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# BUREAU OF INDIAN STANDARDS

**AGENDA**

**Gas Cylinders 33rd Meeting**

**Sectional Committee, MED 16**

**Date, Day & Time : (Physical Meeting, Venue- IIT Indore, Madhya Pradesh)**

**20th December 2024, Friday, 10:00 AM**

#### Item 0 GENERAL

#### 0.1 Welcome remarks by Head (Mechanical Engineering Department)

#### 0.2 Opening remarks by Chairman

**Item 1 CONFIRMATION OF THE MINUTES OF THE LAST MEETING**

The minutes of 32nd meeting of Gas Cylinders Sectional Committee MED 16, held in joint session with 31st meeting of Gas Cylinder Valves & Fittings SubCommittee, MED 16:1, Generators, 33rd meeting of Low Pressure Gas Cylinders SubCommittee, MED 16:2 & 32nd meeting of Dissolved Acetylene Pipe Lines And High Pressure Gas Cylinders SubCommittee, MED 16:3 held on 25-26 July, 2024 physically in Jodhpur (Rajasthan) were circulated to the members vide our letter no. MED 16 dated 03 September 2024. No comments have been received.

*Committee may confirm the minutes.*

**Item 2 ACTIONS ARISING OUT OF THE PREVIOUS MEETING**

**2.1** The actions taken on the minutes of the 32nd Meeting of Gas Cylinders Sectional Committee is given below:

| **Sl No** | **Ref \* No.** | **Decision during 32nd meeting** | **Action taken/Status** |
| --- | --- | --- | --- |
| 1 | Item 2.1 Sl. No. 1 | Report on the modified Foot-ring & Top-ring for LPG Cylinder as per IS 3196-1:2013 and modified SC valve after field testingShri TD Sabu from LERC informed that the project is already under process and agreed to provide the report within 3 months. | Report not received yet. Reminder sent vide email dt. 29 November 2024.*Committee may discuss and decide.* |
| 2 | Item 2.1 Sl. No. 3 | **2**MED 16 (15992) Draft Indian Standard ‘ Gas cylinders welded low carbon steel containers exceeding 250 litres and up to 1000 litres water capacity for the transport of LPG design and construction’Shri Manvinder Singh of M/s Bhiwadi Cylinders agreed to provide the revised draft within 10 days.MED 16(15993) on ‘Combo Valve for 990 Litres water capacity cylinders’Shri SK Dey of M/s Bhiwadi Cylinders agreed to provide the revised draft within 10 days. | **2**The document was sent for WC for 30 Days on 17 October 2024. Last date of comment was 16 November 2024.[*IS 15992 WC.pdf*](https://drive.google.com/file/d/1F_WBxx2r41GL2cnkvGP_Sa1OePRqLJhT/view?usp=drive_link)Comment received from Shri K.C.Thirumalai of M/s Sahuwala Cylinders as attached below:[Suggestion against 425Kg Draft of Indian Standards - Reg.pdf](https://drive.google.com/file/d/1E8C7riZYN3AKGavUShbcTItoia293LLE/view?usp=drive_link), [M.E.D BIS.pdf](https://drive.google.com/file/d/1m9PZul45H_k89GtSpt78gsIurpHumLd_/view?usp=drive_link)A comment also received from Super Technofab Private Limited as attached below:[1000L draft standard comments.pdf](https://drive.google.com/file/d/1qU3ap7ivq-oX2czduwqmR1fFsv08yRGW/view?usp=drive_link)*Committee may discuss and decide.*Draft received from Shri SK Dey of M/s Bhiwadi Cylinders vide email dated 24 September 2024.[Fwd\_ MED 1615993 wc(3) Comments resolved\_.pdf](https://drive.google.com/file/d/1HfJjWrcPzltYa6V-9VspxsSlbsBzr6nC/view?usp=drive_link)[MED16\_(15993)\_WC (3).docx](https://docs.google.com/document/d/1GCxjlE83rfuTMl6bSn8QYz-YVk3cfi9a/edit?usp=drive_link&ouid=116383954287804013918&rtpof=true&sd=true)Comments raised by MS were resolved by Shri SK Dey and changes were incorporated into the draft. Draft sent to all members vide email dt. 27 Sept 2024.[[MED16 15993] Regarding draft standard for Welded Low Carbon Steel Containers Above 250 Litres And Not Exceeding 1 000 Litres Water Capacity For The Transport Of LPG — Specification.pdf](https://drive.google.com/file/d/15Lc0B_we-d_uT_H_W6bqo9lz5-9MMmgp/view?usp=drive_link)[MED16\_(15993)\_Draft.docx](https://docs.google.com/document/d/1t01VGypfSy2I1t3mqS4-YEBAvY7KXOI0/edit?usp=drive_link&ouid=116383954287804013918&rtpof=true&sd=true)Comment received from Shri Y.K. Behani from Tekno Valves, Kolkata dated 06 Nov 2024 are given below:[FW\_ [MED16 15993] Regarding draft standard for Welded Low Carbon Steel Containers Above 250 Litres And Not Exceeding 1 000 Litres Water Capacity For The Transport Of LPG — Specification.pdf](https://drive.google.com/file/d/1Cq6yLZfyyMGPvUHT39tq7S7SCRa4xXgs/view?usp=drive_link)[Comments from TV 30 10 24.xlsx](https://docs.google.com/spreadsheets/d/1zk0LRo_7kk2Hc596aFJ9xP7rW4t4CAAQ/edit?usp=drive_link&ouid=116383954287804013918&rtpof=true&sd=true)[MED16\_(15993)\_Draft (1)YKB.docx](https://docs.google.com/document/d/1fBSl7-399JWAz1_6PY6j9y8C5UwfNeeP/edit?usp=drive_link&ouid=116383954287804013918&rtpof=true&sd=true) Comments sent to Shri SK Dey for recommendations.Revised Draft received vide email dt. 05 December 2024. [MED16\_(15993)\_Draft from SKDey 05-12-24.docx](https://docs.google.com/document/d/1DAI60JU9P0PLLgPycRgJYQVuEHPiZptb/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)*Committee may approve the draft for Wide Circulation.* |
| 3 | Item 2.1 Sl. No. 3 | **2**Studies to ascertain maximum service life of LPG cylinders (as per IS 3196-1) and reconditioned LPG cylinders (as per IS 13258) cylinders (as per IS 3196-4) filled with chlorine and ammoniaShri TD Sabu of LERC informed that report has been made and agreed to share the same to MED 16 committee.Shri Chandrakant Ghatol summaried the report-“The existing standards for Periodic inspection are sufficient to claim that a cylinder is fir for use. Also their is no correlation between the life of the cylinder and it’s material properties and there is no significant change.”Committee after discussing the issue at length decided that Panel formulated for revision of IS 3196-1 will go through the report and put up a proposal to the committee for determining the service life.Committee also approved addition of Shri Md. Yunus Geelani of M/s of M/s Shri Shakti Cylinders Private Limited, Hyderabad.The Panel constituted is as follows- a) Shri Siva shankar of M/s HPCL, Mumbai (convenor)b) Shri Manwinder Singh of M/s Bhiwadi Cylinders Pvt Ltd, New Delhic) Shri Aakash Agarwal of M/s BPCL, Mumbaid) Shri Chandrakant Ghatol of M/s IOCL, Mumbaie) Shri T D Sabu of LERC, Bengaluruf) Shri M.L Fatehpuria of M/s Supreme Cylinders Ltd, Delhig) Representative from PESO and h) Shri Prasoon Yadav, BISi) Shri Md. Yunus Geelani of M/s Shri Shakti Cylinders Private Limited, HyderabadPanel to discuss the same during Physical meeting planned on 12 August, 2024 at IOCL, Mumbai.Studies to ascertain maximum service life of cylinders (as per IS 3196-4) filled with chlorine and ammoniaCommittee decided that since their is not much difference between IS 3196-1 and 3196-4, so study is not necessarily needed to be carried out separately for IS 3196-4 however decision for the same will be taken once results of the study for 3196-1 are examined. | **2**Panel meeting held on 12 August 2024. Outcomes of the meeting summarised by Shri Chandrakant Ghatol is attached herein.[IS 3196-1 revision\_12082024.docx](https://docs.google.com/document/d/1gsgC89hTH8sOEVSruHDejsD28BTKKtiB/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true), [RE\_ Panel meeting for Revision of IS 3196-1- 2nd Meeting & IS 9798 Revision - Panel Meeting, on 12.08.2024 - at IOCL HO.pdf](https://drive.google.com/file/d/1nFL9yY72t7zaaFIjfDIshff7nRvd_GJq/view?usp=sharing)2nd Panel meeting held on 10 December 2024 where discussions were held on IS 17613. Discussions on IS 3196-1 could not be held.Another Panel meeting required.*Committee may discuss and decide.*BIS has also sanctioned an R&D project on the same subject.*Committee may note the information.* |
| 4 | Item 2.1 Sl. No. 4 | Revision of **IS 7241:1981**‘Glossary of terms used in gas cylinder technology (first revision)’Committee discussed the issue of temperature of NTP (either 0deg C or 15 deg C or 20 deg C) at length and decided that MS should send a mail regarding determining the temperature at NTP to all members for recommendations.Committee decided that if a change is required in NTP same will be brought about by an amendment to the current draft under Publication. | The document was published in August 2024 and has been attached below:[IS 7241\_2024.pdf](https://drive.google.com/file/d/1Py1nxBc5Ndqgbvf0PK9aAiiG_bA3Dgr-/view?usp=drive_link)*Committee may note the information.* |
| 5 | Item 2.1 Sl. No. 5 | Draft Revision of IS 3196-1 ‘Welded low carbon steel cylinders exceeding 5 litres water capacity for low pressure liquefiable gases: Part 1 cylinders for liquefied petroleum gases (LPG) - Specification (Sixth Revision)’Panel agreed to incorporate comments by Shri Geelani of removing ‘not’ in 18.2.7 in the revision draft.Panel agreed for a physical meeting to be held on 12 August at IOCL, Mumbai for discussion on the above draft.The Panel constituted is as follows- a) Shri Siva shankar of M/s HPCL, Mumbai (convenor)b) Shri Manwinder Singh of M/s Bhiwadi Cylinders Pvt Ltd, New Delhic) Shri Aakash Agarwal of M/s BPCL, Mumbaid) Shri Chandrakant Ghatol of M/s IOCL, Mumbaie) Shri T D Sabu of LERC, Bengaluruf) Shri M.L Fatehpuria of M/s Supreme Cylinders Ltd, Delhig) Representative from PESO and h) Shri Prasoon Yadav, BIS | *(See also Item 2.1 S. No. 3)*Panel meeting held on 12 August 2024. Outcomes of the meeting summarised by Shri Chandrakant Ghatol is attached herein.[RE\_ Panel meeting for Revision of IS 3196-1- 2nd Meeting & IS 9798 Revision - Panel Meeting, on 12.08.2024 - at IOCL HO.pdf](https://drive.google.com/file/d/1zpx1KeOwLn2FLGpWxxhF9bD6f4u_dokb/view?usp=drive_link)[IS 3196-1 revision\_12082024.docx](https://docs.google.com/document/d/1ptQMF2XkTFY75zqAiuBpE4qqwh_vh4PX/edit?usp=drive_link&ouid=116383954287804013918&rtpof=true&sd=true)2nd Panel meeting held on 10 December 2024 where discussions were held on IS 17613. Discussions on IS 3196-1 could not be held.Another Panel meeting required.*Committee may discuss and decide.* BIS has also sanctioned an R&D project on the same subject.*Committee may note the information.* |
| 6 | Item 2.1 Sl. No. 6 | **3**Draft Standard MED 16(22706) CRYOGENIC VESSELS- VALVES FOR CRYOGENIC VESSELSCommittee finalised the document for publication | **3**Standard has been published in July 2024.[IS 18608 2024.pdf](https://drive.google.com/file/d/1mfdLxYH2YxWjVLfOisXfP9UQKcKwAs_x/view?usp=drive_link)*Committee may note the information.* |
| 7 | Item 2.1 Sl. No. 7 | **3**Draft Indian Standard Code of practice for steel cylinders for compressed gases Part 6 Liquefied chlorine gas ( First Revision of IS 8198-6)Committee approved the draft for WC for 1 month. | **3**The document (MED/16/26961) was wide circulated on 21 November 2024 for 30 days. Last date of comment is 20 December 2024.[IS 8198-6\_WC.pdf](https://drive.google.com/file/d/10Wh5kUv3W_AyTcKEwb6LWZnBhOwczNF_/view?usp=drive_link)No comments received.*Committee may approve the document for Publication.* |
| 8 | Item 2.1 S. No. 8 | **3**Draft revision of IS 8198 (Part 7) to (Part 11)Following standards have been published.[IS 8198 (Part 7) \_2024.pdf](https://drive.google.com/file/d/1AN6AgvHMNbHuq55JsZkGSAUlkuObg_00/view?usp=drive_link)[IS 8198 (Part 9) \_2024.pdf](https://drive.google.com/file/d/178nsGwpT3u7tDZT027O7mVGgwH5R74g4/view?usp=drive_link)[IS 8198 (Part 11) \_2024.pdf](https://drive.google.com/file/d/1LTke7FOx5YU4z--HzVMtpk8wCQVX_kLw/view?usp=drive_link)IS 8198-8 & IS 8198-10 under the final stage of publication. | **3**Remaining standards have also been published and are attached below.[IS 8198 (Part 8)\_2024.pdf](https://drive.google.com/file/d/1BU1-_6-sifFgoSxqw8Gpi7ZEcD42xdh5/view?usp=drive_link)[IS 8198 (Part 10)\_2024.pdf](https://drive.google.com/file/d/1b3KpkLSAMCUYhxKmTunbhHa8BtbxWGNa/view?usp=drive_link)*Committee may note the information.* |
| 9 | Item 2.1 Sl. No. 11 | **3**MED 16(20154) Revision of IS 16017 ‘Transportable gas cylinders – Periodic inspection and testing of seamless aluminum alloy gas cylinders’Draft under final stages of Publication. | **3**The document has been published in July 2024.[IS 16017\_2024.pdf](https://drive.google.com/file/d/1OdW7eVPFtRDnhnq7ZTO9T6Ao4mbzKdvx/view?usp=drive_link)*Committee may note the information.* |
| 10 | Item 2.1 Sl. No. 12 | **3**Committee deliberated the issue at length and following decisions were made.1. **Valves for Hydrogen (COMPRESSED GASEOUS HYDROGEN CGH2 AND HYDROGENNATURAL GAS BLENDS VALVE INTEGRATED WITH SOLENOID OPERATION REMOTELY CONTROLLED FOR AUTOMOTIVE USE - SPECIFICATION)**-

Committee approved the document for Wide Circulation with incorporated changes for 1 month.1. **Valves as per IS 3224 and for Bio-CNG**-

 Shri YK Behani informed that Outlet 21 has been added in draft amd of IS 3224 to cater to Bio-CNG.However the Committee also requested that the Panel should look forward to have valves made of different materials such as Stainless steels which may be more suitable for use with Bio-CNG.The panel is as follows-1. Shri Y.K Behani of M/s Tekno Valves(Convener)
2. Shri Ayush Pawar of M/s EKC
3. Shri Pramod Sangwai of M/s Rama Cylinders
4. Shri Shailendra Dewangan of M/s TATA Motors
5. Dr S.S Thipse of ARAI
6. Dr N.C Bhatia of M/s Jayfee Cylinders
7. Shri S.J Vispute of M/s Vanaz
8. Shri Vivek Jain of M/s Minda Emer
9. Dr. YS Jhala of M/s IOCL, Panipat Refinery Expert from PCD dept of BIS (PCD 03 TC)
10. Shri Arun Kumar of M/s Maruti Suzuki India Limited

Decision on **Draft amd 2 for IS 3224** to be taken once panel formulated for recommendations of burst pressure for cylinders as per IS 15490 provide their inputs(*See Item 2.1 S.No.19 of Agenda of 32nd meeting of MED 16 committee*).Committee approved the comments and their recommendations from M/s Tekno Valves.Committee approved the draft amendment 1(with incorporated comments) to IS 3224 for Publication.[IS 3224\_Amd1\_WC\_commentsIncorporating (1).docx](https://docs.google.com/document/d/1ybk2HwvVycGPZ8PWOAXYTMX5kWeHaX3S/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true) 3. **Valves as per IS 16988-** Committee approved the draft amendment for Publication.4. **Cylinders as per IS 15490-** Committee requested MS to send a mail regarding changing of Burst Pressure to all stake holders for comments. Panel to take a decision after that. Committee also requested Dr. NC Bhatia to provide his recommendations via email so that it can be circulated to Panel members for their recommendations.Panel constituted is as follows-1. Shri S.J. Vispute of M/s Vanaz Engineers Limited, Pune (Convener)
2. Shri ASVS Prasad of M/s Everest Kanto Cylinder Limited, Mumbai
3. Shri S Murali of M/s Mahanagar Gas Limited, Mumbai
4. Shri Rakesh Kishan Agrawal of M/s Indraprastha Gas Limited, New Delhi
5. Shri Pramod Sangwai of M/s RAMA cylinders
6. Shri YK Behani of M/s Tekno Valves
7. Shri Arun Kumar of M/s Maruti Suzuki India Limited
8. Dr. NC Bhatia of M/s Jayfe Cylinders
9. Shri Ghanshyam Goyal of M/s Jayfe Cylinders
 | 1. The document was put up for wide circulation on 08-08-2024. Last date of comment was 07 September 2024.

[Doc 25227.pdf](https://drive.google.com/file/d/1KCWVPjv4HOJSXVYM49UyC_YeWAxWtc4p/view?usp=drive_link)Comment received from Shri Rakesh Kumar, Sc.-D, CMD -3 has been attached below.[Comment Detail of Doc 25227.pdf](https://drive.google.com/file/d/1lbV5JCB7UMIqff0R-ibXexADEHTJPCGK/view?usp=drive_link)*Committe discuss the comment and finalise the draft for publication.*1. Draft amendment has been published in November 2024.

*Committee may note the information.*1. Draft amendment (MED/16/25994) under final stages of Publication.

*Committee may note the information.*1. Panel meeting conducted on 8th August, 2024 physically at Manak Bhawan, New Delhi. During the meeting deliberations were held regarding draft revision to IS 7285-1, IS 7285-2 and IS 15490.

Recommendations for IS 15490 are attached below.[RAMA Comparision of ISO 9809-1 - 2019 VS ISO 11439 -2013 VS IS 15490-2017 .xls](https://docs.google.com/spreadsheets/d/1CYQMelqaAOYfnS6wbZSVfA7XoMi5vmfU/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true), [IS 15490 2017 amd 2 EKC.doc](https://docs.google.com/document/d/1wEtgwyyFbT33RT5HGQBtyUlUWtabfrZk/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)Draft amendment based on the recommendations of the Panel attached herein.[MED16 IS 15490 Amd2 Prepared.docx](https://docs.google.com/document/d/1F1SbB5e8RHzrmEBSS89YFDsMHxC_TVIt/edit?usp=sharing&ouid=113832758106077139668&rtpof=true&sd=true)*Committee may discuss and decide.* |
| 11 | Item 2.1 Sl. No. 13 | **3**Withdrawal of IS 3710:1978 ‘Filling ratios for low pressure liquefiable gases contained in cylinders (First Revision)’ after Amd of IS 15975:2020 ‘Gas Cylinders-- Conditions for Filling Gas Cylinders ( First Revision )’Committee reviewed the draft amendment received from Shri Manu Nigam on 21 July, 2024 and approved the draft amendment 1 to IS 15975 for WC for 1 month | **3**The document (MED/16/22407) was put up for wide circulation for 30 days on 29-10-2024. Last date of comment was 28 November 2024.[Amd 1 IS 15975.pdf](https://drive.google.com/file/d/1mHHnU20RkrSXdrLItwLblkFlaLvEhE1A/view?usp=drive_link)No comment received.*Committee may approve the document for publication and approve withdrawal of IS 3710 once amd 1 to IS 15975 is published.* |
| 12 | Item 2.1 Sl. No. 14 | **3**MED 16 (20199) Draft revision of ‘INSPECTION OF LOW PRESSURE WELDED STEEL GAS CYLINDERSOTHER THAN LPG CYLINDERS IN USE CODE OF PRACTICE IS 5845’Committee finalised the document for publication. | **3**The document has been published in August 2024.[IS 5845 2024.pdf](https://drive.google.com/file/d/1zOVdbzZ1eZ_HQ-tY4Lf-5qnfI-hL9Hfz/view?usp=drive_link)*Committee may note the information* |
| 13 | Item 2.1 Sl. No. 15 | **3**Draft Revision of IS 7285(Part 1) ‘Refillable seamless steel gas cylinders - Specification: Part 1 normalized steel cylinders (Fourth Revision)’ as per comparative analysis of ISO 9809-3:2019 & ISO 13769:2018 VS IS 7285 (Part 1) : 2018 as provided by M/s EKC.Committee requested MS to create a draft revision based on these comments and circulate to all members for 10 days. If no comments are received, draft to be put up for WC for 1 month. | **3**Draft revision attached below.Comments from MS added as comments. Shri Ayush Pawar of M/s EKC may kindly provide recommendations on the same.[MED16 IS 7285-1 wc.docx](https://docs.google.com/document/d/1mI6zlcuJrhIHPpuSvsVpeW2Dxuz3FLUm/edit?usp=sharing&ouid=113832758106077139668&rtpof=true&sd=true)*Committee may approve the draft for Wide Circulation after recommendations from Shri Ayush Pawar of M/s EKC*Draft Amd 3 of IS 7285 (Part 1) also incorporated in draft revision. *Committee may drop MED 16 (17305)/Amd3 of IS 7285 (Part 1).* |
| 14 | Item 2.1 Sl. No. 16 | **3**Draft Revision of IS 7285(Part 2) ‘Refillable seamless steel gas cylinders - Specification: Part 2 quenched and tempered steel cylinders with tensile strength less than 1 100 mpa (112 Kgf/mm²) (Fourth Revision)’ as per comparative analysis of ISO 9809-1:2019 & ISO 13769:2018 VS IS 7285 (Part 2) : 2018 as provided by M/s EKC.Committee requested MS to create a draft revision based on these comments and circulate to all members for 10 days. If no comments are received, draft to be put up for WC for 1 month. | **3**Draft revision under preparation.*Committee may note the information* |
| 15 | Item 2.1 Sl. No. 17 | **3**Withdrawal of IS 8775:1978 ‘Filling pressure and corresponding developed pressure for permanent gases contained in cylinders’ after Amd of IS 15975:2020 ‘Gas Cylinders-- Conditions for Filling Gas Cylinders ( First Revision )’*See also Item 2.1 Sl. No. 11*Committee reviewed the draft amendment received from Shri Manu Nigam on 21 July, 2024 and approved the draft amendment 1 to IS 15975 for WC for 1 month | **3***( See also Item 2.1 S. No. 11)*The document (MED/16/22407) was put up for wide circulation for 30 days on 29-10-2024. Last date of comment was 28 November 2024.[Amd 1 IS 15975.pdf](https://drive.google.com/file/d/1mHHnU20RkrSXdrLItwLblkFlaLvEhE1A/view?usp=drive_link)No comment received.*Committee may approve the document for publication and approve withdrawal of IS 3710 once amd 1 to IS 15975 is published.* |
| 16 | Item 2.1 Sl. No. 18 | **3**Draft Amd to IS 15490 ‘Seamless steel cylinders for on - Board storage of compressed natural gas as a fuel for automotive vehicles - Specification (First Revision)’ as per comparative analysis of ISO 9809-1:2019 & ISO 13769:2018 VS IS 15490:2017 as provided by M/s EKC*See decision taken at Item 2.1 Sl. No. 10 point 4*Committee also discussed the issue regarding point point c. of Cl. 9.1 of IS 15490, “it is manufactured from a steel of different specified chemical composition or manufacturer of the material changes”. It was proposed to remove the part, “manufacturer of the material changes”. However, Chairman were of the opinion since this was a safety related issue, this part may not be removed.  | **3***( See also Item 2.1 S. No. 10)*Panel meeting conducted on 8th August, 2024 physically at Manak Bhawan, New Delhi. During the meeting deliberations were held regarding draft revision to IS 7285-1, IS 7285-2 and IS 15490.Recommendations for IS 15490 are attached below.[RAMA Comparision of ISO 9809-1 - 2019 VS ISO 11439 -2013 VS IS 15490-2017 .xls](https://docs.google.com/spreadsheets/d/1CYQMelqaAOYfnS6wbZSVfA7XoMi5vmfU/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true), [IS 15490 2017 amd 2 EKC.doc](https://docs.google.com/document/d/1wEtgwyyFbT33RT5HGQBtyUlUWtabfrZk/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)*Committee may discuss and decide.* |
| 17 | Item 2.1 Sl. No. 19 | **3**Draft revision of IS 16507 ‘Transportable gas cylinders cascade - Specification’ based on revised ISO 10961:2019 ‘Gas cylinders — Cylinder bundles — Design, manufacture, testing and inspection’Shri Aviral Rajeev and Shri Bimal Karan of M/s Indraprastha Gas Limited, New Delhi agreed to review the standard and the comments received on IS 16507 and provide the draft revision based on their recommendations.[IS 16507 comments.pdf](https://drive.google.com/file/d/1ANshB7ZaMmOBaYqgNQ8Y74vem3RTH-NW/view?usp=sharing) | **3**Revised draft not received yet.Reminder send vide email dt. 06 December, 2024.*Committee may discuss and decide* |
| 18 | Item 2.1 Sl. No. 20 | **3**Draft standard based on ISO 20475:2018 ‘Gas cylinders — Cylinder bundles — Periodic inspection and testing’Committee decided to formulate a Panel for formulation of Draft Indian Standard. The Panel Constituted is as follows-1. Shri Aviral Rajeev of M/s Indraprastha Gas Limited, New Delhi (Convenor)
2. Shri Bimal Karan of M/s Indraprastha Gas Limited, New Delhi
3. Shri Ayush Pawar of M/s Everest Kanto Cylinder Limited, Mumbai
4. Shri A.S.V.S. PRASAD of M/s Everest Kanto Cylinder Limited, Mumbai
5. Shri Pramod W Sangwai of M/s Rama Cylinders Private Limited, Mumbai
6. Shri Naveen Kumar Jain of M/s Time Technoplast Limited, Mumbai
7. Shri Dharmesh Sailor of M/s Gujarat Gas Company Limited, Ahmedabad
8. Shri S. Murali of M/s Mahanagar Gas Limited, Mumbai
9. Representatives from M/s Mecelec

Committee also requested members from M/s IGL to provide contact details of Retesting agencies for invitation to the Panel.[IS ISO 20475 2021 Periodic Testing of Cascades.docx](https://docs.google.com/document/d/1RW4Yros-ewV3Sbs7f5BiJrhC2DywtKPE/edit?usp=drive_link&ouid=113832758106077139668&rtpof=true&sd=true) | **3**Revised draft not received yet. Panel meeting not held yet.Reminder send vide email dt. 06 December, 2024.*Committee may discuss and decide* |
| 19 | Item 2.1 Sl. No. 21 | **3**Draft standard based on ISO 11623:2015 ‘Gas cylinders — Composite construction — Periodic inspection and testing’Shri Ayush Pawar of M/s Everest Kanto Cylinder Limited, Mumbai agreed to provide revised draft in line with ISO 11623: 2023.Draft received to be sent to all members for 15 days. If no comments are received, draft will be put up for WC.[IS ISO 11623-2021 Composite Gas Cylinders-Periodic Inspection and Testing-Code of Practice.docx](https://docs.google.com/document/d/19prfI2B698BdeNxILq83dqs7736viVpj/edit?usp=drive_link&ouid=113832758106077139668&rtpof=true&sd=true)[ISO 11623;2023 ed.3 - id.76501 Publication PDF (en)\_watermark.pdf](https://drive.google.com/file/d/1FG_vtsKblLYFVwTcKHDJI4otQitK756D/view?usp=drive_link) | **3**Revised draft not received yet. Reminder send vide email dt. 06 December, 2024.*Committee may discuss and decide* |
| 20 | Item 2.1 Sl. No. 22 | **3**Draft revision of IS 16735 ‘Cylinders for On-Board Storage of Compressed Gaseous Hydrogen and Hydrogen Blends as a Fuel for Automotive Vehicles — Specification’ inline with ISO 19881:2018Panel formulated to provide recommendations to this draft standard.1. Dr. NC Bhatia of M/s Jayfe Cylinders(Convenor)
2. Shri Ayush Pawar of M/s Everest Kanto Cylinder Limited, Mumbai
3. Shri A.S.V.S. PRASAD of M/s Everest Kanto Cylinder Limited, Mumbai
4. Shri Pramod W Sangwai of M/s Rama Cylinders Private Limited, Mumbai
5. Shri Ghanshyam Goyal
6. Shri Naveen Kumar Jain of M/s Time Technoplast
7. Shri Vivek Jain of M/s Minda Emer
8. Shri Rajesh Kumar of M/s Maruti Suzuki India Limited, Gurugram
9. Shri Prasoon Yadav of BIS

Panel agreed to convene a meeting physically in Manak Bhawan, BIS on 08th August, 2024.*Background:*Draft (MED/16/24593) was put up for WC on 07.03.2024 for 1 month. Comments were received. Subsequently comments forwarded to Shri Ghanshyam Goyal of M/s Jayfe Cylinders vide email dt. 23.04.2024[16735comments.pdf](https://drive.google.com/file/d/16Y9Dl-TK3UGe9_JVcBRVEx7rcD8-RfiZ/view?usp=sharing), [Draft revision IS 16735 (1).pdf](https://drive.google.com/file/d/1YyRL39tM1ZO9lrSvH3kTfewx3aZ8Wl5x/view?usp=sharing), [ISO\_19881\_2018(E)-Character\_PDF\_document (1).pdf](https://drive.google.com/file/d/1bs_WwwVVIUrG8zVc_Xmd1Y2etedtxj_4/view?usp=sharing)Recommendations received.*Committee may confirm the above recommended changes and approve the draft for WC for 1 month.**Recommendations received from Shri Rajesh Kumar, MSIL vide email dt. 24 July, 2024.* [Email MSIL.pdf](https://drive.google.com/file/d/104Gx-BTD_19-uvpuMe8EkDlOvtPsSF2N/view?usp=sharing)*,* [MSIL observations on MED-16 Hydrogen cylinder standard.xlsx](https://docs.google.com/spreadsheets/d/1qtPM-QnL8U8D1IPAXAf7Ml5cNA0auMrC/edit?usp=sharing&ouid=113832758106077139668&rtpof=true&sd=true) | **3**Panel meeting conducted on 08 August 2024. Outcomes of the meeting are attached below.[16735 email.pdf](https://drive.google.com/file/d/1X3W2Xmby1YKXwpCC0DofxlY0CYemFYhg/view?usp=sharing)[IS 16735 2018 (3).docx](https://docs.google.com/document/d/192R8_BrW9b2wBpSYBX9oCtUI_x30IneL/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true), [ISO\_19881\_2018(E)-Character\_PDF\_document (1) (1).pdf](https://drive.google.com/file/d/1MO2yP1zcYtVohsMdLIjNmp5ds8d-bS9W/view?usp=sharing) [EKC recommendations on MSIL observations on MED-16 Hydrogen cylinder standard.pdf](https://drive.google.com/file/d/1jGuDxvN8LBUbHbtWXaDbasYZtwttXUlJ/view?usp=sharing)During the meeting Shri NC Bhatia agreed to provide a revised draft. Revised draft received vide email dt. 20 September, 2024.[Email\_ Regarding draft revision of IS 16735.pdf](https://drive.google.com/file/d/1n27ANMvBFlwAXHM1xoWE3197KJpcfpFE/view?usp=sharing) [IS 16735 revised draft.docx](https://docs.google.com/document/d/1n3b7nkRyCijxp1MdQ0ik78TeXL9NhL0S/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)In the above mail, Shri NC Bhatia has recommended to refer GB35544- R134-Hydrogen. in the draft.16735Same is being procured by BIS.Another Panel meeting is required to finalise the draft.*Committee may discuss and decide.*Since decision on the draft could not be finalised and WC draft is being formulated again from scratch. [IS 16735\_WC copy.pdf](https://drive.google.com/file/d/1ZQbbH3hcxGLfBWF_lqG4UgudHoVRQlyY/view?usp=sharing)*Committee may approve to drop the document MED 16 (24593).* |
| 21 | Item 2.1 Sl. No. 24 | **1**Draft revision of IS 16484 ‘Liquid off - Take valve fitting to gas cylinders or tanks (Mobile Or Static) for liquid petroleum gas (LPG) - Specification’ based on revised ISO 15995:2019 & BS EN 13175:2019Panel convened the meeting on 26th July, 2024 and provided their recommendations on the comments provided by Shri YK Behani.Committee discussed the issue at length and approved the recommendations of the Panel on comments provided by Shri YK Behani.Changes as approved during the meeting to be incorporated in the draft and draft to be sent for WC.[**Comments on Draft Specification IS 16484.docx**](https://docs.google.com/document/d/153XtchnivTAauucQqyuAe_NOY8b-i_5R/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)The reconstituted Panel is as follows-a)Shri Sunil K Dey of M/s Bhiwadi Cylinders (Convener)b) Shri Aakash Agarwal of M/s BPCLc) Shri Siva Shankar of M/s HPCLd) Shri Chandrakant Ghatol of M/s IOCLe) Shri Y.K Behani of M/s Tekno Valves | **1**.Draft revision is being prepared and will be added in the final agenda Test no. 2, 5, 8 not mentioned in the draft standard.Annex D not referenced anywhere in the standard.[IS 16484\_2024\_WC - prepared.docx](https://docs.google.com/document/d/1FkKePT3MSzRHmDn27KU_kj0uFMotXmIL/edit?usp=sharing&ouid=113832758106077139668&rtpof=true&sd=true)*Panel may provide recommendations on the same.**Committee may approve the document for WC.* |
| 22 | Item 2.1 Sl. No.25 | Revised draft of IS 16646 ‘Transportable refillable fully wrapped composite cylinders for liquefied petroleum gas (LPG) - Specification’ based on revised ISO 11119-3:2020[16646\_2017\_Reff2022.pdf](https://drive.google.com/file/d/1UDg4Vyco_wKtDJQByDrir5PSAqD-RKf5/view?usp=sharing), [word file IS 16646 (edited - NJ- 6-7-2023).docx](https://docs.google.com/document/d/1x-aT6ZMRMPaiIS9X7JuMNXBWgs-LZBj_/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)[IS-ISO 11119-3\_2020.pdf](https://drive.google.com/file/d/1fcx0Zt7cgW5Kn5wW3UPayCcZypEWGblt/view?usp=drive_link)Committee approved the draft for Wide Circulation for 1 month | Draft revision is under preparation.*Committee may note the information* |
| 23 | Item 2.1 Sl. No.26 | **1**Draft revision of IS 12300:1988 ‘Valve fittings for refrigerant cylinders – Specification’Committee finalised the draft for publication. | **1**The document has been published on October 2024.[IS 12300\_2024.pdf](https://drive.google.com/file/d/1ZGapdTI_PVLjmJu3P-t__JBwTv0GNhQA/view?usp=drive_link)*Committee may note the information.* |
| 24 | Item 2.1 Sl. No.27 | **2**Draft revision of IS 7142 : 1995 ‘Welded low carbon steel cylinders for low pressure liquifiable gases not exceeding 5 litre water capacity – Specification’ Committee approved the draft revision MED 16(23485) for publication. Committee approved to drop MED 16(17246) | **2**Draft revision sent to Publication and is attached herein.[MED16\_(23485)\_IS 7142\_F-Draft Done.docx](https://docs.google.com/document/d/1h8iIo0Z2fyZkV9Gata1iOiZilcpZRCdW/edit?usp=sharing&ouid=113832758106077139668&rtpof=true&sd=true)*Committee may note the information.* |
| 25 | Item 2.1 Sl. No.28 | Development of standard on ‘Non-refillable AL alloy Gas cylinder as per ISO 11118 [Gas cylinders — Non-refillable metallic gas cylinders — Specification and test methods]’Panel agreed to provide recommendations within 1 month.Panel Agreed to convene a meeting in Manak Bhawan, New Delhi on 8th August, 2024 along with discussion on draft revision of IS 16735.The Panel constituted is as follows-1. Dr. NC Bhatia of M/s Jayfe Cylinders
2. Shri Ghanshyam Goyal of M/s Jayfe Cylinders
3. Shri ASVS Prasad of M/s EKCT
4. Shri Sumir Parikh of M/s Al-Can Exports
 | Panel meeting conducted on 8th August, 2024 physically at Manak Bhawan, New Delhi. During the meeting deliberations were held regarding draft revision to IS 7285-1, IS 7285-2 and IS 15490. Due to paucity of time discussions could not be held on this draft.Another Panel meeting required which could be held along with discussion of IS 16735 revision.*Panel may provided a suitable date and place for holding the Panel meeting.**Committee may discuss and decide.* |
| 26 | Item 2.1 Sl. No. 29 | **1**Pressure Relief Valves For Cylinder Valves And For Transportable Refillable CylindersCommittee approved draft document for PRV valves incorporating recommendations by Shri YK Behani on comments provided by Shri SK Dey for Wide Circulation for 1 month.Draft revision of IS 5903 [Types of Safety Device for Gas Cylinders and Gas Cylinder Valves] based on BS EN 13953:2020 [LPG equipment and accessories. Pressure relief valves for transportable refillable cylinders for Liquefied Petroleum Gas (LPG)]Committee discussed the issue at length and approved the draft for Wide Circulation for 1 month. | Draft revision under preparation.*Committee may discuss and decide.*Draft revision MED 16(27056) put up for Wide Circulation on 05 December, 2024 for 30 days.*Committee may note the information.* |
| 27 | Item 2.1 Sl. No.30 | **1**Draft revision of IS 9798 (Low Pressure Regulators For Use With Liquefied Petroleum Gas LPG — Specification) based on BS EN 16129:2013 [Pressure regulators, automatic change-over devices, having a maximum regulated pressure of 4 bar, with a maximum capacity of 150 kg/h, associated safety devices and adaptors for butane, propane, and their mixtures]Committee formulated a Panel for providing revised draft-1. Shri Chandrakant Ghatol of M/s IOCL, Mumbai (convenor)
2. Shri Aakash Agarwal of M/s BPCL, Mumbai
3. Shri Reddy Dhanumjaya Rao of M/s HPCL, Mumbai
4. Shri SK Dey of M/s Bhiwadi Cylinders Pvt Ltd, New Delhi
5. Shri Y. K. Behani of M/s Tekno Valves, Kolkata
6. Shri Satish Kabra of M/s Kabsons Gas Equipments Limited, Hyderabad

Panel agreed to convene a meeting physically at IOCL, Mumbai HQ on 12 August, 2024.*Background:*Draft document (MED/16/23088) sent for wide circulation on 07.03.2024 for 30 days with last date for comments as 07.04.2024.Comments received from CMD-III. Comments have been sent to all members vide email dt. 24.05.2024.[Email for CMD comments.pdf](https://drive.google.com/file/d/1-C9YqfaHYXBlMf2jLcXpIDZ6QnU0hcNe/view?usp=sharing)Shri Aakash Agarwal of M/s BPCL vide his email dt 25 may, 2024 requested for comparison b/w new and old standard. Comparison attached here.[Worksheet in D PY Agenda and Minutes MED16 Agenda\_MED16.29\_1.xlsx](https://docs.google.com/spreadsheets/d/1feAcq2omU8lypu25tVVBaJNLjJYxtbg2/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true), [Email from Shri Aakash Agrawal.pdf](https://drive.google.com/file/d/1lVpv-CvBgRyEjyWAIhu7VwYgUacOyq9I/view?usp=sharing) | **1**Panel meeting scheduled for 12 August 2024 not held.Another Panel meeting required. *Committee may discuss and decide.*  |
| 28 | Item 2.1 Sl. No. 31  | **1**Draft revision of IS 8776 Valve Fittings for Use With Liquefied Petroleum Gas LPG Cylinders up to and Including 13 Litre Water Capacity - SpecificationCommitee discussed the draft standard and recommended that “Type B and Type C to be changed to Type A and Type B” Type A threads to be deleted. Committee approved the document after incorporating the changes (as provided by Shri Satish Kabra) for Publication. | **1**The revised standard IS 8776: 2024 has been published.[8776-2024.pdf](https://drive.google.com/file/d/15jsQTBor5DtD5J-aYkTJSlvfxjupNM_b/view?usp=sharing)*Committee may note the inforamtion.* |
| 29 | Item 2.1 Sl. No. 33 | Review IS 8451 as base standard superseded by ISO 18119: 2018Committee requested MS to incorporate the annexure and circulate the draft to all members as P-Draft for 30 days. | Draft amendment attached herein.[MED16 IS 8451 Amd1\_Prepared.docx](https://docs.google.com/document/d/1kYcqoVVD2ijhqdCLtgH9aehITNbECOqT/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)Some clarifications required and have been added as comments in the above attached draft. Committee may provide recommendations on the same.[ISO\_18119\_2018\_Character\_PDF\_document.pdf](https://drive.google.com/file/d/1c99K54sOj4XhbJSTopIHQnr5psgDz6P-/view?usp=drive_link)[ISO 18119;2018\_Amd 1;2021 ed.1 - id.80850 Publication PDF (en).pdf](https://drive.google.com/file/d/1zO6kLRYNUqYdCm8j_Is5bMYfYyIYq8h5/view?usp=drive_link)[ISO 18119;2018\_Amd 2;2024 ed.1 - id.86610 Publication PDF (en).pdf](https://drive.google.com/file/d/1phE-G53SrhWeWpM2N_Dp-WSeSrmvQBgm/view?usp=drive_link)*Committee may approve the document for Wide Circulation after the comments have been resolved.* |
| 30 | Item 2.1 Sl. No. 34 | Review of IS 12936 Basic requirements for delivery persons engaged in the delivery of LPG cylinders - Code of practice (First Revision)Committee deliberated the issue at length and formulated a Panel for providing revised draft. The Panel formulated is as follows-1. Shri Reddy Dhanumjaya Rao of Hindustan Petroleum Corporation Limited, Mumbai(Convenor)
2. Shri Aakash Agarwal of Bharat Petroleum Corporation Limited, Mumbai
3. Shri Chandrakant Ghatol of Indian Oil Corporation Limited, Mumbai
4. Sales personnel from each of the three Oil Companies.

MS requested panel members to provide details of sales personnel to be added to the Panel, so that invitation for the Panel may be sent by BIS. | Recommendation for review not received.Panel meeting not held yet.*Panel may provide a suitable date for holding the Panel meeting.**Committee may discuss and decide.* |
| 31 | Item 2.1 Sl. No. 35  | Draft Standard on Butane Gas Cartridges below 500mLShri Manvinder Singh of M/s Bhiwadi Cylinder informed that all comments have been deliberated by the Panel and have been suitably incorporated in the draft standard.In view of the above, Committee approved the draft to be sent for Wide Circulation for 1 month.PESO to also review about formulation of standards above 500mL for this product and provide their recommendations which will be discussed during the next committee meeting.Panel constituted is as follows-a) Shri Satish Kabra of M/s Kabsons(Convener)b) Shri Manvinder Singh of M/s Bhiwadi Cylinder Private Limited, New Delhic) Shri Manu Nigam of M/s Jai Maruti Gas Cylinders Private Limited, Gwaliord) Shri Siva Shankar of M/s HPCL, Mumbaie) Shri Hari Babu Banoth of M/s BPCL, Mumbaif) Shri Naveen Kumar jain of M/s Time Technoplast Limited, Mumbaig) Shri Rakesh G Khade of M/s HPCL, Mumbaih) Shri Mohit Jasuja of M/s Iwatani Corporation i) Representatives from JIA | The document (MED/16/25978) has been sent for P-Draft on 25-06-2024 for 30 days.[*Non refillable LPG cartridge PESO reply.pdf*](https://drive.google.com/file/d/1MfWGgQ8-qeshavCD4XjLcip-AySDRREc/view?usp=drive_link)Panel reviewed the P-Draft and has has given the finalised revised draft on 11 November 2024. [Light gauge metal containers 11nov mail.pdf](https://drive.google.com/file/d/1cBE9vUjtprlKIEWJXseEuDbnU3inSm5T/view?usp=sharing)Clause regarding raw material was recommended for discussion during the committee meeting. Suggestion provided by MS vide email dt. 21 Nov.[Mail by MS 21 Nov.pdf](https://drive.google.com/file/d/13DOJOLh3EAdG14aGLxrteTXFZ-DoS2r9/view?usp=sharing)Recommendations received from Shri Mohit Jasuja of M/s Iwatani Corporation and is attached herein.[Mohit Ji comments.pdf](https://drive.google.com/file/d/17Fe_JXIRJdNXhDIDZdHyM58pl8a636ul/view?usp=sharing), [Gas\_Cartridge\_P-Draft-Edited-11.11.2024.pdf](https://drive.google.com/file/d/1Ao6Mb0qsvPciUDuJJW7eH0OHWQ3XomqM/view?usp=sharing)[Gas\_Cartridge\_P-Draft\_\_.docx](https://docs.google.com/document/d/1b0R_POm1eVrVEpmTSV43GVpZ0m2gkZ21/edit?usp=sharing&ouid=113832758106077139668&rtpof=true&sd=true)*Panel may finalise the draft for Wide Circulation.**Committee may discuss and decide.* |
| 32 | Item 2.1 Sl. No. 36 | ISO 20421-1:2019: Cryogenic vessels — Large transportable vacuum-insulated vessels — Part 1: Design, fabrication, inspection and testing.Committee approved the document for Publication.Committee constituted the following panel for formulation of Indian standard on both a) Cryogenic vessels — Transportable vacuum insulated vessels of not more than 1000 liters volume-part 1 b) Cryogenic vessels — Large transportable vacuum-insulated vessels — Part 1 The panel constituted is as follows1) Shri Nitin Jansari of M/s Inox India Limited(Convener) 2) Shri Naveen Kumar Jain of M/s Time Technoplast 3) Shri Rajeev Gupta of M/s All India Gases Manufacturers Association  | The document (MED/16/25890) under Gazetting Stage.*Committee may note the information.* |
| 33 | Item 4 Sl. No.47 | ISO 11120:2015 Gas cylinders Refillable seamless steel tubes of water capacity between 150 l and 3000 l Design, construction and testingCommittee finalised the document for Publication.  | The document has been published in July 2024.[IS-ISO 11120 \_ 2015.pdf](https://drive.google.com/file/d/1IXpFwJ3bOrPmy8Mdt6osL_8pRX6pdqeO/view?usp=drive_link)*Committee may note the information.* |
| 34 | Item 4 Sl. No.50  | Amendment to IS 17613: 2021Gas Cylinders — Refillable Welded Aluminium Alloy Cylinders — Design, Construction and TestingCommittee formulated a Panel for providing revised draft amendment. Panel formulated is as follows-a) Shri Chandrakant Ghatol of M/s IOCL, Mumbai (convenor)b) Shri Aakash Agarwal of M/s BPCL, Mumbaic) Shri Reddy Dhanumjaya Rao of M/s HPCL, Mumbaid) Shri Manwinder Singh of M/s Bhiwadi Cylinders Pvt Ltd, New Delhie) Shri Vijay K Parikh of M/s Al-Can Exports Private Limited, ThanePanel agreed for a physical meeting to be held on 13 August at IOCL, Mumbai for discussion on the above draft.*Background:*P-Draft circulated on 19-12-2023 for 30 days. No comments received.The document (MED/16/24459) was wide circulated on 07-03-2024 for 30 days. Comments have been received from Shri Vijay Parikh of AL-Can Exports.[Email\_IS 17613.pdf](https://drive.google.com/file/d/1rpEnBIHM6GjGBfzAXkWqzYt2N5jr9IuP/view?usp=drive_link)[00 IOCL Comments IS template for comments IS 17613 A3 with Comments.docx](https://docs.google.com/document/d/1-DQb2MQmcuZw5FcKF6_yl63DKg2Xbch8/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)[BIS IS template for comments IS 17613.docx](https://docs.google.com/document/d/1tOqE-uvy9LDk3w6kLLlNhdz8bh6QJlvd/edit?usp=drive_link&ouid=116383954287804013918&rtpof=true&sd=true) Email is received received from Shri Vijay Parikh of AL-Can Exports on 23 July 2024 as attached below:[Email\_ShriVijay\_IS17613.pdf](https://drive.google.com/file/d/1IDX-E9hT0c5P2xH19e9Rb4vMIZLswd3T/view?usp=drive_link)[BIS Comments.pdf](https://drive.google.com/file/d/1TI6NkV9_liPrPsvSmgsQno8jF7HtEJbu/view?usp=drive_link) | A panel meeting held on 13 August 2024 at IOCL ,HO Mumbai. Discussion has attached below.[RE\_ Panel meeting for IS 17613- Amendment at IOCL HO 13.08.2024.pdf](https://drive.google.com/file/d/11fZfWHC4hvfj-Lmv09KtPyShq_rV4Q_3/view?usp=drive_link)Reply email received from Shri Vijay Parikh of ALCAN Exports Pvt. Ltd as attached below:[Panel meeting for IS 17613- Amendment at IOCL HO 13.08.2024\_VP.pdf](https://drive.google.com/file/d/1Kx5SehDBDZ2cNcC8Yit3BfyFNNFy88Zl/view?usp=drive_link)[TOC IS 17613.xlsx](https://docs.google.com/spreadsheets/d/1CbEWnQU50g_2rwjai8gm_aNhNYPDiZRZ/edit?usp=drive_link&ouid=116383954287804013918&rtpof=true&sd=true)[BIS IS template for comments IS 17613.docx](https://docs.google.com/document/d/1P6VadXfbyRYZopavnWM4W32tyFVNiXYn/edit?usp=drive_link&ouid=116383954287804013918&rtpof=true&sd=true)[17613 Amendment.pdf](https://drive.google.com/file/d/1mC1SoRiJ-7c3zv0394IvAGWec5dtPNS-/view?usp=drive_link)2nd Panel meeting held on 10 December 2024 at IOCL, HQ where discussions were held on IS 17613. [2nd Panel meeting for IS 17613- Amendment & IS 3196-1 at IOCL HO 10.12.2024.pdf](https://drive.google.com/file/d/1WtugPRZYbq1wMPsRFWfbhx4xPc-KwkVm/view?usp=sharing)M/s AL-CAN agreed to provide recommendations on comments by the Panel by 15 December 2024.Finalised Draft not received yet.*Committee may discuss and decide.* |
| 35 | Item 3.2.1 Sl. no. 8 | IS 6044 : Part 1: 2018 Liquefied petroleum gas storage installations - Code of practice: Part 1 residential, commercial and industrial cylinder installations (Third Revision) Amendment - 1Committee approved the document for Publication | The document (MED/16/16990) under Publication.*Committee may note the information.*Recommendations received from Shri Chandrakant Ghatol of IOCl as attached below based on an RTI received on the standard:[*6044 RTI amd request.pdf*](https://drive.google.com/file/d/1k3YNnVXrr3ej3XpCxT7vRAPOG-0f_qjy/view?usp=drive_link)*Committee may discuss and decide.* |
| 36 | Item 3.2.1 Sl. no. 10 | IS/ISO 11114 : PART 2: 2013(Identical To: ISO 11114-2 : 2021)GAS CYLINDERS — COMPATIBILITY OF CYLINDERAND VALVE MATERIALS WITH GAS CONTENTS PART 2 NON-METALLIC MATERIALS Second Revision Adoption of ISO 11114-2Committee approved the document for Publication | The document (MED/16/24646) under the final stage of publication.*Committee may note the information.* |
| 38 | Item 6 Point No. 2 | IS 14899: 2014 Liquefied petroleum gas (LPG) containers for automotive use - SpecificationCommittee requested to send comments to all members for recommendations on the same.*Background:*Comments have been received from Shri S. Jagannathan of M/s K R Trans Energy Pvt Ltd, vide email dt. 22 May, 2024.[Email 14899.pdf](https://drive.google.com/file/d/1eCZhgjMou68N2_ZuIE7tJN3up5eorHi2/view?usp=sharing), [MED Representation for Hardness.pdf](https://drive.google.com/file/d/1xvxylR75A8fn3DnWLDPHwmvolOA60o2M/view?usp=sharing) | Reminder mail sent to 29 October 2024 and 9 December 2024 as attached below:[[MED 16, 14899] Regarding comments received on IS 14899\_ 2014 Liquefied Petroleum Gas (LPG) Containers for Automotive Use — Specification ( First Revision ).pdf](https://drive.google.com/file/d/11Mh54XoyzrYwi4kqNbTKayHMzkJ7MjuE/view?usp=drive_link)*Committee may discuss and decide.* |
| 39 | Item 7.1 Point No. 7 | IS/ISO 11114-1 : 2020Gas Cylinders — Compatibility of Cylinder and Valve Materials with Gas Contents Part 1 Metallic Materials (First Revision)*Committee requested MS to send Amd 1 to all committee members before taking a decision of adoption.* | The Amendment is attached herein.[ISO 11114-1;2020\_Amd 1;2023 ed.3 - id.84934 Publication PDF (en).pdf](https://drive.google.com/file/d/1DJgd07SB1-dz16j0p7t_cvbED7qi0BGJ/view?usp=sharing)*Committee may recommend the Amd 1 for adoption.* |
| 40 | Item 11.3 | NWIP on Aerosol Cans for refrigerant gasesCommittee requested Shri Manvinder Singh to provide a daft on the above subject and consideration for the same will be taken during the next committee meeting.[Email for aerosol cans.pdf](https://drive.google.com/file/d/1WWadFAATdBJxd7aem2Img94uWB1rQmzw/view?usp=sharing) | Draft not received yet. *Committee may discuss and decide.* |
| 41 | Item 11.5 | NWIP on Cylinder Valve Outlet and Inlet ConnectionsCommittee decided that a standard needs to be formulated for Cylinder Valve Outlet and Inlet Connections. Reference to be taken from CGA V-1, EN 15202.Panel formulated for above mentioned standards is as follows-1. Shri Y.K Behani of M/s Tekno Valves(Convenor)
2. Shri Chandrakant Ghatol of M/s IOCL, Mumbai
3. Shri Aakash Agarwal of M/s BPCL, Mumbai
4. Shri Reddy Dhanumjaya Rao of M/s HPCL, Mumbai
5. Shri Sunil K Dey of M/s Bhiwadi Cylinders Pvt. Ltd.
6. Shri Gaurhav Jaiin of M/s Trans Valves (India) Private Limited, Hyderabad
7. Shri Satish Kabra of M/s Kabsons Gas Equipments Limited, Hyderabad
 | Draft not received yet. Panel meeting not held yet.*Committee may discuss and decide.* |

**Item 3 STANDARDS PUBLISHED AND NOTIFIED (PROGRAM OF WORK)**

**3.1** BIS Management is very much concerned about revision of Standards based on latest technology and their utilization by concerned stakeholders. It has been observed that many standards have been published long back and there is no change in the specification through amendment/revision. It is not known whether these standards are being used by anyone. Therefore technical committee is requested to examine whether these standards may be withdrawn if they cover either obsolete technology or are not used in the country. Accordingly, list of the standard published by Gas Cylinders Sectional Committee MED 16 can be accessed with the following link:

[**Programme of work (bis.gov.in)**](https://www.services.bis.gov.in/php/BIS_2.0/bisconnect/pow_details)

[PoW\_MED 16.pdf](https://drive.google.com/file/d/1lXo5aBaTUBNHMIbaIzbmYrE-DHSxM-54/view?usp=drive_link)

*The Committee may note the information.*

**3.2** **Standards under development or publication:**

**3.2.1 Standards under Development:**

| **S.No** | **Document Number** | **Document Title** | **Doc Type** | **Document Stage** | **Remarks** |
| --- | --- | --- | --- | --- | --- |
| 1 | MED/16/25978 | LIGHT GAUGE METAL CONTAINERS NON-REFILLABLE LPG CARTRIDGES GENERAL REQUIREMENTS | New | P-Draft | *See* Item 2.1 Sl No. 31 |
| 2 | MED/16/15992 | Draft Indian Standard GAS CYLINDERS WELDED LOW CARBON STEEL CONTAINERS EXCEEDING 250 LITRES AND UP TO 1000 LITRES WATER CAPACITY FOR THE TRANSPORT OF LPG DESIGN AND CONSTRUCTION | New | WC-Draft | *See* Item 2.1 Sl. No. 2 |
| 3 | MED/16/15993 | Draft Indian Standard LPG EQUIPMENT AND ACCESSORIES DESIGN SPECIFICATION AND TESTING FOR LIQUEFIED PETROLEUM GAS LPG COMBO VALVES AND FITTINGS TO BE USED IN CYLINDERS WITH WATER CAPACITY MORE THAN 150 L | New | WC-Draft | *See* Item 2.1 Sl. No. 2 |
| 4 | MED/16/17305 IS 7285 : Part 1: 2018 | Refillable seamless steel gas cylinders - Specification: Part 1 normalized steel cylinders (Fourth Revision) Amendment - 2 | Amendment | WC-Draft | *See* Item 2.1 Sl. No. 13 |
| 5 | MED/16/22407 IS 15975: 2020 | Gas Cylinders-- Conditions for Filling Gas Cylinders ( First Revision ) Amendment - 1 | Amendment | WC-Draft | *See* Item 2.1 Sl. No. 11 |
| 6 | MED/16/23088 IS 9798: 2013 | LOW PRESSURE REGULATORS FOR USE WITH LIQUEFIED PETROLEUM GAS LPG SPECIFICATION Third Revision of IS 9798 | Revision | WC-Draft | *See* Item 2.1 Sl. No. 27 |
| 7 | MED/16/23485 IS 7142: 1995 | WELDED LOW CARBON STEEL CYLINDERS FOR LOW PRESSURE LIQUEFIABLE GASES NOT EXCEEDING 5 LITRE WATER CAPACITY SPECIFICATION Second Revision of IS 7142 | Revision | WC-Draft | *See* Item 2.1 Sl. No. 24 |
| 8 | MED/16/24459 IS 17613 : 2021 | GAS CYLINDERS REFILLABLE WELDED ALUMINIUM ALLOY CYLINDERS DESIGN CONSTRUCTION AND TESTING Amendment - 1 | Amendment | WC-Draft | *See* Item 2.1 Sl. No. 34 |
| 9 | MED/16/24593 IS 16735 : 2018 | CYLINDERS FOR ON-BOARD STORAGE OF COMPRESSED GASEOUS HYDROGEN AND HYDROGEN BLENDS AS A FUEL FOR AUTOMOTIVE VEHICLES SPECIFICATION First revision of IS 16735 | Revision | WC-Draft | *See* Item 2.1 Sl. No 20 |
| 10 | MED/16/25227 | COMPRESSED GASEOUS HYDROGEN CGH2 AND HYDROGENNATURAL GAS BLENDS VALVE INTEGRATED WITH SOLENOID OPERATION REMOTELY CONTROLLED FOR AUTOMOTIVE USE - SPECIFICATION | New | WC-Draft | *See* Item 2.1 Sl. No 10, Point No. 1. |
| 11 | MED/16/26961 IS 8198 : Part 6: 1988 | STEEL CYLINDERS FOR COMPRESSED GASES CODE OF PRACTICE PART 6 LIQUEFIED CHLORINE GAS Second Revision of IS 8198 Part 6 | Revision | WC-Draft | *See* Item 2.1 Sl. No 7. |

**3.2.2 Documents Under Print:**

| **S.No** | **Document Number** | **Document Title** | **Doc Type** | **Document Stage** | **Remarks** |
| --- | --- | --- | --- | --- | --- |
| 1 | MED/16/25890 (Modified/Technically Equivalent To: ISO 20421-1 : 2019) | CRYOGENIC VESSELS - LARGE TRANSPORTABLE VACUUM-INSULATED VESSELS PART 1 DESIGN FABRICATION INSPECTION AND TESTING (Modified Adoption of ISO 20421-1) | New | Ready for Gazette | *See* Item 2.1 Sl. No 32. |
| 2 | MED/16/16990IS 6044 : Part 1: 2018 | Liquefied petroleum gas storage installations - Code of practice: Part 1 residential, commercial and industrial cylinder installations (Third Revision) Amendment - 1 | Amendment | Manuscritp for editing (with Publication) | *See* Item 2.1 Sl. No 35. |
| 3 | MED/16/25994IS 16988 : 2018 | COMPRESSED NATURAL GAS CYLINDER VALVE INTEGRATED WITH SOLENOID OPERATION (REMOTELY CONTROLLED) FOR AUTOMOTIVE USE - SPECIFICATION | Amendment | Pdf from Department | *See* Item 2.1 Sl. No 10 Point No. 3. |
| 4 | MED/16/24646IS/ISO 11114 : PART 2: 2013(Identical To: ISO 11114-2 : 2021) | GAS CYLINDERS � COMPATIBILITY OF CYLINDER AND VALVE MATERIALS WITH GAS CONTENTS: PART 2 NON-METALLIC MATERIALS (Second Revision) ( Adoption of ISO 11114-2 ) | Revision | Pdf from Department | *See* Item 2.1 Sl. No 36. |

*The Committee may note the information.*

**ITEM 4 IMPLEMENTATION OF STANDARDS (STATUS OF STANDARD UNDER BIS CERTIFICATION)**

The following standards prepared by MED 16 are under certification:

| IS NO. | PRODUCT | NO OF LICENCES |
| --- | --- | --- |
| IS 3196 : Part 1 : 2013 | Welded Low Carbon Steel Cylinders Exceeding 5 Litre Water Capacity for Low Pressure Liquefiable Gases - Part 1 : Cylinders for liquefied Petroleum Gases (LPG) | 176 |
| IS 3196 : Part 2 : 2006 | Welded Low Carbon Steel Cylinders Exceeding 5 Litre Water Capacity for Low Pressure Liquefiable Gases - Part 2 : Cylinders for Liquefiable Non-Toxic Gases Other Than LPG | 5 |
| IS 3196 : Part 4 : 2001 | Welded Low Carbon Steel Cylinders Exceeding 5 Litre Water Capacity for Low Pressure Liquefiable Gases - Part 4 : Cylinders for Toxic and Corrosive Gases (Amalgamation of IS 7680,7681 and 7682) | 4 |
| IS 3224 : 2021 | Valve Fittings for Compressed Gas Cylinders Excluding Liquefied Petroleum Gas (LPG) Cylinders | 24 |
| IS 3745 : 2006 | Yoke Type Valve Connection for Small Medical Gas Cylinders | 3 |
| IS 7142 : 1995 | Welded low carbon steel cylinders for low pressure liquifiable gases not exceeding 5 litre water capacity - Specification | 2 |
| IS 7285 : Part 1 : 2018 | Refillable Seamless Steel Gas Cylinders - Part 1 : Normalized Steel Cylinders | 7 |
| IS 7285 : Part 2 : 2017 | Refillable Seamless Steel Gas Cylinders - Part 2 : Quenched and Tempered Steel Cylinders with Tensile Strength Less Than 1 100 MPa (112 kgf/mm2) | 11 |
| IS 7302: 2018 | Valve fittings for self contained breathing apparatus (SCBA) and self contained underwater breathing apparatus (SCUBA) - Specification (First Revision) | 1 |
| IS 7312 : 2018 | Welded and seamless steel dissolved acetylene gas cylinders | 2 |
| IS 8471 : 2003 | Acetylene Generators – Requirements (Amalgamation of IS 8471(Part 1 to 5) | 4 |
| IS 8737 : 2017 | Valve fittings for use with liquefied petroleum gas (LPG) cylinders of more than 5 litre water capacity | 43 |
| IS 9798 : 2013 | Low Pressure Regulators for Use with Liquefied Petroleum Gas (LPG) Mixtures | 67 |
| IS 11006 : 2011 | Flash back arrestor (Flame Arrestor) - Specification (First Revision) | 3 |
| IS 12586 : 2021 | Brazed Low Carbon Steel Gas Cylinders Not Exceeding 13 Litre Water Capacity | 1 |
| IS 12300 : 1988 | Valve fittings for refrigerant cylinders - Specification | 1 |
| IS 13258 : 2014 | Welded Low Carbon Steel Cylinders Exceeding 5 Litre Water Capacity for Low Pressure Liquefiable Gas - Code of Practice for Inspection and Reconditioning of Used Lpg Cylinders | 51 |
| IS 14899 : 2014 | Liquefied Petroleum Gas (LPG) Containers for Automotive Use - Specification | 6 |
| IS 15100 : 2018 | Multifunction Valve Assembly for Permanently Fixed Liquefied Petroleum Gas (LPG) Containers for Automotive Use | 3 |
| IS 15490 : 2017 | Cylinders for On-Board Storage of Compressed Natural Gas As a Fuel for Automotive Vehicles | 12 |
| IS 15660 : 2017 | Refillable transportable seamless aluminium alloy gas cylinders | 2 |
| IS 16484 : 2017 | Liquid Off - Take Valve Fitting To Gas Cylinders Or Tanks (Mobile Or Static) For Liquid Petroleum Gas (LPG) - Specification | 6 |
| IS 16988:2018 | Compressed natural gas cylinder valve integrated with solenoid operation (RemotelyControlled) for automotive use - Specification | 2 |
| **Total** | 436 |

*The Committee may note the information.*

**Item 5 COMPOSITIONS OF THE COMMITTEE AND SUBCOMMITTEE**

**5.1** The following directions have been received from the Competent Authority of the Bureau for reviewing the composition of the Sectional Committee:

1. Major Government purchasing organizations like RDSO, CPWD, Defence etc are to be given representation in the committees wherever applicable.
2. Examine the justification and need for continuation of a member in an individual capacity who is continuing for more than six years in a sectional committee.
3. New members are to be co-opted who are expected to contribute in emerging new technology.
4. In case representative of the concerned organization is not attending the meeting regularly or not continuing even by correspondences, the organization may be informed for substituting their member.
5. Members who are represented in individual capacity, the continuation of their membership is to be considered on the basis of their past attendance and contribution.
6. Efforts should be made to include representative of different product segments as per the scope of the committee.

*The Committee may note the information.*

**5.2** As per directive of the Ministry of Consumer Affairs, Food & Public Distribution, Govt. of India, which is the Controlling Ministry of the Bureau that the composition of Sectional Committees be reviewed to replace the persons who are continuing for longer periods, to co-opt the members/organizations which are capable of contributing in emerging new technologies and new areas of work and strength of the manufacturers should be restricted to 1/3 of the total strength of the Technical Committees.

*The Committee may note the information.*

**5.3** The present composition of Gas Cylinders Sectional Committee MED 16 is given at **Annex 1 (Page no. 43)***.* The list shows the attendance of the members in the last two consecutive meetings. As directed by CA, members who have not attended **3 consecutive meetings** of MED 16 are to be terminated from the committee.

*Active participation letter was sent to all members who had not participated in the last 3 meetings.*

*The committee may note and recommend for termination of the members.*

**5.4 Request for membership in this Committee**

Revised nominations received from the following organizations till 28th November 2024.

1. **Bharat Heavy Electricals Limited, Project Engineering Management, Noida** (Revised nomination received on October 07, 2024)

Shri Kshitij Taneja (Principal Member)

Shri Lokesh Kumar Goyal (Alternate Member)

[Nominations for MED 16 Sectional Committee,Bhel.pdf](https://drive.google.com/file/d/1-LIrXofwl0rRjIYf42muSqQiAeWwwC1N/view?usp=drive_link)

*The Committee may note the information.*

New nominations received from the following organizations till 28th November 2024.

1. **Al-Can Exports Private Limited, Thane**

Shri Vijay K Parikh(Principal Member)

Shri Sumir Vijay Parikh (Alternate Member)

 [Request for inclusion in subcommittee 16 02.pdf](https://drive.google.com/file/d/1gQ9bYiodgmlCFZpBSOiEN5jiFQQrAFZ0/view?usp=drive_link)

*The Committee may approve their nomination for MED 16: P22 (Low Pressure Gas Cylinders Panel). They are already members of MED 16 : P23 (Dissolved Acetylene Cylinders, Generators, Acetylene Pipe Lines and High Pressure Gas Cylinders Panel)*

**Item 6 COMMENTS ON PUBLISHED INDIAN STANDARD**

1. *IS 15894 : 2018 Inspection gauges for checking taper threads of gas cylinder valves and cylinder necks - Taper 1 in 16 on diameter - Specification (First Revision)*

An email received from Shri Y. K. Behani of M/s Tekno Valves as attached below:

[Amendment of IS 15894 2018.pdf](https://drive.google.com/file/d/1ESfiFI3h8XurbKZ3jboMDpo-t2oP1QsX/view?usp=drive_link)

[HANDBOOK\_H-28\_1957\_PART-II.pdf](https://drive.google.com/file/d/1zH2sPYxygAqTqsltvf4-Q-CLWXvpRvcG/view?usp=drive_link), [Attachment\_E.docx](https://docs.google.com/document/d/1QGV4UY78-lbSCxsp90fzDoOGbhqTRYpI/edit?usp=drive_link&ouid=116383954287804013918&rtpof=true&sd=true), [Summary of comment on IS 15894 2018 ..docx](https://docs.google.com/document/d/1KYDqJ6c8NC9YOUVcI7Zo6SHPsRt2h9hS/edit?usp=drive_link&ouid=116383954287804013918&rtpof=true&sd=true)

[Attachment\_C.png](https://drive.google.com/file/d/1uruALSyzSr7rPrq8ArhT03mlQtCvyfKZ/view?usp=drive_link), [Attachment\_B.png](https://drive.google.com/file/d/1wPfG7I3s8LqPdxux4Fuzm0qNkts1Yyxq/view?usp=drive_link), [Attachment\_A.png](https://drive.google.com/file/d/1vsD5LT2s4JNBj9dG33mjdPSOA5lcnQPa/view?usp=drive_link), [Attachment\_D.png](https://drive.google.com/file/d/1GsAq1FWlSAUmi4gyFpq-7ul-dejSsJ6r/view?usp=drive_link)

**Committee may discuss and decide.**

1. *IS 4379 : 2021 Identification of the Contents of Industrial Gas Cylinders (Second Revision)*

*A comment received from FRBO, BIS dated 29 Oct 2024.*

[*IS 4379 amendment or clarification request\_.pdf*](https://drive.google.com/file/d/1JbdQTbr19-GSbxrKDcbjDgR3plfCHH7t/view?usp=drive_link)*,* [*Applicatn submission 2.pdf*](https://drive.google.com/file/d/1etgQBFiQGsS6XaXUtAdgI3dApgMeDvNp/view?usp=drive_link)*,* [*Applicatn submission 3.pdf*](https://drive.google.com/file/d/1Wsj5fs4wrD6EEoh8PmH-2G9MJNN0Kc8f/view?usp=drive_link)*,* [*Applicatn submission 1.pdf*](https://drive.google.com/file/d/1qqb2-WI0PskOh8SuD8zIarZ93tDkgRDq/view?usp=drive_link)

*Draft based on these comments circulated to all members vide email dated 29 October 2024.*

[*MED16\_IS 4379\_Amd1 .docx*](https://docs.google.com/document/d/1HVeF0uMR5Asbv8_AfFD574bxh87c9CZX/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)[*RE\_ IS 4379 amendment or clarification request\_.pdf*](https://drive.google.com/file/d/1Ig6C2hKuDE6j6Vrafog-SVA3aKS9fwHE/view?usp=drive_link)

*This draft was circulated to all members for their comments vide email dt. 06 November, 2024.*

*Comments received from EKC vide email dated 27 November 2024 and same circulated to all members on 28 November. Shri Chandrakant Ghatol of M/s IOCL has agreed on the comments.*

[*IS 4379 amendment comments from EKCT.pdf*](https://drive.google.com/file/d/1L9IpZFEw37UI7TUuaHJy63pCi2bl1uVP/view?usp=sharing)

***Committee may approve the document for Wide Circulation after incorporating the comments.***

1. *IS 12300 : 2024 Gas Cylinder Valves for Small Refrigerant Cylinders -Specification (First Revision)*

*A comment received from FRBO, BIS dated 18 November 2024. Same was circulated to all members for their comments.*

*Comments received from Shri Manvinder Singh and Shri SK Dey of M/s Bhiwadi Cylinders.*

[*Re\_ URGENT\_ Comment pertaining to IS 12300 or IS\_ISO 11114-1.pdf*](https://drive.google.com/file/d/1L-NGCx7711gyK_Nmxo2DHCEyIGdHpmv1/view?usp=sharing)

[*Shri Manvinder Singh URGENT\_ Comment pertaining to IS 12300 or IS\_ISO 11114-1.pdf*](https://drive.google.com/file/d/1TZDnbuAsWvpXXNf_mGZWRCpjaR08T58w/view?usp=sharing)

***The Committee may discuss and decide.***

**Item 7 REVIEW OF PUBLISHED INDIAN STANDARD**

**7.1** Following Indian Standards are due for review in 2024-25.

| **Sl No.** | **IS Number** | **IS Title** | **Remarks** |
| --- | --- | --- | --- |
| 1. | IS 15975 : 2020 | Gas Cylinders — Conditions for Filling Gas Cylinders ( First Revision ) | *The document has been wide circulated for 30 days on 29-10-2024.**See Item 2.1 Sl. No. 11 and 15**Committee may approve the standard for reaffirm and amend.* |
| 2. | IS 15637 : 2006Reviewed In : 2020 | Welded stainless steel cylinders for liquefied petroleum gases (LPG) from 0.5 litre to 250 litre water capacity - Specification | ARP allotted to Shri Vikrant Yadav, Sc.-D, BIS*Committee may note the information.* |
| 3. | IS 3196 (Part 2) : 2006Reviewed In : 2020 | Welded low carbon steel cylinders exceeding 5 litre water capacity for low pressure liquefiable gases: Part 2 cylinders for liquefiable non - Toxic gases other than lpg - Specification (First Revision) | ARP allotted to Shri Vikrant Yadav, Sc.-D, BIS*Committee may note the information.* |
| 4. | IS 7142 : 1995Reviewed In : 2020 | Welded low carbon steel cylinders for low pressure liquifiable gases not exceeding 5 litre water capacity - Specification (First Revision) | See Item 2.1 Sl. No.24*Committee may approve the standard for reaffirm and revise.* |
| 5. | IS 16485 : 2020 | Flame Arresters — Performance Requirements, Test Methods and Limits for Use ( First Revision )[16485.pdf](https://drive.google.com/file/d/1Dpq0nnKY6DmYZU-FALBpikTCnT-QI1-m/view?usp=sharing) | *Committee may approve the standard for reaffirmation.* |
| 6. | IS 16050 : 2020 | Gas Cylinders — Seamless, Welded and Composite Cylinders for Compressed and Liquefied Gases ( Excluding Acetylene ) — Inspection at Time of Filling ( First Revision ) | ARP allotted to Shri Vikrant Yadav, Sc.-D, BIS*Committee may note the information.* |
| 7. | IS/ISO 11114-1 : 2020 | Gas Cylinders — Compatibility of Cylinder and Valve Materials with Gas Contents Part 1 Metallic Materials (First Revision) | ISO 11114-1:2020/Amd 1:2023 has been published.*See* Item 2.1 Sl No. 39.*Committee may approve the standard for reaffirm and amend.*  |

*The Committee may discuss and decide.*

**Item 8 INTERNATIONAL ACTIVITIES**

**8.1** BIS, as a founding member of International Organization for Standardization (ISO), actively participates in standardization activities at international level including participation in its policy making bodies like Development Committee (DEVCO), Committee on Conformation Assessment (CASCO) and Committee on Consumer Policy (COPALCO). In the current global economic scenario, standardization has become necessary as emerging of concept like Technical Barriers to Trade Agreement(TBT), issued by WTO, which tries to ensure that regulations, standards, conformity assessment procedures do not create unnecessary obstacles to trade internationally. Over **203** ISO technical committees are engaged in the formulation of international standards with the consensus of all member countries.

*The committee may please note.*

**8.2** India is ‘P’ member of ISO/TC 58 – Gas cylinders**.** Being P member, it is obligatory for India to vote on all the documents. The comments from the members are compiled and sent to the Chairman for approval for voting. All the members and the Chairman are requested to take prompt action on the circulated documents for voting as voting is time bound.

**Effective participation in ISO activities is crucial for our nation as we have a significant stake in international trade and ISO standards. Therefore, it is essential that the committee participates effectively and thoroughly examines ISO ballots with respect to their relevance. If the ballot is relevant to us, the committee should nominate experts to represent our nation in ISO meetings. This will help to ensure that our national interests are well-represented and safeguarded in the international arena. Currently, following ballots (where India is ‘P’ member) are under circulation:**

| **Type** | **Committee / Working Group** | **Reference** | **Status** |

| **End date**  |
| --- |

 | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- |
| CD | ISO/TC 58 | ISO/CD 17519 | Open | 2025-01-14 | - |
| SR | ISO/TC 58/SC 3 | ISO 3500:2005 (Ed 3, vers 4)  | Open | 2025-03-04 | IS 4152 : 2011 |
| SR | ISO/TC 58/SC 3 | ISO 20703:2006 (vers 4)  | Open | 2025-03-04 | - |

*The committee may please note.*

**8.3** India has established itself as a significant manufacturing hub and has a considerable stake in international trade. To ensure our active involvement in trade-related norms set by different countries, it is essential for us to participate in the standardisation process of ISO and provide input for the betterment of our industries. Standardisation is the key to influence these norms, and a **closer examination of new work item proposals** received from ISO is necessary for us to standardise products at the international level. This activity will benefit Indian manufacturers at all levels to keep up with or enter into international level trade, ultimately improving their competitiveness in the global market. Currently No NWIPs ballot received from ISO.

*The committee may please note.*

**8.4** List of International Standards formulated by ISO/TC 58 and its SC’s can be accessed with following links respectively:

**8.4.1 ISO/TC 58 - Gas cylinders**

<https://www.iso.org/committee/49008/x/catalogue/p/1/u/0/w/0/d/0>

**8.4.2 ISO/TC 58/SC 2 - Cylinder fittings**

<https://www.iso.org/committee/49018/x/catalogue/>

**8.4.3 ISO/TC 58/SC 3 - Cylinder design**

<https://www.iso.org/committee/49040/x/catalogue/>

**8.4.4 ISO/TC 58/SC 4 - Operational requirements for gas cylinders**

<https://www.iso.org/committee/49062/x/catalogue/>

*The committee may please note.*

**8.5** ISO/TC 58 ‘Gas cylinders’ is the committee at the ISO level which deals with Standardization of gas cylinders and other pressure receptacles, their fittings and requirements relating to their manufacture and use. ISO/TC 58 and it’s various SC/WGs are planning to have their meetings via physical/Virtual mode. Brief details of the same is given below:

| Sl. No. | Date | Month | Location | TC/SC/WG | Mode of Meeting |
| --- | --- | --- | --- | --- | --- |
| 1 | 20 | February 2025 | Berlin (Germany) | ISO/TC 58/SC 4 | Physical |

As India is currently having P-membership in the above said ISO committee and MED 16 is the corresponding national mirror committee. So, it is required that we participate in the plenary meeting and it’s SC meeting and represent India's views. The participation in the plenary meeting will help us to proactively work with ISO and influence India’s position in the International Standardization process. This will also help us to know recent developments in the International Standards.

 So, I would request the committee members to go through the scope and list of standards published by this committee and provide their nomination to attend the above mentioned meetings.

*Committee my finalize the nominations for attending the meeting.*

**8.6 Designation of Experts at ISO/IEC**

As per the directiors received from higher management of BIS, each Sectional Committee shall focus on participating in the making of ISO/IEC standards on the basis of the Level of Interest established in respect of a NWIP or draft standard. Then, it shall designate one or two members of the Sectional Committee to represent BIS for ISO/IEC standards categorized as Level H (High) and M (Medium) and mandatorily comment on the ballots of these subjects.

These designated experts will act as face and voice of BIS for the project at the ISO/IEC level. The designated expert shall be responsible for providing detailed feedback on drafts and documents from ISO/IEC, assisting the Sectional Committee in developing the rationale for proposing NWIPs, finalizing proposals for leadership positions and secretariats and briefing the Sectional Committee on discussions at the ISO/IEC level. These experts will also be participating mandatorily in all ISO/IEC meetings.

MED 16 sectional committee has liaison with the following SCs and WGs of ISO/ TC 58 and experts have been nominated as follows at ISO/IEC level-

| **Sl No.** | **Concerned ISO/IEC/ TC, SC & WG** |

| **Experts nominated** |
| --- |

 | **To be nominated now (Y/N)** |
| --- | --- | --- | --- | --- |
| 1. | ISO/TC 58- Gas CylindersScope of Committee<https://www.iso.org/committee/49008.html>  | Bureau of Indian Standards (BIS) | Shri Chandan Guptamed@bis.gov.in Smt Khashboo kumarimed@bis.gov.in  |  |
| 2. | ISO/TC 58/WG 7 - Compatibility between gases and materials | M/s Vanaz Engineers Limited, Pune | Shri S.J. Visputevisputesj@vanaz.com  |  |
| M/s Tekno Valves  | Shri Rohit Behanirb@teknovalves.com  |  |
| 3. | ISO/TC 58/WG 10 - Fitting of valves to gas cylinders | M/s Vanaz Engineers Limited, Pune | Shri S.J. Visputevisputesj@vanaz.com  |  |
| 4. | ISO/TC 58/WG 11 - Vocabulary | M/s Tekno Valves  | Shri Rohit Behanirb@teknovalves.com  |  |
| M/s Bhiwadi Cylinders | Shri Manvinder Singhm.s@bhiwadicylinders.com *(Nominated in previous meeting)* |  |
| M/s Jai Maruti Gas Cylinders Private Limited, Gwalior | Shri Manu K Nigammanu.jmgcl@gmail.com *(Nominated in previous meeting)* |  |
| 5. | ISO/TC 58/WG 13 - Permanently mounted Large Tubes | - | - |  |
| 6. | ISO/TC 58/SC 2- Cylinder fittingsScope of Committee<https://www.iso.org/committee/49018.html>  | M/s Bhiwadi Cylinders | Shri SK Deydey.sk@bhiwadicylinders.com*(Nominated in previous meeting)* |  |
| M/s Tekno Valves  | Shri YK Behani ykb@teknovalves.com*(Nominated in previous meeting)* |  |
| Bureau of Indian Standards (BIS) | Shri Prasoon Yadavprasoonyadav@bis.gov.in*(Nominated in previous meeting)* |  |
| 7.  | ISO/TC 58/SC 2/WG 4 - Valve stem and cylinder neck threads | M/s Vanaz Engineers Limited, Pune | Shri S.J. Visputevisputesj@vanaz.com  |  |
| Luxfer Uttam India Private Limited, Faridabad | Shri Karan Bhatiakaran.bhatia@uttam.com  |  |
| M/s Bhiwadi Cylinders | Shri SK Deydey.sk@bhiwadicylinders.com |  |
| M/s Tekno Valves  | Shri YK Behani ykb@teknovalves.com |  |
| 8. | ISO/TC 58/SC 2/WG 6 - Gas cylinder valves - Specifications and testing | M/s Vanaz Engineers Limited, Pune | Shri A.S. Wagh waghas@vanaz.com  |  |
| M/s Bhiwadi Cylinders | Shri SK Deydey.sk@bhiwadicylinders.com*(Nominated in previous meeting)* |  |
| M/s Tekno Valves  | Shri YK Behani ykb@teknovalves.com*(Nominated in previous meeting)*Shri Rohit Behanirb@teknovalves.com  |  |
| Bureau of Indian Standards (BIS) | Shri Prasoon Yadavprasoonyadav@bis.gov.in*(Nominated in previous meeting)* |  |
| 9. | ISO/TC 58/SC 2/WG 7 - Determination of properties of gases and gas mixtures | M/s Vanaz Engineers Limited, Pune | Shri S.J. Visputevisputesj@vanaz.com  |  |
| M/s Tekno Valves  | Shri Rohit Behanirb@teknovalves.com  |  |
| M/s Linde India Limited, Kolkata | Shri Ramana Vutukuru ramana.vutukuru@linde.com  |  |
| 10. | ISO/TC 58/SC 2/WG 11 - Allocations of valve outlets | M/s Jai Maruti Gas Cylinders Private Limited, Gwalior | Shri Anil Kumar Sharmaaksharmaashaweld@gmail.com  |  |
| Everest Kanto Cylinder Limited, Mumbai |

| Shri Ayush Pawar ayush.pawar@ekc.in |
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| M/s Tekno Valves  | Shri YK Behani ykb@teknovalves.com*(Nominated in previous meeting)*Shri Rohit Behanirb@teknovalves.com  |  |
| M/s Bhiwadi Cylinders | Shri SK Deydey.sk@bhiwadicylinders.com*(Nominated in previous meeting)* |  |
| 11. | ISO/TC 58/SC 2/WG 14 - Inspection and maintenance of cylinder valves | M/s Bhiwadi Cylinders | Shri SK Deydey.sk@bhiwadicylinders.com |  |
| 12. | ISO/TC 58/SC 3 - Cylinder designScope of the Committee- <https://www.iso.org/committee/49040.html>  | Everest Kanto Cylinder Limited, Mumbai |

| Shri A.S.V.S. PRASADsiva.prasad@ekc.inShri Ayush Pawar ayush.pawar@ekc.in |
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| M/s Rama Cylinders  | Shri Shri Pramod W Sangwai pramod.sangwai@ramacylinders.in |  |
| M/s Linde India Limited, Kolkata | Shri Vutukuru Ramanaramana.vutukuru@linde.com |  |
| M/s Time Technoplast |  Shri Naveen Kumar Jainnj@timetechnoplast.com  |  |
| Bureau of Indian Standards (BIS) | Shri Chandan Guptamed@bis.gov.in Shrimati Khashboo kumarimed@bis.gov.in  |  |
| 13. | ISO/TC 58/SC 3/WG 17 - Compressed natural gas cylinders for road vehicles | Everest Kanto Cylinder Limited, Mumbai |

| Shri Ayush Pawar ayush.pawar@ekc.in |
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| 14. | ISO/TC 58/SC 3/WG 19 - Refillable seamless aluminium alloy gas cylinders | - | - |  |
| 15. | ISO/TC 58/SC 3/WG 21 - Refillable welded steel gas cylinders | M/s Jai Maruti Gas Cylinders Private Limited, Gwalior | Shri Manu K Nigam manu.jmgcl@gmail.com  |  |
| 16. | ISO/TC 58/SC 3/WG 24 Factors of safety for composite cylinders | Everest Kanto Cylinder Limited, Mumbai |

| Shri Ayush Pawar ayush.pawar@ekc.in |
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| 17. | ISO/TC 58/SC 3/WG 26 Refillable seamless steel gas cylinders (except stainless steel) | Everest Kanto Cylinder Limited, Mumbai |

| Shri Ayush Pawar ayush.pawar@ekc.in |
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| 18. | ISO/TC 58/SC 3/WG 27 Composite cylinders | Petroleum and Explosives Safety Organisation, Nagpur | Shri P. Seenirajexplosives@explosives.gov.in  |  |
| The Supreme Industries Limited, Halol | Shri Pradeep Kamatpradeep\_kamat@supreme.co.in  |  |
| 19. | ISO/TC 58/SC 3/WG 29 Revision of ISO 11118 | - | - |  |
| 20. | ISO/TC 58/SC 3/WG 32 Refillable composite reinforced tubes of water capacity between 150l and 3 000l Design, construction and testing | Everest Kanto Cylinder Limited, Mumbai |

| Shri Ayush Pawar ayush.pawar@ekc.in |
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| 21. | ISO/TC 58/SC 3/WG 33 Refillable seamless stainless steel gas cylinders | Everest Kanto Cylinder Limited, Mumbai |

| Shri Ayush Pawar ayush.pawar@ekc.in |
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| 22. | ISO/TC 58/SC 3/WG 36 Service life testing for cylinders and tubes | Everest Kanto Cylinder Limited, Mumbai |

| Shri Ayush Pawar ayush.pawar@ekc.in |
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| 23. | ISO/TC 58/SC 4Operational requirements for gas cylindersScope of Committee- <https://www.iso.org/committee/49062.html>  | Bharat Petroleum Corporation Limited, Mumbai |

| Shri Aakash Agarwal  aakashagarwal@bharatpetroleum.in |
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| M/s Bhiwadi Cylinders  | Shri Manvinder Singhm.s@bhiwadicylinders.com |  |
| Hindustan Petroleum Corporation Limited, Mumbai | Mr. Pitabas Sarangisarangi@hpcl.in |  |
| Indian Oil Corporation Limited, Mumbai | Shri Chandrakant Ghatolcghatol@indianoil.in |  |
| Indraprastha Gas Limited, New Delhi | Shri Rakesh Kishan Agrawarakesh.agrawal@igl.co.in |  |
| M/s L.P.G. Equipment Research Centre, Bengaluru | Mr. T D Sabu tdsabu@lerc.co.in |  |
| Mahanagar Gas Limited, Mumbai | SH. S. MURALI smurali@mahanagargas.com |  |
| Maruti Suzuki India Limited, Gurugram |  Mr. Gururaj Ravi gururaj.ravi@maruti.co.in |  |
| M/s Tekno Valves  | Shri Y. K. Behani ykb@teknovalves.com |  |
| M/s Vanaz | Mr. S.J. Visputevisputesj@vanaz.com |  |
| Bureau of Indian Standards (BIS) | Shri Chandan Guptamed@bis.gov.in Smt Khashboo kumarimed@bis.gov.in  |  |
| 24 | ISO/TC 58/SC 4/TF 1 Safe use of large tubes | - | - |  |
| 25. | ISO/TC 58/SC 4/WG 3 Methods for inspection and requalification of NGV fuel gas containers | - | - |  |
| 26. | ISO/TC 58/SC 4/WG 6 Cylinder identification | Everest Kanto Cylinder Limited, Mumbai | Shri Ayush Pawar ayush.pawar@ekc.in Shri A.G. KHAMKARagkhamkar@ekc.in  |  |
| 25. | ISO/TC 58/SC 4/WG 10 Inspection and testing of composite cylinders | M/s Vanaz Engineers Limited, Pune | Shri S.J. Visputevisputesj@vanaz.com  |  |
| 26. | ISO/TC 58/SC 4/WG 11 Periodic inspection and testing of seamless steel and seamless aluminium-alloy gas cylinders | - | - |  |
| 27. | ISO/TC 58/SC 4/WG 15 MAE examination for composite cylinders | - | - |  |
| 28. | ISO/TC 58/SC 4/WG 18 Acoustic emission for composite cylinders | - | - |  |
| 29. | ISO/TC 58/SC 4/WG 19 Inspection of tubes and frames | M/s Linde India Limited, Kolkata | Shri Vutukuru Ramanaramana.vutukuru@linde.com |  |

*The Committee may kindly discuss and suggest the changes/modifications in the experts, if any.*

**Item 9 RESEARCH PROJECT TO BE TAKEN UP FOR INCLUSION OF EMPIRICAL DATA AND INSIGHTS**

BIS has recognized the importance of including research to generate empirical data in its standardization process for the development of Indian standards. Decision making without evidence can be challenging, and it may result in dropping some crucial projects related to standard-making. In this regard, empirical data can help the committee to make informed decisions on such issues. By incorporating research-based empirical data, the standardization process can become more evidence-based, accurate, and effective, ultimately leading to the development of better and more relevant Indian standards. This type of project may be granted to experts in the relevant field. The committee may deliberate on this topic and identify standards that require empirical data for their development or revision

Guidelines for research project and new provision for providing financial assistance/ honorarium are attached here for reference.

[Circular.pdf](https://drive.google.com/file/d/1zNfpX6ZYvN7mmHaGkBSBjrZLAXrmG78p/view?usp=drive_link) *,* [R&D Guidelines.pdf](https://drive.google.com/file/d/1WIy-ZmoyStG8o_5Yv3M_lIk5kFey4eXf/view?usp=drive_link)

*Committee may note the information.*

**Item 10 DATE AND PLACE FOR THE NEXT MEETING**

*Committee may discuss and decide date, mode and place of next meeting.*

**Item 11 ANY OTHER BUSINESS WITH PERMISSION OF CHAIR**

11.1 RTI received for IS 14899 : 2014 Liquefied petroleum gas (LPG) containers for automotive use - Specification (First Revision)

[*Reminder 1 श्री Jagannathan S से प्राप्त सीपीग्राम्स शिकायत संख्या- DOCAF\_E\_2024\_0007697.pdf*](https://drive.google.com/file/d/1hL0d8CpBaJdVM3OsO6r5a3577jqKR3sk/view?usp=drive_link)

[*\_h3\_Action history of registration number DOCAF\_E\_2024\_0007697\_\_h3\_.pdf*](https://drive.google.com/file/d/1SHEqk2rgfIXQB-zfVrfj39ra4HDqQFNc/view?usp=drive_link)*,* [*DOCAF\_E\_2024\_0007697.pdf*](https://drive.google.com/file/d/1Fg0S6jhKjjD6wdrWeoEIrBSKfexTNRy2/view?usp=drive_link)*,* [*Response Format.docx*](https://docs.google.com/document/d/1w3TsE_2ImuFtvC55AvbvxoRg_42SvHUX/edit?usp=drive_link&ouid=116383954287804013918&rtpof=true&sd=true)*,* [*AllDetails.pdf*](https://drive.google.com/file/d/11uY-iNvEKAFRI84WmnXXg1fNJ19w5Cme/view?usp=drive_link)*,*

*Committee may discuss and decide*

*11.2 MNRE in it’s 2nd set of recommendations has recommended the following standards for adoption as Indian Standards-*

| *S. No.* | *Standard No. and Name* | *Recommendations* |
| --- | --- | --- |
| *1* | *CGA S-1.1: 2022* *Pressure Relief Device Standards - Part 1 - Cylinders For Compressed Gases*[*CGA S-1.1 16TH ED (2022).pdf*](https://drive.google.com/file/d/1ThGN3kdjMJSqAx93d65GWzrRugApJVUs/view?usp=sharing) |  |
| *2* | *CGA S-1.2: 2019**Pressure Relief Device Standards-Part 2-Portable Containers For Compressed Gases - Tenth Edition*[*CGA S-1.2 10TH ED (2019).pdf*](https://drive.google.com/file/d/10aMTNXgexY0x3SRizFYfjw5gjlciXEkB/view?usp=sharing) |  |
| *3* | *CGA S-1.3: 2020**Pressure Relief Device Standards-Part 3-Stationary Storage Containers For Compressed Gases - 9th Edition*[*CGA S-1.3-2020.pdf*](https://drive.google.com/file/d/18-ZkhT4TMO_Vx79mtsZ7KM1IuBUpf0-_/view?usp=sharing) |  |
| *4.* | *CGA V-1: 2021**Standard For Compressed Gas Cylinder Valve Outlet And Inlet Connections - 15th Edition*[*CGA V-1 16TH ED (2023).pdf*](https://drive.google.com/file/d/1N3t0krk8_U6JW0lvB6vfuUMJWoyGIGIo/view?usp=sharing) |  |

**Annex 1**

(*Clause* 5.3)

**Composition of Gas Cylinder Sectional Committee, MED 16**

| **Meeting** | **Date** | **Venue** |
| --- | --- | --- |
| 30th Meeting | 05 Jul 2023 | Webex |
| 31st Meeting | 07 Nov 2023 | Webex |
| 32nd Meeting | 25 - 26 July 2024 | Physical |

| **S.No** | **Organization Represented** | **Principal /Alternate** | **30th** | **31st** | **32nd** | **Total** |
| --- | --- | --- | --- | --- | --- | --- |
| 1  | Petroleum and Explosives Safety Organisation, Nagpur | Shri P. Kumar (*Chairperson*) | Y | Y | Y | 3/3 |
| 2  | All India Industrial Gases Manufacturers Association, New Delhi | Shri Saket TikuShri K. R Sahasranam (*Alt*) | Y | Y | Y | 3/3 |
| 3  | Ashok Leyland Limited, Chennai | Shri Ved Prakash GautamShri Faustino V (*Alt*) | Y | Y | N | 2/3 |
| 4  | Automotive Research Association of India, Pune | Dr S S ThipseShri Sandeep Rairikar (*Alt*) | N | Y | N | 1/3 |
| 5 | Bharat Heavy Electricals Limited, Project Engineering Management, Noida | Shri Kshitij TanejaShri Lokesh Kumar Goyal (*Alt*) | N | N | N | 0/3 |
| 6  | Bharat Petroleum Corporation Limited, Mumbai | Shri Senthil Kumar BShri Aakash Agarwal(*Alt*)Shri Ramprit (*Alt*) | Y | Y | Y | 3/3 |
| 7  | Bhiwadi Cylinder Private Limited, New Delhi | Shri Manvinder SinghShri Sunil K. Dey (*Alt*) | Y | Y | N | 2/3 |
| 8  | Directorate General of Quality Assurance, Ministry of Defence, New Delhi | Colonel Sabir Hundekar | Y | Y | N | 2/3 |
| 9  | Everest Kanto Cylinder Limited, Mumbai | Shri Ayush PawarShri A.S.V.S. Prasad (*Alt*)Shri Ravi Sharma (*Alt*) | Y | Y | Y | 3/3 |
| 10  | Gujarat Gas Company Limited, Ahmedabad | Shri Dharmesh SailorShri Ravi Ravipalli (*Alt*) | N | N | N | 0/3 |
| 11  | Hindustan Petroleum Corporation Limited, Mumbai | Shri Pitabas SarangiShri Dinesh Pangtey (*Alt*)Shri Reddy Dhanumjaya Rao (*Alt*) | Y | Y | Y | 3/3 |
| 12 | Ideal Engineers Hyderabad Private limited, Hyderabad | Shri Satish KabraShri Kunal Kabra (*Alt*) | Y | N | N | 1/3 |
| 13 | Indian Oil Corporation Limited, Mumbai | Shri Bidhan Chandra JenaShri Chandrakant Ghatol (Alt)Shri K N Gowtham (Alt) | Y | Y | Y | 3/3 |
| 14 | Indraprastha Gas Limited, New Delhi | Shri Rakesh Kishan AgrawalShri Bimal Karan (*Alt*)Shri Aviral Rajeev (*Alt*) | N | Y | Y | 2/3 |
| 15 | Inox India Limited, Vadodara | Shri Deepak V. AcharyaShri Nitin jansari (*Alt*) | N | Y | N | 1/3 |
| 16 | International Industrial Gases Limited, Howrah | Shri Devendra K. GargShri Nikhilesh K. Garg (*Alt*) | N | N | N | 0/3 |
| 17 | Jai Maruti Gas Cylinders Private Limited, Gwalior | Shri Manu K Nigam | Y | Y | Y | 3/3 |
| 18 | Kosan Industries Limited, Surat | Shri Girishbhai K.Shri S. B. Bolmal (*Alt*) | N | N | N | 0/3 |
| 19 | L.P.G. Equipment Research Centre, Bengaluru | Shri T. D. SabuShri Santosh Kumar Gupta (*Alt*) | N | Y | N | 1/3 |
| 20 | Linde India Limited, Kolkata | Shri Ramana Vutukuru | N | Y | N | 1/3 |
| 21 | Mahanagar Gas Limited, Mumbai | Shri S. MuraliShri Milind M. Ranade (*Alt*)Shri Sachin Gumaste (*Alt*) | Y | Y | N | 2/3 |
| 22 | Maruti Suzuki India Limited, Gurugram | Shri Gururaj RaviShri Arun Kumar (*Alt*)Shri Rajesh Kumar (*Alt*) | Y | Y | Y | 3/3 |
| 23 | Petroleum and Explosives Safety Organisation, Nagpur | Shri P. Seeniraj (*Alt*)Shri Seenivas Rao Keta (*Alt*) | Y | Y | N | 2/3 |
| 24 | Research and Development Establishment, Pune | Dr. Shankar BhaumikShri Tamhankar Ravindra (*Alt*) | N | N | N | 0/3 |
| 25 | Society of Indian Automobile Manufacturers (SIAM), Delhi | Shri K.K. GandhiShri Amit Kumar (*Alt*) | N | N | N | 0/3 |
| 26  | Steel Authority Of India Limited (SAIL), Research & Development Centre for Iron & Steel, Ranchi | Shri K.K.SinghShri Santosh Kumar (*Alt*) | N | Y | N | 1/3 |
| 27 | Tata Motors Limited, Pune | Shri Gowrishankar P. S.Shri Shailendra Dewangan (*Alt*) | Y | Y | Y | 3/3 |
| 28  | Tekno Valves, Kolkata | Shri Y. K. BehaniShri Rohit Behani (*Alt*) | Y | Y | Y | 3/3 |
| 29 | Trans Valves (India) Private Limited, Hyderabad | Shri Gaurhav JaiinShri Pradeep Kumar Mathur (*Alt*) | Y | N | N | 1/3 |
| 30 | Vanaz Engineers Limited, Pune | Shri S.J. VisputeShri A.S. Wagh (*Alt*) | Y | Y | Y | 3/3 |