety of machinery - Participating (P) |
| 2) | ISO/TC 199/WG 10 | Fire prevention and protection |
| 3) | ISO/TC 199/WG 11 | Permanent means of access to machinery |
| 4) | ISO/TC 199/WG 12 | Human-machine-interactions |
| 5) | ISO/TC 199/WG 3 | Safety of integrated manufacturing system |
| 6) | ISO/TC 199/WG 5 | General principles for the design of machinery and risk assessment |
| 7) | ISO/TC 199/WG 6 | Safety distances and ergonomic aspects |
| 8) | ISO/TC 199/WG 7 | Interlocking devices |
| 9) | ISO/TC 199/WG 8 | Safe Control Systems |

<https://www.iso.org/committee/54604.html>

The Committee noted the information.

5.2 Working Groups under ISO/TC 199 and members nominated from India

The committee had decided to formulate internal Working Groups under MED 40 corresponding to ISO Working Groups with the objective to have a discussion group for deliberating on ISO draft standards and ballots. The members mentioned below expressed their interest to be part of the Working Groups. Nominations of the Working Groups are open and as decided in the committee, internal Working Groups structure are being circulated to all committee members to suggest more names for inclusion in the Working Groups. Email for the same was sent to the Committee on 31 Oct 2023.

Following responses have been received-

| Sl No. | WG | Project Number | Project Title | Participation by | Internal Working Group |
|--------|------|----------------------|---|--|---|
| 1. | WG 3 | ISO/DIS 11161 :2023 | Integration of machinery into systems | a) Shri N. Madhan, IMTMA b) Shri V. Ravindranath, M/s ITC c) Mr DB Naik, Directorate General of Mines Safety | a) Shri N. Madhan, IMTMA b) Shri V. Ravindranath , M/s ITC c) Mr Atul Bhargav , IIT Gandhinagar d) Mr DB Naik, Directorate General of Mines Safety |
| 2. | WG 5 | ISO 12100/PW 1 Amd I | General principles for design — RA & RR | a) Shri Vinay Girdhar Bansod , M/s PMMAI b) Mr Girish Alawe, M/s Schmersal volunteered c) Mr D. B. Naik, Directorate General of Mines Safety d) Mr Siddhesh Dalal, Macsafe e) Mr Sathiya Mohan. S, Ross Controls | a) Shri Vinay Girdhar Bansod , M/s PMMAI b) Mr V. Ravindranath , M/s ITC Limited, Kolkata c) Mr D. B. Naik, Directorate General of Mines Safety d) Mr Siddhesh Dalal, Macsafe e) Mr Sathiya Mohan. S, Ross Controls |
| 3. | WG 6 | ISO/FDIS 13855:2010 | Positioning of safeguards | a) Shri Girish Alawe , M/s Schmersal India Pvt Ltd b) Mr D. B. Naik, Directorate General of Mines Safety | a) Shri Girish Alawe , M/s Schmersal India Pvt Ltd. b) Mr Mudit Maheshwari, M/s ITC c) Mr D. B. Naik, Directorate General of Mines Safety |

| | | | | | |
|----|-------|------------------------|---|--|--|
| 4. | WG 6 | ISO/CD 12895:2023 | Whole body access | a) Shri Girish Alawe , M/s Schmersal India Pvt Ltd b) Mr D. B. Naik, Directorate General of Mines Safety | a)Shri Girish Alawe , M/s Schmersal India Pvt Ltd. b) Mr Mudit Maheshwari, M/s ITC Ltd. c) Mr DB Naik, Directorate General of Mines Safety |
| 5. | WG 7 | ISO/FDIS 14119:2023 | Interlocking devices associated with guards | a) Shri Girish Alawe , M/s Schmersal India Pvt Ltd b) Shri Samir Kanchan, M/s Macsafe c) Mr D. B. Naik, Directorate General of Mines Safety | a) Shri Girish Alawe , M/s Schmersal India Pvt Ltd b) Shri Samir Kanchan , M/s Macsafe c) Mr D. B. Naik, Directorate General of Mines Safety |
| 6. | WG 8 | ISO/TR 13849-3 | Markov-Modelling | a) Shri Girish Alawe , M/s Schmersal India Pvt Ltd. b) Shri Siddesh Dalal, M/s Macsafe | a) Shri Girish Alawe , M/s Schmersal India Pvt Ltd. b) Shri Siddesh Dalal, M/s Macsafe |
| 7. | WG 10 | - | Fire protection and prevention | a) Shri V. Ravindranath, M/s ITC. b) Shri Atul Bhargav, Indian Institute of Technology | a) Shri V. Ravindranath, M/s ITC b)Shri Atul Bhargav, Indian Institute of Technology Gandhinagar |
| 8. | WG 11 | ISO 14122 series | Permanent means of access to machinery | a) Shri Girish Alawe, M/s Schmersal India Pvt Ltd b) Mr Mohan Babu , Joint Chief, Directorate of Factories, Telangana State, Hyderabad. | a) Shri Girish Alawe, M/s Schmersal India Pvt Ltd. b) Mr Mohan Babu , Directorate of Factories, Telangana State, Hyderabad. |
| 9. | WG 12 | ISO/CD TR 21260 | Mechanical safety data for phys. contacts | a) Shri Girish Alawe, M/s Schmersal India Pvt Ltd | a) Shri Girish Alawe, M/s Schmersal India Pvt Ltd |

| | | | | | |
|-----|-----------------------------------|-----------|--|--|--|
| | | | mov. machinery/people | M/s BEML Limited volunteered to nominate an expert on this working group during the 9th Meeting. | M/s BEML Limited volunteered to nominate an expert on this working group during the 9th Meeting. |
| 10. | ISO/JWG between TC 199 and TC 326 | ISO 14159 | Safety of machinery — Hygiene requirements for the design of machinery | a) Shri Atul Bhargav, Indian Institute of Technology b) Mr Anant Maheshwari - Hygiene, ITC Limited. | b) Shri Atul Bhargav, Indian Institute of Technology b) Mr Anant Maheshwari - Hygiene, ITC Limited c) Mr Samir Kanchan, M/s Macsafe. |

The Committee noted the information.

- a) Mr. Vinay Bansod, Windsor Machines Ltd, in previous meeting had requested to add Mr. Amit Patel from Windsor and Mr. Pradip Vanwani from Milacron ultimately representing PMMAI to be added in WG/5. The committee agreed to it.
- b) Shri Dhiraj Podutwar from Pilz India, requested to be nominated in WG 5, WG 6, WG 7, WG 8, WG 11 and WG 12. The committee agreed to it.
- c) Shri Dinesh Saner requested to be added in WG 5, WG 6, WG 7, WG 8, WG 11 and WG 12. The committee agreed to it.
- d) Shri Biswa Rath from Prazmanna requested to be added in WG 5, WG 6, WG 11 and WG 12. The committee agreed to it.

ITEM 6 NEW SUBJECTS

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

- a) Whether the subject is financed by the proposer;
- b) Sale ability of the standard;
- c) Standards shall be user friendly; and
- d) Social needs with regards to safety, health and environment.

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

[ANNEX B.pdf](#)

The Committee noted the information.

ITEM 7 DATE AND PLACE OF NEXT MEETINGS

Proposed meeting Calendar for FY 2024-25 is as follows-

| | Q1 2024-25 | Q2 2024-25 | Q3 2024-25 | Q4 2024-25 |
|--------|----------------------------|------------------------------|------------------------------|------------------------------|
| | May | August | November | February |
| MED 40 | May 29 , 2024 Wednesday | September 23, 2024 Monday | November 22 , 2024 Friday | February 21 , 2025 Friday |

The Committee noted the information.

ITEM 8 ANY OTHER BUSINESS

1. The committee decided to make a panel that will look into the gap areas of standardization in the Safety of Machinery aspect of Indian industries. This panel will lead efforts in the development of indigenous standards for the sector. The committee recommended that the panel meeting may be organized at the earliest, so that the inputs from the Panel can be analysed in the next committee meeting. Following members volunteered to be the part of the panel-
 - a) Shri Mudit Maheshwari, ITC limited, Kolkata.
 - b) Shri Dinesh Saner, In-person capacity.
 - c) Shri Sachheendra Bapat, V-Same Engineering.
 - d) Shri Biswa Rath, Prazamanna Safety Limited Liability Partnership, Pune.
 - e) Shri Prodip Sarkar, Rockwell Automation.
 - f) Shri Mohan Babu, Directorate of Factories, Telangana State, Hyderabad.

2. The committee decided that the next meeting may be in physical mode and preferably in Pune. There being no other business, the meeting ended with a vote of thanks to the Chair and the committee.

Annex-A

ATTENDANCE

11th Meeting of Safety of Machinery Sectional Committee, MED 40

| Sl No. | Organization Name | Member Name | Email ID | Mob. No. |
|--------|--|--|---|------------|
| 1. | Ministry of Heavy Industries and Public Enterprises, Department of Heavy Industry, New Delhi | Shri Vikas Dogra (<i>Chairperson</i>) | vikasdogra71-cgo@gov.in | 9404946411 |
| 2. | Automotive Research Association of India, Pune | Shri Vyanktesh S. Khairatkar | khairatkar.shl@araiindia.com | 9881473749 |
| | | Shri Moqtik A. Bawase | bawase.erl@araiindia.com | 9970055127 |
| 3. | BEML Limited, Kolar | Shri Somegowda K. T. | somegowda.kt@bemltd.in | 9008295172 |
| | | Shri Vijay M. | gde@beml.co.in | 9731800410 |
| 4. | Bharat Heavy Electrical Limited, New Delhi | Dr Kuruva Gopanna | gopanna@bhel.in | 9489202868 |
| 5. | Central Manufacturing Technology Institute, Bengaluru | Shri Anil Kumar K. | anilkumar@cmti.res.in | 8022188266 |
| 6. | Cummins India Limited, Pune | Shri Riyazahmad Abbasalli Kazi | riyazahmad.kazi@cummins.com; riyazahmad.kazi@gmail.com | 8805981208 |

| | | | | |
|-----|---|------------------------------|---|------------|
| | | Shri Ravi Sonawala | ravi.sonawala@cummins.com | 9130087510 |
| | | Shri Santoshkumar S. Rajguru | santoshkumar.rajguru@cummins.com | 9623448245 |
| 7. | Directorate General of Mines Safety, Dhanbad | Shri D. B. Naik | dbnaik74@gmail.com; ddg.mech@dgms.gov.in | 9483544266 |
| 8. | Directorate of Factories, Telangana State, Hyderabad | Shri Y. Mohan Babu | ymbabu@rediffmail.com | 9848083872 |
| 9. | Directorate General Factory Advice Service and Labour Institutes, Mumbai | Shri N. Varadharajan | n.varadhrajan@dglasli.nic.in | 9962695659 |
| 10. | In Personal Capacity | Shri Dinesh Keshav Saner | saner.dinesh11@gmail.com | 8460518936 |
| 11. | Indian Machine Tools Manufacturers Association, Bengaluru | Shri N. Madhan | director@amttf.in | 8056324243 |
| 12. | Indian Printing Packaging and Allied Machinery Manufacturers Association, Noida | Shri Prashant Vats | admin@ipama.org | 9871999384 |
| 13. | ITC Limited, Kolkata | Shri Mudit Maheshwari | mudit.maheshwari@itc.in | 9831305335 |
| 14. | National Institute of | Dr Manoj Kumar Gupta | mkg201322@gmail.com | 9355222278 |

| | | | | |
|-----|--|------------------------------|---|------------|
| | Technology, Kurukshetra | | | |
| 15. | Pilz India Private Limited, Pune | Shri Dhiraj Podutwar | d.podutwar@pilz.in | 8390900754 |
| 16. | Plastics Machinery Manufacturers Association of India (PMMAI), New Delhi | Shri Pradip Vanwani | pradip_a_vanwani@milacron.com | 9512950018 |
| 17. | Prazamana Safetic Limited Liability Partnership, Pune | Shri Biswa Bhushan Rath | biswa_rath@prazamana.in | 9421697027 |
| | | Shri Bikram Nag | bikram_nag@prazamana.in | 9561829536 |
| | | Shri Ankit Kumar | akumar@prazamana.in | 8956479257 |
| 18. | Rockwell Automation India Private Limited, Noida | Shri Prodip Kumar Sarkar | psarkar@rockwellautomation.com; sarkar@ra.rockwell.com; prodip.sarkar@ra.rockwell.com | 9582804074 |
| 19. | Ross Controls India Private Limited, Chennai | Shri Yashpal Setiya | yashpal.setiya@rosscontrols.com | 9810308761 |
| | | Shri Sathiya Mohan S. | sathiya.selvaraju@rosscontrols.com | 9003066021 |
| 20. | Schmersal India Private Limited, Pune | Shri Gaurav Gore | ggore@tecnicum.com | 8796879724 |
| 21. | Sick India Private Limited, Mumbai | Shri Jayesh Jani | jayesh.jani@sick-india.com | 9323116438 |
| 22. | V-SAME Engineering and Training Solutions, Pune | Shri Shacheendra Bapat | shacheendrabapat@gmail.com | 8275573159 |

| 23. | BIS, New Delhi | Shri K. V. Rao (HMED) | hmed@bis.gov.in | — |
|----------------|--|------------------------------------|----------------------------------|----------|
| 24. | BIS, New Delhi | Ankita Vidhyarthi (Scientist-D) | ankita14v@gmail.com | — |
| INVITEE | | | | |
| Sl No. | Organization Name | Member Name | Email ID | Mob. No. |
| 23. | Macsafe India Solutions Private Limited, Pune | Shri Mayank Choudhary | mayank.choudhary@safe-t-sense.in | — |
| GUEST | | | | |
| Sl No. | Organization Name | Member Name | Email ID | Mob. No. |
| 24. | Ministry of Heavy Industries and Public Enterprises, Department of Heavy Industry, New Delhi | Shri Abhinav Kumar | hemt-dhi@nic.in | — |
| | | Shri Shahid Qayoom | shahid.qayoom@nic.in | — |
| | | Shri Shubhankit | shubhankit.hei@gov.in | — |

NOTE — Attendance of member organisations updated in Standards Portal of BIS. Members are requested to check and revert if their attendance is not showing in their profile in the portal.