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# **BUREAU OF INDIAN STANDARDS**

**AGENDA**

**Gas Cylinders 32nd Meeting**

**Sectional Committee, MED 16**

***In joint session with***

**Gas Cylinder Valves & Fittings Thirty First (31st) Meeting**

**SubCommittee, MED 16:1,**

**Low Pressure Gas Cylinders Thirty Third (33rd) Meeting**

**SubCommittee, MED 16:2, And**

**Dissolved Acetylene Cylinders, Thirty Second (32nd) Meeting**

**Generators, Acetylene Pipe Lines**

**And High Pressure Gas Cylinders**

**SubCommittee, MED 16:3**

**Date, Day & Time : (Physical Meeting, Venue- Jodhpur, Rajasthan)**

**25th - 26th July 2024, Thursday-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 31st meeting of Gas Cylinders Sectional Committee MED 16, held in joint session with 30th meeting of Gas Cylinder Valves & Fittings SubCommittee, MED 16:1, Generators, 32nd meeting of Low Pressure Gas Cylinders SubCommittee, MED 16:2 & 31st meeting of Dissolved Acetylene Pipe Lines And High Pressure Gas Cylinders SubCommittee, MED 16:3 held on 07 November, 2023 on webex platform (online virtual meeting) were circulated to the members vide our letter no. MED 16 dated 21/11/2023. 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 30th and 31st Meeting of Gas Cylinders Sectional Committee is given below:

| **Sl No** | **Ref \* No.** | **Decision during 31st meeting** | **Action taken/Status** |
| --- | --- | --- | --- |
| 1 | Item 2.1 Sl. No. 1 | **2**  Report on the modified Foot-ring & Top-ring for LPG Cylinder as per IS 3196-1:2013 and modified SC valve after field testing  Shri TD Sabu from LERC informed that the project is already under process and agreed to provide the report within 1 month. | **2**  Reminder sent vide email dt. 06.12.2023, 16.02.2024 & 09.07.2024.    Report received vide email dt. 10.07.2024.  [Email for service life.pdf](https://drive.google.com/file/d/1bXlIfJVGEsjuuneQXLHfUBKspRLT4COM/view?usp=sharing)  *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 informed that draft already prepared and sent to MED. But draft was not received. MS requested the member to send the draft again. A Panel meeting to be held in the first week of December and draft to be finalised.  *Draft received to be circulated to all members as for 30 days. If no comments are received draft to be sent for WC.*  MED 16(15993) on ‘Combo Valve for 990 Litres water capacity cylinders’  Shri SK Dey of M/s Bhiwadi Cylinders informed that he has sent redrafted Copy ( In line with latest EN 13175) for Combo Valve.  *Committee decided to circulate the new draft to all committee members for 10 days. If no comments are received, changes to be incorporated and draft to be put up for WC again for 1 month.* | **2**  Draft received was circulated to all members for 30 days with last date for comments as 07 January, 2024*.*  No comments received.  Some editorial clarifications required and draft sent to Shri Manvinder Singh of M/s Bhiwadi Cylinders vide email dt. 18 March, 2024 and reminder sent on 09 July, 2024. Clarifications once received will be incorporated and draft will be then sent for Wide Circulation for 30 days.  *Committee may discuss and decide.*  Draft received was circulated to all the members for 10 days with last date of comments as 17 December, 2023.  No comments were received*.*  Comments identified by Member Secretary were sent to Shri SK Dey vide email dt. 18 March, 2024 and reminders sent on 13 June, 2024 & 09 July, 2024.  Clarifications once received will be incorporated and draft will be then sent again to all members for 10 days. If no comments are received, Draft will be sent for Wide Circulation for 30 days.  Email received with comments from Shri YK Behani from Tekno Valves Pvt Ltd on 23 July 2024.  [Email\_TeknoValves\_15993.pdf](https://drive.google.com/file/d/1wUigao0MUMsjkk-wa5wMPYNSutDXuJVS/view?usp=drive_link)  [Comments on Draft Specification IS 16484.doc](https://docs.google.com/document/d/1GuHIgOMRTQtEem1AzhSId-EpRCt4BKsF/edit?usp=drive_link&ouid=116383954287804013918&rtpof=true&sd=true)  *Committee may discuss and decide.* |
| 3 | Item 2.1 Sl. No. 4 | **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 ammonia  Shri TD Sabu of M/s LERC informed that the study has been given to CMRE and is under progress and will be completed in 4-5 weeks. Report of the study will subsequently be shared with the committee.  ToR has been finalized by the committee with some deliverables and methodology to be added in line with the study being carried out by CMRE(methodology of CMRE to be provided by Shri Chandrakant Ghatol of M/s IOCL). Members from IOCL, BPCL and HPCL agreed to provide cylinders for carrying out the Research Project.  Studies to ascertain maximum service life of cylinders (as per IS 3196-4) filled with chlorine and ammonia  Committee 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**  Report not received yet.  Reminder sent vide email dt. 07 December, 2023, 19 March, 2024 & 09 July, 2024 .  *Committee may discuss and decide.* |
| 4 | Item 2.1 Sl. No. 5 | Revision of **IS 7241:1981**‘Glossary of terms used in gas cylinder technology (first revision)’  Committee finalized the draft for publication. | Document under Publication.  *Committee may note the information.* |
| 5 | Item 2.1 Sl. No. 6 | 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)’  Nominations received from committee for reconstitution of the panel are as follows:  a) Shri Siva shankar of M/s HPCL, Mumbai (convenor)  b) Shri Manwinder Singh of M/s Bhiwadi Cylinders Pvt Ltd, New Delhi  c) Shri Aakash Agarwal of M/s BPCL, Mumbai  d) Shri Chandrakant Ghatol of M/s IOCL, Mumbai  e) Shri T D Sabu of LERC, Bengaluru  f) Shri M.L Fatehpuria of M/s Supreme Cylinders Ltd, Delhi  g) Representative from PESO and  h) Shri Prasoon Yadav, BIS  Decision taken on the comments are as follows.  [CommentsbyMrAKBera.doc](https://docs.google.com/document/d/15uX-srCGLTmGJ0eT6xugaiKVtexADZJV/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)  *Committee has accepted the above comments.*  [consolidated observations on 2347 and 4246.pptx](https://docs.google.com/presentation/d/1cHN9n9xC8aiBjXQvosHokw7avpgquYv7/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)  *Not relevant to the committee.*  [3196 and 1239.pdf](https://drive.google.com/file/d/1f4-jSmolPpetHbgAlsD9Me0-0MyxHebm/view?usp=sharing)  *Committee decided that no changes be made in the standard.*  [CMD-3 comments.pdf](https://drive.google.com/file/d/1zOAn7PlZH5ksAYqLUhAZETx4aLjtKFx5/view?usp=sharing)  *See Item 2.1 S. No. 14 of minutes of 31st meeting of MED 16 sectional committee.*  [consolidated observations on Standards- apart from 2347 and 4246.pptx](https://docs.google.com/presentation/d/1UQVvNDFe9tB3nwvm1Vtf0UdtrR9V2oMs/edit?usp=drive_link&ouid=116383954287804013918&rtpof=true&sd=true)  *Committee decided that no changes be made in the standard.*  [Email.pdf](https://drive.google.com/file/d/1lq0HxXyrr9JsygOv58qLgz07qx2oG8Nd/view?usp=drive_link)  *Committee decided that no changes be made in the standard.*  [IS 3196-1 revision (1).docx](https://docs.google.com/document/d/1XWSa2Yrs3qQTucXsVPymNbOwrRtDuCKj/edit?usp=drive_link&ouid=116383954287804013918&rtpof=true&sd=true)  *Committee requested Panel to review the document and incorporate the accepted comments and provide the draft standard within 1 month.*  [IS\_template\_for\_comments-IS\_3196-1.doc](https://docs.google.com/document/d/1ABmmgYEx_ohf0b1MXorNNzSKj8wXDtxh/edit?usp=drive_link&ouid=116383954287804013918&rtpof=true&sd=true)  *Committee accepted the above comments.*  Editorial Clarification by MS-  In Cl. 6.2.1, Kindly clarify that brackets are to be put up for Re + Ph.  *Committee clarified that Re + Ph are not in brackets and no change required in the standard.*    [Al-Can comments.pdf](https://drive.google.com/file/d/17wWbqilEkDyq4FhXH1Ivhph2C6Hi_nuW/view?usp=sharing)  *PESO informed that the above discussion will be held physically in the 2nd week of December at a location to be decided by PESO with all relevant members of MED 16 committee along with other stakeholders.* | Draft not received.  Reminder Sent vide email dt. 08 December, 2023 and 19 March, 2024.  Panel meeting held on 24 April, 2024. One more panel meeting required to finalise the draft IS 3196-1.  *Committee may discuss and decide. Panel may provide a suitable date for holding the Panel meeting.* |
| 6 | Item 2.1 Sl. No. 7 | **3**  Draft on ‘cryogenic container’ based on DOT 4L and ISO 21029-1 and BS EN 1251-2  Shri Nitin Jansari of M/s Inox India Ltd. informed that IS 21029-1 was discussed by the panel and has been recommended for adoption.  *Committee agreed for adoption of ISO 21029-1.*  Draft standard MED 16 (20263) CRYOGENIC VESSELS TRANSPORTABLE VACUUM INSULATED VESSELS OF NOT MORE THAN 1 000 LITRES VOLUME OPERATIONAL REQUIREMENTS  Shri Naveen Kumar Jain, M/s Time Technoplast informed that he needs to review the document wrt to ISO 21029-1. Commitee decided that draft may be reviewed by Shri Naveen Kumar Jain within 10 days. If no comments are received, document to be finalised for publication.  Draft Standard MED 16(22706) CRYOGENIC VESSELS- VALVES FOR CRYOGENIC VESSELS  Committee finalised the document for publication | **3**  Standard has been Published as IS 18719 (Part 1): 2024/ ISO 21029-1: 2018,  Cryogenic Vessels - Transportable Vacuum Insulated Vessels of not More than 1 000 Litres Volume Part 1 Design, Fabrication, Inspection and Tests  *Committee may note the information.*  Standard has been Published as IS 18719 (Part 2) : 2024 Cryogenic Vessels - Transportable Vacuum Insulated Vessels of not more than 1 000 Litres Part 2 Operational Requirements  *Committee may note the information.*  Document currently under final stages of publication.  *Committee may note the information.* |
| 7 | Item 2.1 Sl. No. 8 | **3**  Draft Indian Standard Code of practice for steel cylinders for compressed gases Part 6 Liquefied chlorine gas ( First Revision of IS 8198-6)  Shri Ramana Vutukuru of M/s Linde informed vide his email dt 02 Nov, 2023.  Committee decided that changes suggested to be incorporated in the draft standard and to be circulated to all members for 10 days. If no comments are received, Draft to be put up for WC. | **3**  Document sent to all members vide email dt. 10 July, 2024 with last date of comments as 23 July, 2024.  [IS 8198-6\_WC\_.docx](https://docs.google.com/document/d/1H-rMX3c90pwbrQmxX3fRlfZ_TwS5e69T/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)  *Committee may discuss and decide for WC.* |
| 8 | Item 2.1 S. No. 9 | **3**  Draft revision of IS 8198 (Part 7) to (Part 11)  Committee noted the information. | **3**  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.  *Committee may note the information.* |
| 9 | Item 2.1 S. No. 10 | **3**  Draft MED 16(20392) Revision of IS 8198-12 Steel Cylinders for Compressed  Gases — Code of Practice  Part 12 Gases for Medical Use  ( First Revision )  Committee finalised the drafts for publication. | **3**  Standard has been Published as IS 8198 (Part 12) : 2024  [IS 8198 (Part 12) \_2024.pdf](https://drive.google.com/file/d/1ruPVWyACflNmSQKlc_-iLXII8WXTtrhH/view?usp=drive_link)  *Committee may note the information.* |
| 10 | Item 2.1 S. No. 11 | **3**  Amendment 1 of IS 8471:2003 'Acetylene Generators -Requirements (first revision)  Committee finalised the document for publication. | **3**  Amendment 1 has been published.  *Committee may note the information.* |
| 11 | Item 2.1 Sl. No. 12 | **3**  MED 16(20154) Revision of IS 16017 ‘Transportable gas cylinders – Periodic inspection and testing of seamless aluminum alloy gas cylinders’  The committee finalized the document for publication. | **3**  Draft under final stages of Publication.  *Committee may note the information.* |
| 12 | Item 2.1 Sl. No. 13 | **3** Committee deliberated the issue at length and following decisions were made.   1. **Valves for Hydrogen**- Shree YK Behani agreed to go through the comments and provide revised draft with concurrence of the panel within 01 month. 2. **Valves as per IS 3224 and for Bio-CNG**- Committee agreed that a separate standard may be formulated for valves to be used for Bio-CNG preferably made of stainless steel. Panel formulated for hydrogen valves to also formulate draft standard for Bio-CNG valves.   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*).  3. **Valves as per IS 16988-** Committee decided that Panel formulated for valves to be used for Bio-CNG to also give their recommendations wrt Solenoid operated valves for Bio-CNG. Committee agreed for incorporation of the note (*Note 4- Outlet connection for CNG valves shall be subject to agreement between the purchaser and the manufacturer.* )but same to be added once recommendations are received from the Panel.  4. **Cylinders as per IS 15490-** Committee agreed that no change required in design and material for use with Bio-CNG.  Panel formulated for providing recommendations for changing burst pressure to 450 bar in IS 15490. Committee also requested to have a common calculation formula for other similar products.  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   As per Cl. 5.1 of IS 16087: 2016, Biogas (biomethane) shall be stored and  transported through cylinders conforming to IS 7285  (Part 2). For automotive use, it shall be filled in  cylinders conforming to IS 15490. This standard only provides the composition of Biogas but does not provide testing methods for checking the purity/composition of Biogas. Furthermore a study was carried out by M/s EKCT and it was found out in the report that since purity of the biogas being supplied is not being controlled, cylinders which have a service life of 20 years are developing cracking within 4-6 months due to hydrogen embrittlement.  *In view of the above, Committee requested PCD dept of BIS to take necessary actions on the same and formulate a draft standard for testing of Biogas. Committee also requested PCD dept to form a joint panel so manufacturers of cylinders and valves can also give their inputs regarding Bio-Gas.* | 1. Draft received vide email dt. 08 February, 2024. Redrafted document as per IS 12 approved for Wide Circulation vide email dt. 10 April, 2024 for 30days.   Some comments were identified by MS which were editorial in nature.  [YKB Comments on Hydriogen Valves standard.docx](https://docs.google.com/document/d/1rTd4Zb3xp7xYo7ejTHQ-PdRmJLhBS-Us/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)  Subsequently comments have been resolved by Shri YK Behani and changes have been incorporated.  [Hydrogen Cylinder\_wc\_YKB\_CommentsIncorporating.docx](https://docs.google.com/document/d/1YpX2QvMcNhea5ppxkvSKWi4v628068aC/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)  *Committtee may discuss and decide for sending the document for Publication.*   1. *Panel meeting held in Pune on 10th April’24. The Panel decided that there is no need to formulate a new standard for Valves for Bio-CNG Application. Only Outlet 21 needs to be added in IS 3224. Subsequently same has been added in draft amendment to IS 3224.*   *Committee may discuss and decide.*  *Email received from Shri Pramoad of Rama Cylinders on 23 Jul 2024 as attached below:*  [Email\_Shri Pramod\_RamaCylinders.pdf](https://drive.google.com/file/d/15IL5lRwGRQSk5CQxG2UdNc24etSORjCg/view?usp=drive_link)  [RAMA Comparision of ISO 9809-1 - 2019 VS ISO 11439 -2013 VS IS 15490-2017 Sept2023.xls](https://docs.google.com/spreadsheets/d/19OIlGDhfs_jWLbCGbAb5OMmwwDH2CHKA/edit?usp=drive_link&ouid=116383954287804013918&rtpof=true&sd=true)  [RAMA Comparision of ISO 9809-1 VS 7285-2 Sept 2023.xls](https://docs.google.com/spreadsheets/d/1xkR_YYL0lP39rJXzpzbKReAoKToKGDG8/edit?usp=drive_link&ouid=116383954287804013918&rtpof=true&sd=true)  *Committee may discuss and decide*  Panel meeting for draft Amd 1 to IS 3224 held on 08 January, 2024. Subsequently draft was approved to be circulated as P-Draft for 15 days. Draft circulated to all members on 20 March, 2024 with last date of comments as 07 April, 2024.  Comments were received from Vanaz Engineers Limited. Subsequently the same was sent to all Panel members.  [Proposed amendment\_Table 22 of IS 3224 2021\_Vanaz Engineers Ltd.pdf](https://drive.google.com/file/d/1YqACl2RPm5at92aaXIPQmAIchh_OuZQq/view?usp=sharing)  A Panel meeting was again held on 10th April and draft amendment was finalised. Draft was then circulated to all members with last date of comments as 16 May, 2024. No comments were received on the same.  Draft was then put up for WC for 30 days on 20 May, 2024.  Comments were received on the same and have been incorporated. Document sent to all Panel members vide email dt. 05 July, 2024 with last date for comments as 16 July, 2024.  [IS 3224\_Amd1\_WC\_commentsIncorporating.docx](https://docs.google.com/document/d/1U2kjBwSFtUGQasZ_bZYOgKQ7N8d8OFMI/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)  *Committee may approve the changes made in the draft amendment and approve the draft for Publication.*   1. A Panel meeting was again held on 10th April and draft amendment was finalised. Draft was then circulated to all members on 16 May, 2024 with last date of comments as 27 May, 2024. No comments were received on the same.   Subsequently draft was sent for WC for 30 days with last date for comments as 26 July, 2024.  *Committee may discuss and decide.*   1. *Recommendations for changing burst pressure to 450 bar in IS 15490 not received yet.*   *Reminder sent vide email dt. 08 December, 2023 and 20 March, 154902024.*  *Panel meeting held on 10th April, 2024. Minutes of the Panel meeting along with relevant references attached here.*  [Minutes of Meeting\_10.04.24.docx](https://docs.google.com/document/d/1FV_6u0dYitOyoDQk7v901KIS9L3jaH2V/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)[Email by SJ Vispute.pdf](https://drive.google.com/file/d/1-P5p_72VTqo4uQPovPqLSpvb2gxVHXel/view?usp=sharing)[Attendance Sheet\_Panel Meeting\_10.04.24.pdf](https://drive.google.com/file/d/18mwZQQwuyLr6vMwrE8W8fs8KVcrJS0Ev/view?usp=sharing)[ISO 11439 cl. no. 7.3.2.pdf](https://drive.google.com/file/d/1KeQj4NOm10V6_AaeZCAKaV_GzWrwMCNU/view?usp=sharing) *,* [ECE R110 Annex.3 Table 6.3.pdf](https://drive.google.com/file/d/1Zy6Ko7Uh7Twkgp21JOgaiRJRn7hYedi1/view?usp=sharing)[ANSI NGV-II Page no.5.pdf](https://drive.google.com/file/d/1heaP2RcG6sWt56BpmFLDMRxDAImqUl8b/view?usp=sharing)[NZS 5454 cl. no. 8.3.3.pdf](https://drive.google.com/file/d/1vZEL_u-cYw7kQcipW0CtEZsvJqowT149/view?usp=sharing)  *Committee may discuss and decide.*  *Email received from Shri Pramod Sangwai of Rama Cylinders on 23 Jul 2024 as attached below:*  [Email\_Shri Pramod\_RamaCylinders.pdf](https://drive.google.com/file/d/15IL5lRwGRQSk5CQxG2UdNc24etSORjCg/view?usp=drive_link)  [RAMA Comparision of ISO 9809-1 - 2019 VS ISO 11439 -2013 VS IS 15490-2017 Sept2023.xls](https://docs.google.com/spreadsheets/d/19OIlGDhfs_jWLbCGbAb5OMmwwDH2CHKA/edit?usp=drive_link&ouid=116383954287804013918&rtpof=true&sd=true)  [RAMA Comparision of ISO 9809-1 VS 7285-2 Sept 2023.xls](https://docs.google.com/spreadsheets/d/1xkR_YYL0lP39rJXzpzbKReAoKToKGDG8/edit?usp=drive_link&ouid=116383954287804013918&rtpof=true&sd=true)  *Committee may discuss and decide*  *Email sent regarding joint panel formulation on 08 December, 2023. Reminder sent on 20 March, 2024.*  *No reply received.*  *Committee may discuss and decide,* |
| 13 | Item 2.1 Sl. No. 14 | **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 )’  Shri Manu Nigam of M/s Jai Maruti Gas Cylinders Private Limited agreed to go through the comments from MS and provide the draft standard by the end of November in consultation with Shri Ramana Vutukuru of M/s Linde India Limited, Kolkata.  Shri Manu Nigam to also provide inputs on addition of UN no. of LPG(UN No. 1075) in the draft amendment as per comments received from CMD-III. | **3**  Reminder sent vide email dt. 08 January 2024 and 22 March 2024.  Shri Manu Nigam Vide his email dt. 01 May, 2024 informed that he will provide the draft amd to IS 15975 within a week.  Draft amendment awaited.  [Email for IS 15975.pdf](https://drive.google.com/file/d/14iJfnkubY0yZnphA6reOka8YvBaXjZr8/view?usp=sharing), [AMENDMENT FOR IS 15975.docx](https://docs.google.com/document/d/1gMU_vlkpx17ahyKrszKE66-m2LbxJ5_w/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true), [MED16\_22407\_IS 15975\_2020\_Amd\_wc\_Checking (1).docx](https://docs.google.com/document/d/1j6J8B25hCPzLmZTaySxgITP3ZGj3R24G/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)  *Committee may discuss and decide.*  Email received with comments from Shri Manu Nigam from Jai Maruti Gas Cylinders Pvt Ltd on 21 July 2024.  [Email\_Shri Manu Nigam\_Jai Maruti.pdf](https://drive.google.com/file/d/1njMd4Du_AplnoAbQAvzZMRx2h-Y4DjTt/view?usp=drive_link)  [MED16\_22407\_IS 15975\_2020\_Amd\_1\_Jai Maruti.docx](https://docs.google.com/document/d/1eDs-fn-2rD9nIJ7k1iizSycJZDLwKBy8/edit?usp=drive_link&ouid=116383954287804013918&rtpof=true&sd=true) |
| 14 | Item 2.1 Sl. No. 15 | **3**  MED 16 (20199) Draft revision of ‘INSPECTION OF LOW PRESSURE WELDED STEEL GAS CYLINDERS  OTHER THAN LPG CYLINDERS IN USE CODE OF PRACTICE IS 5845’  Committee finalised the document for publication. | **3**  Document under Publication.  *Committee may note the information.* |
| 15 | Item 2.1 Sl. No. 16 | **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 discussed the issue at length. Convener of the Panel agreed to provide draft amendment by 10 December, 2023. Draft received to be circulated to the members for 10 days. If no comments are received draft to be put up for WC for 1 month. | **3**  Draft amendment awaited.  Reminder sent vide email dt. 11 December, 2023 and 22 March 2024.  [EKC draft comments on propsed IS 7285-P1 2018 Amndt..1.xlsx](https://docs.google.com/spreadsheets/d/1-ycQ9vwu0kUWvcpZtkOYoolgxs6QNM80/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true), [Email 7285-1,2.pdf](https://drive.google.com/file/d/1JPbBW1Rly7v2z6Qilf8rXfTeFF3mePBV/view?usp=sharing)  *Committee may discuss and decide.* |
| 16 | Item 2.1 Sl. No. 17 | **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 discussed the issue at length. Convener of the Panel agreed to provide draft amendment by 10 December, 2023. Draft received to be circulated to the members for 10 days. If no comments are received draft to be put up for WC for 1 month. | **3**  Draft amendment awaited.  Reminder sent vide email dt. 11 December, 2023 and 22 March 2024.  Committee may also seek to address Test Pressure in line with other standards.  [RAMA Comparision of ISO 9809-1 VS 7285-2 Sept 2023.xlsx](https://docs.google.com/spreadsheets/d/1FyJnp7FVCCRBuyu7FO5wKVrWUbl7u0vA/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true), [Email 7285-1,2.pdf](https://drive.google.com/file/d/1JPbBW1Rly7v2z6Qilf8rXfTeFF3mePBV/view?usp=sharing), [EKC Comparision of ISO 9809-1 VS 7285-2 Oct 2023.xlsx](https://docs.google.com/spreadsheets/d/1_phBX19UvhLLAIMj6MelFqrB0OF377Ph/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)  *Committee may discuss and decide.* |
| 17 | Item 2.1 Sl. No. 18 | **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. 13*  Shri Manu Nigam of M/s Jai Maruti Gas Cylinders Private Limited agreed to go through the comments from MS and provide the draft standard by the end of November in consultation with Shri Ramana Vutukuru of M/s Linde India Limited, Kolkata.  Shri Manu Nigam to also provide inputs on addition of UN no. of LPG(UN No. 1075) in the draft amendment as per comments received from CMD-III. | **3**  Reminder sent vide email dt. 08 January 2024 and 22 March 2024.  Shri Manu Nigam Vide his email dt. 01 May, 2024 informed that he will provide the draft amd to IS 15975 within a week.  Draft amendment awaited.  [Email for IS 15975.pdf](https://drive.google.com/file/d/14iJfnkubY0yZnphA6reOka8YvBaXjZr8/view?usp=sharing), [AMENDMENT FOR IS 15975.docx](https://docs.google.com/document/d/1gMU_vlkpx17ahyKrszKE66-m2LbxJ5_w/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true), [MED16\_22407\_IS 15975\_2020\_Amd\_wc\_Checking (1).docx](https://docs.google.com/document/d/1j6J8B25hCPzLmZTaySxgITP3ZGj3R24G/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)  *Committee may discuss and decide.* |
| 18 | Item 2.1 Sl. No. 19 | **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 S. No. 13 point 4 of minutes of 31st meeting.* | **3**  *See Item 2.1 Sl. No. 12 point 4* |
| 19 | Item 2.1 Sl. No. 20 | **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’  Committee discussed the issue at length. Convener of the Panel agreed to provide draft amendment by 10 December, 2023. Draft received to be circulated to the members for 10 days. If no comments are received draft to be put up for WC for 1 month. | **3**  Reminder sent vide email dt. 11 December, 2023 and 22 April, 2024.    *Comments received vide email dt. 29 April, 2024.*  [IS 16507 comments.pdf](https://drive.google.com/file/d/1ANshB7ZaMmOBaYqgNQ8Y74vem3RTH-NW/view?usp=sharing)  *Committee may discuss and decide.*  *Email received from Shri Pramoad of Rama Cylinders on 23 Jul 2024 as attached below:*  [Email\_Shri Pramod\_RamaCylinders.pdf](https://drive.google.com/file/d/15IL5lRwGRQSk5CQxG2UdNc24etSORjCg/view?usp=drive_link)  [RAMA Comparision of ISO 9809-1 - 2019 VS ISO 11439 -2013 VS IS 15490-2017 Sept2023.xls](https://docs.google.com/spreadsheets/d/19OIlGDhfs_jWLbCGbAb5OMmwwDH2CHKA/edit?usp=drive_link&ouid=116383954287804013918&rtpof=true&sd=true)  [RAMA Comparision of ISO 9809-1 VS 7285-2 Sept 2023.xls](https://docs.google.com/spreadsheets/d/1xkR_YYL0lP39rJXzpzbKReAoKToKGDG8/edit?usp=drive_link&ouid=116383954287804013918&rtpof=true&sd=true)  *Committee may discuss and decide* |
| 20 | Item 2.1 Sl. No. 21 | **3**  Draft standard based on ISO 20475:2018 ‘Gas cylinders — Cylinder bundles — Periodic inspection and testing’  Committee decided that MS and M/s EKCT to replace ISO standards with relevant Indian Standards and subsequently circulate to all members as P-Draft for 1 month.  [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**  Draft not received yet.  Reminder sent vide email dt. 11 December, 2023 and 22 April, 2024.    *Committee may discuss and decide.* |
| 21 | Item 2.1 Sl. No. 23 | **3**  Draft standard based on ISO 11623:2015 ‘Gas cylinders — Composite construction — Periodic inspection and testing’  Committee discussed the issue at length and finalised the circulation of the draft standard as P-Draft for 1 month with editorial corrections.  [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) | **3**  ISO 11623 has now been revised as ISO 11623: 2023.  [ISO 11623;2023 ed.3 - id.76501 Publication PDF (en)\_watermark.pdf](https://drive.google.com/file/d/1FG_vtsKblLYFVwTcKHDJI4otQitK756D/view?usp=drive_link)  *Committee may discuss and decide.* |
| 22 | Item 2.1 Sl. No. 24 | **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 19881:2018  Shri Ghanshyam Goyal of M/s Jayfe Cylinders informed that the draft can be put up for WC.  In view of the above, Committee finalised the draft for WC for 1 month. | **3**  Draft 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)  *Committee may discuss and decide.* |
| 23 | Item 2.1 Sl. No. 25 | **1**  Amd 1 of IS 7302: 2018 ‘Valve fittings for self contained breathing apparatus SCBA) and self contained underwater breathing apparatus (SCUBA) - Specification (First Revision)’  Committee discussed the issue at length.  For Item 6 S. No. 3 of minutes of 31st meeting.  Committee informed that changes have already been incorporated in the draft amendment.  Committee finalised the draft for publication. | **1**  Amendment 1 has been published.  [7302A1.pdf](https://drive.google.com/file/d/17bGhXZ2t6-wzHYUClKVF2ZK0UV8cdDzo/view?usp=sharing)  *Committee may note the information.* |
| 24 | Item 2.1 Sl. No. 26 | **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 13175:2019  Shri Sunil K Dey of M/s Bhiwadi Cylinders informed during the meeting that he will provide the draft standard by the last week of November in consultation with the reconstituted panel.  The reconstituted Panel is as follows-  a)Shri Sunil K Dey of M/s Bhiwadi Cylinders (Convener)  b) Shri Aakash Agarwal of M/s BPCL  c) Shri Siva Shankar of M/s HPCL  d) Shri Chandrakant Ghatol of M/s IOCL  e) Shri Y.K Behani of M/s Tekno Valves | **1**.  Reminder sent vide email dt. 14.12.2023.  Draft received from Shri Sunil K Dey,  of M/s Bhiwadi Cylinders Pvt. Ltd. vide email dt. 09 July, 2024.  [IS 16484\_2024\_Draft.docx](https://docs.google.com/document/d/1bpmDH137g6tpV2BXMCt83_21DJrpOWsx/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)  *Committee may dicuss and decide.*  Shri YK Behani vide his email dt. 23.7.2024 has sent his comments  [Comments on Draft Specification IS 16484.doc](https://docs.google.com/document/d/153XtchnivTAauucQqyuAe_NOY8b-i_5R/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)**,** [Email for 16484.pdf](https://drive.google.com/file/d/18KI4EdauabJar1R3l8NlTLS_juuLeVe1/view?usp=sharing) |
| 25 | Item 2.1 Sl. No.27 | Revised draft of IS 16646 ‘Transportable refillable fully wrapped composite cylinders for liquefied petroleum gas (LPG) - Specification’ based on revised ISO 11119-3:2020  [IS-ISO 11119-3\_2020.pdf](https://drive.google.com/file/d/1fcx0Zt7cgW5Kn5wW3UPayCcZypEWGblt/view?usp=drive_link)  Committee finalised the draft for circulation as P-Draft for one month. If no comments are received draft to be put up for WC. | Draft received vide email dt. 07 December 2023 from Shri Naveen Kumar Jain of M/s Time Technoplast for review by Panel Members.  [ISO 11119-3;2020 ed.3 - id.75817 Publication PDF (en).pdf](https://drive.google.com/file/d/16-SSoeptA95gFQ7QunSO0f5UE-FTi8W4/view?usp=sharing), [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)  Panel formed for formulation of the standard is-  a) Shri Naveen Kumar Jain of M/s Time Technoplast (Convener)  b) Shri Maneesh Patney of M/s BPCL  c) Shri Siva Shankar of M/s HPCL  d) Shri A. Bera of LERC  e) A representative of M/s IOCL  f) Shri Pradeep Kamat of M/s Supreme Industries  No comments have been received from any of the Panel Members.  *Committee may discuss and decide.* |
| 26 | Item 2.1 Sl. No.28 | **1**  Draft revision of IS 12300:1988 ‘Valve fittings for refrigerant cylinders – Specification’  Committee finalised the draft for publication. | **1**  Draft under final stages of Publication.  *Committee may note the information.* |
| 27 | Item 2.1 Sl. No.29 | **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 clarified that no changes are required as Re + Ph are not in brackets and are separate terms.  Committee also finalised the draft for WC for 1 month. | **2**  Draft put up for WC on 07 March, 2024 for 30 days. Last date for comments was 07 April, 2024.  No comments received.  *Committee may approve the draft for Publication.*  Draft Amd 2 was also earlier prepared in 2022. Changes identified in the Amd have already been incorporated in the draft revision document.  *Committee may approve to drop Amd Doc. MED 16(17246).* |
| 28 | Item 2.1 Sl. No.30 | 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]’  Committee deliberated the issue at length and decided for formulation of a panel which will provide their recommendation for adopting the standard/ provide a draft standard within 1 month.  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 | Draft awaited. Panel meeting not held yet.  Email regarding same sent on 14.12.2023 and reminder sent on 01.05.2024.  [Email 11118.pdf](https://drive.google.com/file/d/1CX7JMjICbFLfvw3aijQ4icXNGWxgTuKn/view?usp=sharing)*,* [ISO 11118;2015 ed.2 - id.45767 Publication PDF (en).pdf](https://drive.google.com/file/d/1b8zORB3uqmUEoTLINPO82794Nfy3ZcWQ/view?usp=sharing)  *Committee may discuss and decide.* |
| 29 | Item 2.1 Sl. No. 31 | **1**  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. Committee decided that certification requirements to be removed from the standard(IS 5903) and a separate product standard needs to be formulated for safety of valves.  Shri YK Behani of M/s Tekno Valves agreed to provide a draft standard for revision of IS 5903 such that it contains only recommendations for safety devices.  Shri YK Behani also agreed to provide draft for a separate product standard on safety of valves in consultation with Shri SK Dey of M/s Bhiwadi Cylinders Private Limited.  Discussion for the same to be held during meeting of MED 16:1 to be held in consultation with convener of the subcommittee. | Pressure Relief Valves For Cylinder Valves And For Transportable Refillable Cylinders  Draft for a separate standard on PRV valves sent by Shri YK Behani in consultation with Shri SK Dey vide email dt 10.01.2024.  Subsequently draft was sent to all members for comments. No comments were received and hence document was sent for approval from chairman for WC for 30 days. Approval received vide email dt. 10.04.2024.  While formatting the draft as per IS 12, some comments were identified by MS and resolved by Shri YK Behani vide his email dt. 28 June, 2024.  [Email for MS.pdf](https://drive.google.com/file/d/10Kz6Zpq-Xudd1KYMFBbVqyse5KHhg5Ty/view?usp=sharing), [Amendment in PRV Valve, 28.06.24.docx](https://docs.google.com/document/d/1KLpX09PWlejkyfIz2skgrM7KKKlpK0Wc/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)  Comments were also received from Shri SK Dey and have been responded to by Shri YK Behani vide his email dt 28 June, 2024.  [PRV draft Comments MED 16 JUNE 24.docx](https://docs.google.com/document/d/1THeT3AfNNSKGbxjhuiTTbPNzNaiEU-25/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true), [Email for SK Dey.pdf](https://drive.google.com/file/d/1r7ldgmxpx5n3AXDaSA62-1-4D3zPBVTk/view?usp=sharing)  *Committee may discuss and finalise the draft standard for* ***PRV valves*** *for WC.*  Draft revision of IS 5903 [Types of Safety Device for Gas Cylinders and Gas Cylinder Valves]  Draft revision of IS 5903 received from Shri YK Behani vide his email dt. 02 April, 2024. Subsequently draft circualated to all members vide email dt. 13 May, 2024.  Comments were received from Shri SK Dey stating that a discussion is required. Written submission not received from Shri SK Dey yet.  [Email to SK Dey for IS 5903.pdf](https://drive.google.com/file/d/1M_EXNPBqmRxJ2OB3ep9PKonyC1XbVDkH/view?usp=sharing), [WC IS 5903\_Prepared (1).docx](https://docs.google.com/document/d/1f-hz6UDukiRupk66TaIxsYrNSkw2HZhe/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)  *Committee may discuss and decide.* |
| 30 | Item 2.1 Sl. No.  32 | **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 finalised the draft for WC. | **1**  Draft sent for wide circulation on 07.03.2024 for 30 days with last date for comments as 07.04.2024.  [MED16\_ IS 9798\_2013\_(23088)\_wc\_DDG Corrected.docx](https://docs.google.com/document/d/1tyl_ZFfMxcsTDflfG1HtpWM4-EET0ouG/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)  [9798\_WC (1).pdf](https://drive.google.com/file/d/1a9E5dyVANXdSrn7NystfOxTR9Zy-8UQu/view?usp=sharing)  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)  *Committee may discuss and decide.* |
| 31 | Item 2.1 Sl. No. 34 | **1**  Draft revision of IS 8776 Valve Fittings for Use With Liquefied Petroleum Gas LPG Cylinders up to and Including 13 Litre Water Capacity - Specification  Committee finalised the draft for publication. | **1**  Document under final stages of Publication.  Shri Satish Kabra in consultation with Shri YK Behani provided their comments on clarifications of CMD-III.  [Email for IS 8776.pdf](https://drive.google.com/file/d/11cTO18UsOl_HevgdzHRfvHAtXNDSiNBG/view?usp=sharing), [IS 8776 - Final Draft.docx](https://docs.google.com/document/d/1BwHRRXhUXCsINONH0RPknEXt8CSx2ZSv/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true), [Draft - IS 8776 -with editing in Blue.docx](https://docs.google.com/document/d/1XT-5IrBt4ydE1G5O_f_INylCiywsjOZJ/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)  *Committee may discuss and decide.* |
| 32 | Item 2.1 Sl. No. 35 | **2**  Review of IS 3196-2 (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)) in line with ISO 4706:2023 [Gas cylinders — Refillable welded steel cylinders — Test pressure 60 bar and below]  Shri Manu Nigam agreed to provide his recommendations for IS 3196-2 in consultation with Shri Manvinder Singh latest by 10 December, 2023. | **2**  Recommendations not received yet.  Reminder sent vide email dt 14.12.2023 and 01.05.2024.  *Committee may discuss and decide.* |
| 33 | Item 2.1 Sl. No. 36 | Review IS 8451 as base standard superseded by ISO 18119: 2018  Committee agreed for inclusion of Clause 13 Annexure B of ISO 18119 in the standard by amendment.  Draft amendment to be prepared by MS and to be circulated as P-Draft for 1 month.  If no comments are received, draft to be put up for WC. | Document under preparation by MS.  The relevant standards are given below:  [IS 8451\_2018.pdf](https://drive.google.com/file/d/121ZPWYzY-NffbyPqLLat-I-YOPm6eqYR/view?usp=drive_link)  [ISO\_18119\_2018(E)-Character\_PDF\_document.pdf](https://drive.google.com/file/d/1nDTSHw_Zm4QO0J3UArYUfb-WvwPNWzXN/view?usp=drive_link)  [ISO 18119;2018\_Amd 1;2021 ed.1 - id.80850 Publication PDF (en).pdf](https://drive.google.com/file/d/1D5Ms7PSLC8920BZrfevG02CAtjQJ55W5/view?usp=drive_link)  [ISO 18119;2018\_Amd 2;2024 ed.1 - id.86610 Publication PDF (en).pdf](https://drive.google.com/file/d/1KjrLRa9bMpKuoDCNFKBYcqBEf_3F3ehl/view?usp=drive_link)  *Committee may note the information.*  *Email received from Shri Pramoad of Rama Cylinders on 23 Jul 2024 as attached below:*  [Email\_Shri Pramod\_RamaCylinders.pdf](https://drive.google.com/file/d/15IL5lRwGRQSk5CQxG2UdNc24etSORjCg/view?usp=drive_link)  [RAMA Comparision of ISO 9809-1 - 2019 VS ISO 11439 -2013 VS IS 15490-2017 Sept2023.xls](https://docs.google.com/spreadsheets/d/19OIlGDhfs_jWLbCGbAb5OMmwwDH2CHKA/edit?usp=drive_link&ouid=116383954287804013918&rtpof=true&sd=true)  [RAMA Comparision of ISO 9809-1 VS 7285-2 Sept 2023.xls](https://docs.google.com/spreadsheets/d/1xkR_YYL0lP39rJXzpzbKReAoKToKGDG8/edit?usp=drive_link&ouid=116383954287804013918&rtpof=true&sd=true)  *Committee may discuss and decide* |
| 34 | Item 2.1 Sl. No. 40 | Review of IS 12936 Basic requirements for delivery persons engaged in the delivery of LPG cylinders - Code of practice (First Revision)  Shri Chandrakant Ghatol M/s IOCL agreed to provide his recommendation within 1 month. | Recommendation awaited.  Reminder sent vide email dt.- 14.12.2023 and 01.05.2024.  *Committee may discuss and decide.* |
| 35 | Item 2.1 Sl. No. 41 | Draft Standard on Butane Gas Cartridges below 500mL  Committee agreed for circulation of the draft document to all members as P-Draft. If no comments are received, Draft to be put up for WC. | Draft standard(**Light Gauge Metal Containers — Non-Refillable Lpg Cartridges — General Requirements**) modified as per IS 12 circulated to all Panel members vide email dt.- 12.03.2024 with comments by MS.  Subsequently comments were also received from Shri Mohit Jasuja of M/s Iwatani Corporation which he shared with all other members vide email dt. 28 March, 2024.  No reply received yet from other Panel members. Reminder sent vide email dt. 01.05.2024.  [Email for NON-REFILLABLE LPG CARTRIDGES.pdf](https://drive.google.com/file/d/1A3gWxqhnVFf8u_FId1IUHp-TuTW1_QUl/view?usp=sharing), [4.19\_Gas\_Cartridge\_P-Draft (2).docx](https://docs.google.com/document/d/1nmBPbO3klw9FCCS9dI7gUVIQkrUutRjS/edit?usp=sharing&ouid=116383954287804013918&rtpof=true&sd=true)  *Committee may discuss and decide.*  Shri Hari Babu Banoth of M/s BPCL, Mumbai has also informed that he has been transferred to another department and will no longer be able to contribute on the above.  The Present composition of the Panel is as follows-  a) Shri Satish Kabra of M/s Kabsons(Convener)  b) Shri Manvinder Singh of M/s Bhiwadi Cylinder Private Limited, New Delhi  c) Shri Manu Nigam of M/s Jai Maruti Gas Cylinders Private Limited, Gwalior  d) Shri Siva Shankar of M/s HPCL, Mumbai  e) Shri Hari Babu Banoth of M/s BPCL, Mumbai  f) Shri Naveen Kumar jain of M/s Time Technoplast Limited, Mumbai  g) Shri Rakesh G Khade of M/s HPCL, Mumbai  h) Shri Mohit Jasuja of M/s Iwatani Corporation  i) Representatives from JIA  *Committee may also reconstitute the Panel.* |
| 36 | Item 2.1 Sl. No. 43 | ISO 20421-1:2019: Cryogenic vessels — Large transportable vacuum-insulated vessels — Part 1: Design, fabrication, inspection and testing.  Panel agreed to provide their recommendations by the 30 November, 2023.  *Background:*  *See also Item 2.1 S. No. 41*  Panel meeting held on 19 October, 2023 but members did not join so next panel meeting planned on 02 November, 2023.  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 follows  1) 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 | Modified adoption document provided by the Panel vide email dt. 13.02.2024. Document was sent for review to Shri S Arulanandam of M/s Chart Industries. Comments received by him were sent to all members vide email dt. 21.03.2024. Reminder sent vide email dt. 10.04.2024 and 01.05.2024.  Comments were resolved and draft modified adoptions of ISO 20421-1:2019 was sent for WC on 19 June 2024 for 30 days with approval of Chairman vide email dt. March 19, 2024.  [ISO 20421-1.pdf](https://drive.google.com/file/d/1cXDkZxyPPSNkUd2r3tX9hzQ38SQn5Ogh/view?usp=sharing)  *Committee may kindly approve the document for printing.* |
| 37 | Item 2.1 Sl. No. 44 | Adoption of ISO 11119-1,2,3 and draft amendment to IS 15935 : 2021 Composite Cylinders for On-Board Storage of Compressed Natural Gas ( CNG ) as a Fuel for Automotive Vehicle - Specification ( First Revision )  Panel agreed to provide their recommendations by 30 November 2023.  *Background:*  Reminder sent vide email dt. 31 July, 2023 and again on 10 October, 2023.  The committee discussed the issue at length. Shri Naveen Kumar Jain informed that cylinders manufactured as per ISO 11119-1,2,3 are used for storage and transportation of gas whereas IS 15935 are used for automotive use. In view of the above committee constituted the following panel for providing recommendations on adoptions of these ISO standards and for providing draft amendment to IS 15935. | Identical adoptions of the standards ISO 11119-1,2,3 have been published.  [IS\_ISO 11119-1\_2020.pdf](https://drive.google.com/file/d/1HzTZ3vyt-E527LeE_6ry6u_SLEAW-n2u/view?usp=drive_link)  [IS-ISO 11119-2\_2020.pdf](https://drive.google.com/file/d/1I3Qs0U41ABcqSjwMqK1eS4_ZcGU_qEZ7/view?usp=drive_link)  [IS-ISO 11119-3\_2020.pdf](https://drive.google.com/file/d/1fcx0Zt7cgW5Kn5wW3UPayCcZypEWGblt/view?usp=drive_link)  *Committee may note the information.* |
| 45 | Item 4  Sl. No.  7 | ISO 11515: Gas Cylinders-Refillable composite reinforced tubes of water capacity between 450 l and 3000 1-Design, construction and testing  Committee finalised the document for Publication.  *Background:*  Draft put up for WC on 02 August, 2023 with last date of comments as 01 September, 2023.  No comments received.  Committee discussed the issue at length.  Committee agreed for adoption of ISO 11515 and document to be put up for WC for 60 days. | The document IS/ISO 11515 : 2022 has published in December 2023.  [IS-ISO 11515\_2022.pdf](https://drive.google.com/file/d/1Kyu4Er1hmKxPSWjd9yeU_zGMgDqrLm82/view?usp=drive_link)  *Committee may note the information.* |
| 46 | Item 4  Sl. No.  8 | MED(16) 23093 Amd. to IS 15660Refillable Transportable Seamless Aluminium Alloy Gas Cylinders — Specification ( First Revision )  Committee finalised the document for Publication.  *Background:*  Draft amendment put up for WC on 01 August, 2023 with last date of comments as 27 August, 2023.  No comments received.  Amendment to remove exclusion of LPG from scope of IS 15660 to be put up for Wide Circulation. Once the amendment is published committee informed that it cover all requirements of ISO 7866 and hence ISO 7866 need not be adopted.  (See also Item 5.1 of minutes of 29th meeting of MED 16) | The document was published in February 2024.  [15660A2.pdf](https://drive.google.com/file/d/1Se0MO2sW_z4CvqSpegF-Dvc83-X5cgzQ/view?usp=drive_link)  *Committee may note the information.* |
| 47 | Item 4  Sl. No.  9 | ISO 11120:2015 Gas cylinders Refillable seamless steel tubes of water capacity between 150 l and 3000 l Design, construction and testing  Committee finalised the document for Publication.  *Background:*  *See also Item 2.1 S. No. 17 regarding IS 7285-2.*  Draft put up for WC on 08 August, 2023 with last date of comments as 01 September, 2023.  No comments received.  IS 7285 Part 2 already aligned with ISO 9809-1 so ISO standard is not to be adopted. Committee also approved for adoption of ISO 11120 and approved the document for Wide circulation for 60 days. | Document under final stages of Publication (Doc No. 23111)  *Committee may note the information.* |
| 48 | Item 4  Sl. No.  10 | ISO 9809-2:2019 Gas cylinders — Design, construction and testing of refillable seamless steel gas cylinders and tubes — Part 2: Quenched and tempered steel cylinders and tubes with tensile strength greater than or equal to 1 100 Mpa  Committee finalised the document for Publication.  *Background:*  Draft put up for WC on 08 August, 2023 with last date of comments as 01 September, 2023.  Committee discussed the issue at length.  Committee agreed for adoption of ISO 9809-2 and document to be put up for WC for 60 days. | The document has been published in December 2023.  [IS-ISO 9809-2\_2019.pdf](https://drive.google.com/file/d/1HvK8t-uDIe6rUAPsju7LDVqyKzCtA1hn/view?usp=sharing)  *Committee may note the information.* |
| 49 | Item 4  Sl. No.  11 | ASME BPV Section VIII Division 3 Part KD-10  Ghanshyam Goyal and Member Secretary agreed to provide their recommendations within 1 month.  *Background:*  Committee discussed the issue at length. Shri Ghanshyam Goyal and Member Secretary to identify gap areas in IS 16735 wrt ASME standard. Mail to be sent for members to be added in panel for providing recommendations on ASME standard. | Recommendations awaited.  *Committee may discuss and decide.* |
| 50 | Item 21 | Amendment to IS 17613: 2021  Gas Cylinders — Refillable Welded  Aluminium Alloy Cylinders —  Design, Construction and Testing  Shri Chandrakant Ghatol agreed to provide the recommendations by the end of the day. The recommendations received to be circulated to all members as P-Draft for 1 month. If no comments are received, draft to be put up for WC. | P-Draft circulated on 19-12-2023 for 30 days.  No comments received.  The document 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)  *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\_MED16.pdf](https://drive.google.com/file/d/1tKAnk1-XF-gDPmm3-_bY1kL9mBdzkyg4/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** | **Last Action Date** |
| --- | --- | --- | --- | --- | --- |
| 1 | MED/16/25087  IS 3224: 2021 | Valve for compressed gas cylinders excluding liquefied petroleum gas (LPG) cylinders - Specification (fourth revision) Amendment - 1 | Amendment | WC-Draft | WC on 20-05-2024 for 30 days.    See Item 2.1 Sl. No. 13 |
| 2 | 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. 16 |
| 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. 3 |
| 4 | MED/16/25978 | LIGHT GAUGE METAL CONTAINERS NON-REFILLABLE LPG CARTRIDGES GENERAL REQUIREMENTS | New | P-Draft | 25-06-2024    See Item 2.1 Sl. No. 41 |
| 5 | 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 | WC on 07-03-2024 for 30 days    Item 2.1 Sl. No. 24 |
| 6 | 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 | WC on 07-03-2024 for 30 days    See Item 2.1 Sl. No.29 |
| 7 | MED/16/22407  IS 15975: 2020 | Gas Cylinders-- Conditions for Filling Gas Cylinders ( First Revision ) Amendment - 1 | Amendment | P-Draft | P-Draft on 03-05-2023 for 30 days      See Item 2.1 Sl. No. 13 and 17 |
| 8 | MED/16/16990  IS 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 | WC-Draft | 18-02-2021 |
| 9 | 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. 3 |
| 10 | MED/16/24646  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 11114-2 | Revision | WC-Draft | WC on 06-03-2024 for 30 days. |
| 11 | MED/16/25994  IS 16988 : 2018 | COMPRESSED NATURAL GAS CYLINDER VALVE INTEGRATED WITH SOLENOID OPERATION (REMOTELY CONTROLLED) FOR AUTOMOTIVE USE - SPECIFICATION | Amendment | WC-Draft | WC on 27-06-2024 for 30 days    See Item 2.1 Sl. No. 13 |
| 12 | MED/16/24459  IS 17613 : 2021 | GAS CYLINDERS REFILLABLE WELDED ALUMINIUM ALLOY CYLINDERS DESIGN CONSTRUCTION AND TESTING Amendment - 1 | Amendment | WC-Draft | WC on 07-03-2024 for 30 days    See Item 21 |
| 13 | 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 | WC-Draft | WC on 19-06-2024 for 30 days.    See Item 2.1 Sl. No. 43 |
| 14 | 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 | WC on 07-03-2024 for 30 days.    See Item 2.1 Sl. No.  32 |

**3.2.2 Documents Under Print:**

| **Sl No.** | **IS No.** | **Title** | **Document Type** | **Status** | **Remarks** |
| --- | --- | --- | --- | --- | --- |
| 1 | IS 8737 : 2017 (17247) | Valve fittings for use with liquefied petroleum gas (LPG) cylinders for more than 5 litre water capacity - Specification (Second Revision) Amendment - 2 | Amendment | Under Printing | - |
| 2 | IS 8776: 1988 (18618) | Valve Fittings for Use With Liquefied Petroleum Gas LPG Cylinders up to and Including 13 Litre Water Capacity — Specification | Revision | Under Printing | See Item 2.1 Sl. No. 34 |
| 3 | IS 3745: 2006 (16579) | Yoke Type Medical Cylinder Valve with Pin Index Connection | Revision | Under Printing |  |
| 4 | IS 7241: 1981 (23565) | Gas Cylinder Technology —Glossary of Terms ( Second Revision ) | Revision | Under Printing | *See* Item 2.1 Sl. No. 5. |
| 5 | MED/16/(22706) | CRYOGENIC VESSELS — VALVES FOR CRYOGENIC VESSELS | New | Under Printing | See Item 2.1 Sl. No. 7 |
| 6 | IS 8198 : Part 10: 1980 (20415) | Steel Cylinders for Compressed Gases — Code of Practice Part 10 Methyl Bromide Gas ( First Revision ) | Revision | Under Printing  (Ready for Gazette | See Item 2.1 S. No. 9 |
| 7 | IS 16017: 2013 (20154) | Transportable Gas Cylinders — Periodic Inspection and Testing of Seamless Aluminium Alloy Gas Cylinders (First Revision) | Revision | Under Printing | See Item 2.1 Sl. No. 12 |
| 8 | MED/16/(23111) | GAS CYLINDERS REFILLABLE SEAMLESS STEEL TUBES OF WATER CAPACITY BETWEEN 150 L AND 3 000 L DESIGN CONSTRUCTION AND TESTING | New | Under Printing | See Item 4  Sl. No.  9 |
| 9 | IS 8198 : Part 8: 1993 (20771) | Steel Cylinders for Compressed Gases — Code of Practice Part 8 Common Organic Refrigerant Gases ( Second Revision ) | Revision | Under Printing  (Ready for Gazette) | See Item 2.1 S. No. 9 |
| 10 | IS 5845: 1993 (20199) | INSPECTION OF LOW PRESSURE WELDED STEEL GAS CYLINDERS OTHER THAN LPG CYLINDERS IN USE CODE OF PRACTICE (THIRD REVISION) | Revision | Under Printing | See Item 2.1 Sl. No. 15 |
| 11 | IS 12300: 1988 (20189) | GAS CYLINDER VALVES FOR SMALL REFRIGERANT CYLINDERS SPECIFICATION | Revision | Under Printing | See Item 2.1 Sl. No.28 |

*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) | 189 |
| 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 | 4 |
| 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 | 23 |
| 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 | 44 |
| IS 9798 : 2013 | Low Pressure Regulators for Use with Liquefied Petroleum Gas (LPG) Mixtures | 72 |
| 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 | 7 |
| 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 | 5 |
| IS 16988:2018 | Compressed natural gas cylinder valve integrated with solenoid operation (Remotely  Controlled) for automotive use - Specification | 2 |
| **Total** | | 453 |

*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** The present composition of the Gas Cylinder Valves & Fittings Sub Committee, MED 16:1 along with attendance of members in the last two consecutive meetings is given at **Annex 2 (Page no. 45).**

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

**5.5** The present composition of the Low Pressure Gas Cylinders Sub-Committee, MED 16:2 along with attendance of members in the last two consecutive meetings is given at **Annex 3 (page no. 46).**

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

**5.6** The present composition of the Dissolved Acetylene Cylinders, Generators, Acetylene Pipe Lines and High Pressure Gas Cylinders Subcommittee, MED 16:3 along with attendance of members in the last two consecutive meetings is given at **Annex 4 (Page no. 48).**

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

**5.7 Request for membership in this Committee**

Revised nominations received from the following organizations after 25th October 2023.

1. **Kosan Industries Limited, Surat** (Revised nomination received on November 22, 2023)

Shri Bhupinder Singh (Principal Member)

Shri Girish K. Desai (Alternate Member)

[NOMINATION PROFORMA (2).pdf](https://drive.google.com/file/d/1gvfffPpW1gR7sVjz0UoAsIeme_FDPdNy/view?usp=sharing)

1. **Vanaz Engineers Limited, Pune** (Revised nomination received on January 6, 2024)

Shri S. J . VISPUTE (Principal Member)

Shri A S WAGH (Alternate Member)

Shri A S Athalye (Young Professional)

[Nomination proforma (ME16) SEPT.2023 (1).pdf](https://drive.google.com/file/d/1Iz1I2o0PRNgWnLQ80fAYgCgJk9DYT9Az/view?usp=sharing)

1. **Bharat Petroleum Corporation Limited, Mumbai** (Revised nomination received on June 27, 2024)

Shri Senthil Kumar B (Principal Member)

Shri Aakash Agarwal (Alternate Member-1)

Shri Ramprit (Alternate Member-2)

[BPCL Nomination 270624 (1).pdf](https://drive.google.com/file/d/1m2EDP7M0hIOoBlLCiJ_YxSeoSksRqMn0/view?usp=sharing)

1. **Hindustan Petroleum Corporation Limited** (Revised nomination received on May 8, 2024)

Shri Reddy Dhanumjaya Rao (Principal Member)

Shri Dinesh Pangtey (Alternate Member)

Shri Debashish Chakraverty as a convernor in MED 16:2

[MED 16 NOMINATION PROFOMA -HPCL (2).pdf](https://drive.google.com/file/d/1DxLjcgRUfeNnzgyctY47rY-7qvHiMJvV/view?usp=sharing)

*Shri Debashish Chakraverty was the convernor in MED 16:2. Revised nomination received. Committee may kindly recommend the new convenor name in MED 16:2 sub committee.*

1. **IOCL** (Revised nomination received on July 5, 2024 for MED 16:3 subcommittee)

Shri Alok Sharma (Principal Member)

Dr Tapan Bera (Alternate Member)

[IOCL Revised Nomination.pdf](https://drive.google.com/file/d/1n6v0cvPG6KuEx4anj0okntM-7eeOIShV/view?usp=sharing)

1. **IOCL** (Revised nomination received on July 24, 2024)

Shri Bidhan Chandra Jena(Principal Member)

Shri Chandrakant Ghatol (Alternate Member)

Shri K N Gowtham (Alternate Member)

[Nomination Proforma\_MED16 IOCL 24072024.pdf](https://drive.google.com/file/d/1KQiLeGLaezc833Hkd8hB4v7-kkU3DrZU/view?usp=sharing)

1. Committee is requested to review nomination of Shri Vivek Jain of M/s Minda Westport as members of MED 16 sectional committee due to his active participation in various Panels and providing valuable comments in formulation of new standards as well as revision of standards.
2. Committee is also requested to review nomination of M/s Bhiwadi Cylinders in the MED 16:01, Gas Cylinder Valves and Fittings sub committee as they actively participate in formulation of standards on Valves.

**Item 6 COMMENTS ON PUBLISHED INDIAN STANDARD**

1. *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)*

| ***SNo.*** | ***Clause / Subclause No.*** | ***Paragraph No./Figure No./Table No.*** | ***Type of Comment*** | ***Attachment*** |
| --- | --- | --- | --- | --- |
| *1* | *Amendment No. 1* | *Amendment No. 1* | *Editorial* | [*cmt\_1717076429\_665881cd32856.pdf*](https://www.services.bis.gov.in/tmp/cmt_1717076429_665881cd32856.pdf) |
| ***Comments/Suggestions along with Justification for the Proposed Change*** | | *In title of Amd. No. 1,*   | *IS 7285 (PART 2): 2018 is mentioned. Year 2018 is mentioned however it should be 2017.* | | --- | | | |
| ***Proposed Change/Modified Wordings*** | | *Title of Amd. No. 1 to be changed as*   | *IS 7285 (PART 2): 2017 is mentioned. Year 2017 to be mentioned instead of 2018.* | | --- | | | |

1. *IS 14899: 2014 Liquefied petroleum gas (LPG) containers for automotive use - Specification*

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)

*Committee may discuss and decide on the above comments.*

**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 ) | *See Item 2.1 Sl. No. 13 and 17* |
| 2. | IS 15637 : 2006  Reviewed In : 2020 | Welded stainless steel cylinders for liquefied petroleum gases (LPG) from 0.5 litre to 250 litre water capacity - Specification | - |
| 3. | IS 3196 (Part 2) : 2006  Reviewed 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) | - |
| 4. | IS 7142 : 1995  Reviewed In : 2020 | Welded low carbon steel cylinders for low pressure liquifiable gases not exceeding 5 litre water capacity - Specification (First Revision) | WC on 07-03-2024 for 30 days    See Item 2.1 Sl. No.29 |
| 5. | IS 16485 : 2020 | Flame Arresters — Performance Requirements, Test Methods and Limits for Use ( First Revision ) | - |
| 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 ) | - |
| 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. |

*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** |
| --- | --- | --- | --- | --- | --- | --- |
| FDIS | ISO/TC 58/SC 2 | | ISO 14245:2021/FDAmd 1 (Ed 3) | | --- | | Open | 02/08/2024 | Assistance has been derived in IS 8737 : 2017. |
| FDIS | ISO/TC 58/SC 2 | ISO 15995:2021/FDAmd 1 (Ed 3) | Open | 02/08/2024 | - |
| SR | ISO/TC 58/SC 3 | | ISO 11513:2019 (Ed 2) | | --- | | Open | 02/09/2024 |  |
| DIS | ISO/TC 58/SC 3 | | ISO/DIS 9809-4 (Ed 3) | | --- | | Open | 30/07/2024 |  |
| DIS | ISO/TC 58/SC 4 | | ISO/DIS 19078 (Ed 3) | | --- | | Open | 06/08/2024 |  |

*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 | 7-8 | October 2024 | Praha 1 (Czech Republic) | ISO/TC 58/WG 11 | Hybrid |
| 2 | 8-11 | October 2024 | Praha 1 (Czech Republic) | ISO/TC 58/SC 2 | Physical |
| 3 | 8-11 | October 2024 | Praha 1 (Czech Republic) | ISO/TC 58/SC 2/ WG 6 | Hybrid |
| 4 | 8-11 | October 2024 | Praha 1 (Czech Republic) | ISO/TC 58/SC 2/ WG 7 | Physical |
| 5 | 8-11 | October 2024 | Praha 1 (Czech Republic) | ISO/TC 58/SC 2/ WG 11 | Physical |
| 6 | 23-24 | October 2024 | Pullach im Isartal (Germany) | ISO/TC 58/SC 3 | 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.*

**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 PFA article on Gas Cylinders in Laboratories: Safety, Purity and Cost Concerns and How Gas Generators Can Help

[Gas cylinder article.pdf](https://drive.google.com/file/d/1oq381QUjxEBpZyKfs4ewb4gQjJitxebB/view?usp=drive_link)

11.2 Email received from Shri Ayush Pawar of M/s EKC regarding implementation of IS 7285-2 and IS 15490

[Email from EKC.pdf](https://drive.google.com/file/d/1Doyk2DjsCc6pUv3XsqTxW4Q0WEsepbEW/view?usp=sharing), [BIS Manual copy - Annexure A.pdf](https://drive.google.com/file/d/1t_Q9n_CAoaS_8NZmjGd1pJzCJHObCAp7/view?usp=sharing)

11.3 Shri Manvinder Singh vide his email dt. 10 January 2024 proposed for a NWIP on Aerosol Cans for refrigerant gases. Same was circulated to all members vide email dt.- 29 January, 2024.

[Email for aerosol cans.pdf](https://drive.google.com/file/d/1WWadFAATdBJxd7aem2Img94uWB1rQmzw/view?usp=sharing)

*Committee may discuss and decide.*

11.4 Request for addition to MED 16:3 subcommittee received from Shri Navin Kumar Jain from Time Technoplast Ltd,

[Email\_Nomination\_MED16\_3.pdf](https://drive.google.com/file/d/1JFbg80m0kXqLcQ4sY8e0_I2aQyYfoaIa/view?usp=sharing)

*Committee may discuss and decide*

*11.4 Email received from Shri Pramoad of Rama Cylinders on 23 Jul 2024 for Prototype Samples drawn during joint inspection & sending to BIS laboratory as attached below:*

[Email\_Shri Pramod\_RamaCylinders.pdf](https://drive.google.com/file/d/15IL5lRwGRQSk5CQxG2UdNc24etSORjCg/view?usp=drive_link)

*Committee may discuss and decide*

**Annex 1**

(*Clause* 5.3)

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

| **Meeting** | **Date** | **Venue** |
| --- | --- | --- |
| 29th Meeting | 28 Mar 2023 | Webex |
| 30th Meeting | 05 Jul 2023 | Webex |
| 31st Meeting | 07 Nov 2023 | Webex |

| **S.No** | **Organization Represented** | **Principal /Alternate** | **29th** | **30th** | **31st** | **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 Tiku  Shri K. R Sahasranam (*Alt*) | Y | Y | Y | **3/3** |
| 3 | Ashok Leyland Limited, Chennai | Shri Ved Prakash Gautam  Shri Faustino V (*Alt*)  Ms. Suchismita C. (YP) | Y | Y | Y | **3/3** |
| 4 | Automotive Research Association of India, Pune | Dr S S Thipse  Shri Sandeep Rairikar (*Alt*) | N | N | Y | **1/3** |
| 5 | Bharat Heavy Electricals Limited, Project Engineering Management, Noida | Shri Sayan Roy  Shri Karan Yadav (*Alt*) | NA | N | N | **0/2** |
| 6 | Bharat Petroleum Corporation Limited, Mumbai | Shri Senthil Kumar B  Shri Aakash Agarwal  (*Alt*)  Shri Ramprit (*Alt*) | Y | Y | Y | **3/3** |
| 7 | Bhiwadi Cylinder Private Limited, New Delhi | Shri Manvinder Singh  Shri Sunil K. Dey (*Alt*) | Y | Y | Y | **3/3** |
| 8 | Directorate General of Quality Assurance, Ministry of Defence, New Delhi | Colonel Sabir Hundekar | Y | Y | Y | **3/3** |
| 9 | Everest Kanto Cylinder Limited, Mumbai | Shri Ayush Pawar  Shri A.S.V.S. Prasad (*Alt*)  Shri Ravi Sharma (*Alt*) | Y | Y | Y | **3/3** |
| 10 | Gujarat Gas Company Limited, Ahmedabad | Shri Dharmesh Sailor  Shri Ravi Ravipalli (*Alt*) | Y | N | N | **1/3** |
| 11 | Hindustan Petroleum Corporation Limited, Mumbai | Shri Pitabas Sarangi  Shri Dinesh Pangtey (*Alt*)  Shri Reddy Dhanumjaya Rao (*Alt*) | Y | Y | Y | **3/3** |
| 12 | Ideal Engineers Hyderabad Private limited, Hyderabad | Shri Satish Kabra  Shri Kunal Kabra (*Alt*) | Y | Y | N | **2/3** |
| 13 | Indian Oil Corporation Limited, Mumbai | Shri Soumitra Chakraborty  Shri Chandrakant Ghatol (*Alt*) | Y | Y | Y | **3/3** |
| 14 | Indraprastha Gas Limited, New Delhi | Shri Rakesh Kishan Agrawal  Shri Bimal Karan (*Alt*)  Shri Aviral Rajeev (YP) | N | N | Y | **1/3** |
| 15 | Inox India Limited, Vadodara | Shri Deepak V. Acharya  Shri Nitin jansari (*Alt*) | Y | N | Y | **2/3** |
| 16 | International Industrial Gases Limited, Howrah | Shri Devendra K. Garg  Shri Nikhilesh K. Garg (*Alt*) | N | N | N | **0/3** |
| 17 | Jai 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*) | Y | N | N | **1/3** |
| 19 | L.P.G. Equipment Research Centre, Bengaluru | Shri T. D. Sabu  Shri Santosh Kumar Gupta (*Alt*) | Y | N | Y | **2/3** |
| 20 | Linde India Limited, Kolkata | Shri Ramana Vutukuru | Y | N | Y | **2/3** |
| 21 | Mahanagar Gas Limited, Mumbai | Shri S. Murali  Shri Milind M. Ranade (*Alt*)  Shri Sachin Gumaste (*Alt*) | Y | Y | Y | **3/3** |
| 22 | Maruti Suzuki India Limited, Gurugram | Shri Gururaj Ravi  Shri Arun Kumar (*Alt*)  Shri Rajesh Kumar (YP) | NA | Y | Y | **2/2** |
| 23 | Petroleum and Explosives Safety Organisation, Nagpur | Shri P. Seeniraj (*Alt*)  Shri Seenivas Rao Keta (*Alt*) | Y | Y | Y | **3/3** |
| 24 | Research and Development Establishment, Pune | Dr. Shankar Bhaumik  Shri Tamhankar Ravindra (*Alt*) | N | N | N | **0/3** |
| 25 | Society of Indian Automobile Manufacturers (SIAM), Delhi | Shri K.K. Gandhi  Shri Amit Kumar (*Alt*) | Y | N | N | **1/3** |
| 26 | Steel Authority Of India Limited (SAIL), Research & Development Centre for Iron & Steel, Ranchi | Shri K.K.Singh  Shri Santosh Kumar (*Alt*) | Y | N | Y | **2/3** |
| 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. Behani  Shri Rohit Behani (*Alt*) | Y | Y | Y | **3/3** |
| 29 | Trans Valves (India) Private Limited, Hyderabad | Shri Gaurhav Jaiin  Shri Pradeep Kumar Mathur (*Alt*) | N | Y | N | **1/3** |
| 30 | Vanaz Engineers Limited, Pune | Shri S.J. Vispute  Shri A.S. Wagh (*Alt*) | Y | Y | Y | **3/3** |

**Annex 2**

(*Clause* 5.4)

**Composition of Gas Cylinder Valves and Fittings Subcommittee, MED 16:1**

| **Meeting** | **Date** | **Venue** |
| --- | --- | --- |
| 28th Meeting | 25 June 2021 | Webex |
| 29th Meeting | 05 July 2023 | Webex |
| 30th Meeting | 07 November 2023 | Webex |

| **Sl. No.** | **Organization Represented** | **Principal /**  **Alternate** | **28th** | **29th** | **30th** | **Total** |
| --- | --- | --- | --- | --- | --- | --- |
|  | Tekno Valves , Kolkata | Shri Y.K. Behani (*Convener*) | Y | Y | Y | 3/3 |
|  | All India Gases Mfrs Assn., | Shri. Saket Tiku | N | Y | Y | 2/3 |
|  | Batra Associates Limited Faridabad | Shri. N.K. Sawhney | N | N | N | 0/3 |
|  | Bharat Petroleum Corporation Ltd, Mumbai | Shri Senthil Kumar B  Shri Aakash Agarwal (*Alt*)  Shri Ramprit (*Alt*) | Y | Y | Y | 3/3 |
|  | Everest Kanto Cylinder  Ltd , Mumbai | Shri Ayush Pawar  Shri A.S.V.S. Prasad (*Alt*)  Shri Ghanshyam Goyal (*Alt*) | Y | Y | Y | 3/3 |
|  | Hindustan Petroleum Corpn Ltd , Kolkata/Mumbai | Shri Pitabas Sarangi  Shri Dinesh Pangtey (*Alt*)  Shri Reddy Dhanumjaya Rao (*Alt*) | Y | Y | Y | 3/3 |
|  | Indian Oil Corporation Ltd ,Mumbai | Shri Soumitra Chakraborty  Shri Chandrakant Ghatol (Alt) | Y | Y | Y | 3/3 |
|  | Jai Gopal Engineering Works & Gases Pvt. Ltd, Delhi | Mr.Jai Gopal Mehta  Mr.A.K. Singh (Alt)  Ms. Rakhi Verma (Alt)  Mayur Mehta (YP) | Y | Y | N | 2/3 |
|  | Kabsons Gas Equipments Ltd , Hyderabad | Shri Satish Kabra  Shri Kunal Kabra (*Alt*) | Y | Y | N | 2/3 |
|  | Kosan Industries Ltd ,  Mumbai/Surat | Shri Girishbhai K. Desai  Shri S. B. Bolmal (Alt) | Y | N | N | 1/3 |
|  | L.P.G. Equipment Research Centre , Bangalore | Shri T D Sabu  Shri Santosh Kumar Gupta (Alt) | Y | N | Y | 2/3 |
|  | PESO ,  Nagpur | Shri P. Seeniraj  Shri Seenivas Rao Keta (*Alt*) | Y | Y | Y | 3/3 |
|  | Southern Metals & Alloys Pvt. Ltd. Mumbai | Shri Vivek Noronha  Shri Vinod Noronha (Alt) | Y | N | Y | 2/3 |
|  | Tomasetto Achille India Pvt Ltd, Thane | Shri Amit kumar Shah  Shri Rakesh Gurunath Patil (Alt) | Y | N | Y | 2/3 |
|  | Trans Valves (India) Pvt Ltd, Hyderabad | Shri Gaurhav Jaiin  Shri P K Mathur (Alt) | Y | Y | N | 2/3 |
|  | Vanaz Engineers Pvt Ltd , Pune | Shri S.J. Vispute  Shri. A.S Wagh (Alt) | Y | Y | Y | 3/3 |

**Annex 3**

(*Clause* 5.5)

**Composition of Low Pressure Gas Cylinders Sub-Committee, MED 16:2**

| **Meeting** | **Date** | **Venue** |
| --- | --- | --- |
| 30th Meeting | 28 March 2023 | Webex |
| 31st Meeting | 05 July 2023 | Webex |
| 32nd Meeting | 07 November 2023 | Webex |

| **Sl No.** | **Organization Represented** | **Principal /Alternate** | **30th** | **31st** | **32nd** | **Total** |
| --- | --- | --- | --- | --- | --- | --- |
| 1. | Hindustan Petroleum Corporation Limited, Mumbai | Shri Debashish Chakraverty (***Convenor***) | Y | Y | Y | 3/3 |
| 2. | All India Industrial Gases Manufacturers Association, New Delhi | Shri Saket Tiku  Shri K. R Sahasranam (*Alt*) | Y | Y | Y | 3/3 |
| 3. | Bharat Petroleum Corporation Limited, Mumbai | Shri Senthil Kumar B  Shri Aakash Agarwal (*Alt*)  Shri Ramprit (*Alt*) | Y | Y | Y | 3/3 |
| 4. | Bhiwadi Cylinder Private Limited, New Delhi | Shri Manvinder Singh  Shri Sunil K. Dey (*Alt*)  Shri Rajneesh Chopra (*Alt*) | Y | Y | Y | 3/3 |
| 5. | Directorate General of Quality Assurance, Ministry of Defence, New Delhi | Colonel Sabir Hundekar | Y | Y | Y | 3/3 |
| 6. | Hindalco Industries Limited, Mumbai | Shri Sourabh Manohar  Shri Devesh Kumar (*Alt*) | N | N | N | 0/3 |
| 7. | Hindustan Petroleum Corporation Limited, Mumbai | Shri Pitabas Sarangi  Shri Dinesh Pangtey (*Alt*)  Shri Reddy Dhanumjaya Rao (*Alt*) | Y | Y | N | 2/3 |
| 8 | Indian Oil Corporation Limited, Mumbai | Shri Soumitra Chakraborty  Shri Chandrakant Ghatol (*Alt*) | Y | Y | Y | 3/3 |
| 9. | Ideal Engineers Hyderabad Private limited, Hyderabad | Shri Satish Kabra  Shri Kunal Kabra (*Alt*) | Y | Y | N | 2/3 |
| 10. | Jai Maruti Gas Cylinders Private Limited, Gwalior | Shri Ashok K Nigam  Shri Manu K Nigam (*Alt*) | Y | Y | Y | 3/3 |
| 11. | Kelvin Energy Solutions Private Limited, Mumbai | Shri Prafulla Wankhede | N | N | N | 0/3 |
| 12. | L.P.G. Equipment Research Centre, Bengaluru | Shri T D Sabu  Shri Santosh Kumar Gupta (*Alt*) | Y | N | Y | 2/3 |
| 13. | Petroleum and Explosives Safety Organisation, Nagpur | Shri P. Seeniraj  Shri Seenivas Rao Keta (*Alt*) | Y | Y | Y | 3/3 |
| 14. | Sahuwala Cylinders Private Limited, Visakhapatnam | Shri P. K. Gupta | N | N | N | 0/3 |
| 15. | Shri Shakti Cylinders Private Limited, Hyderabad | Shri D. V. Rajasekhar  Md. Yunus Geelani (*Alt*) | Y | N | N | 1/3 |
| 16. | Steel Authority of India Limited (SAIL) - Salem Steel Plant, Salem | Shri M. Prabakaran  Shri N.K. Vijayvargia (*Alt*) | Y | N | N | 2/3 |
| 17. | Supreme Cylinders Limited, Delhi | Shri M.L. Fathepuria | Y | N | N | 1/3 |
| 18. | Tata Iron and Steel Company Limited (TISCO), Jamshedpur | Shri Sudipto Sarkar  Dr. A. N. Bhagat (*Alt*) | N | N | N | 0/3 |
| 19. | The Supreme Industries Limited, Halol | Shri Pradeep Kamat | Y | N | N | 1/3 |
| 20. | Time Technoplast Limited, Mumbai | Shri Naveen Kumar Jain  Shri Venkateshwaran N. (*Alt*) | Y | Y | Y | 3/3 |
| 21. | Vanaz Engineers Limited, Pune | Shri S.J. Vispute  Shri A.S. Wagh (*Alt*) | Y | Y | Y | 3/3 |

**Annex 4**

(*Clause* 5.6)

**Composition of Dissolved Acetylene Cylinders, Generators, Acetylene Pipe Lines and High Pressure Gas Cylinders Subcommittee, MED 16:3**

| **Meeting** | **Date** | **Venue** |
| --- | --- | --- |
| 29th Meeting | 28 March 2022 | Webex |
| 30th Meeting | 05 July 2023 | Webex |
| 31st Meeting | 07 November 2023 | Webex |

| **Sl No** | **Organization Represented** | **Principal/Alternate Member** | **29th** | **30th** | **31st** | **Total** |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | Linde India Ltd, Kolkata | Shri Vutukuru Ramana (***Convener***) | Y | Y | Y | 3/3 |
| 2 | Adani Gas Ltd., Ahmedabad | Shri Peeyush Tripathi    Shri Amit Malik (Alt) | Y | N | Y | 2/3 |
| 3 | Al-Can Exports Pvt Ltd,  Distt Thane | Shri. Vijay K. Parikh | Y | Y | Y | 3/3 |
| 4 | All India Indl Gases Mfrs Assn., New Delhi | Shri Saket Tiku  Shri K. R Sahasranam (Alt) | Y | Y | Y | 3/3 |
| 5 | Ashok Leyland Ltd, Chennai | Shri Ved Prakash Gautam  Shri Faustino V (Alt) | Y | Y | Y | 3/3 |
| 6 | Automotive Research Association of India, Pune | Dr S S Thipse  Shri Sandeep Rairikar (*Alt*) | N | N | Y | 1/3 |
| 7 | Bharat Petroleum Corpn Ltd , Mumbai | Shri Senthil Kumar B  Shri Aakash Agarwal (*Alt*)  Shri Ramprit (*Alt*) | Y | Y | Y | 3/3 |
| 8 | Directorate General of Quality Assurance, Ministry of Defence, New Delhi | Colonel Sabir Hundekar | Y | Y | Y | 3/3 |
| 9 | Everest Kanto Cylinder Ltd , Mumbai | Shri Ayush Pawar  Shri A.S.V.S. Prasad (Alt)  Shri Ghanshyam Goyal (Alt) | Y | Y | Y | 3/3 |
| 10 | Hindalco Industries Limited, Mumbai | Shri Sourabh Manohar  Shri Devesh Kumar (*Alt*) | N | N | N | 0/3 |
| 11 | Hindustan Petroleum Corporation Limited, Mumbai | Shri Pitabas Sarangi  Shri Dinesh Pangtey (*Alt*)  Shri Reddy Dhanumjaya Rao (*Alt*) | Y | Y | Y | 3/3 |
| 12 | Indian Oil Corporation (R and D Centre), Faridabad | Shri Alok Sharma  Shri Tapan Bera (*Alt*) | N | N | N | 0/3 |
| 13 | Indian Oil Corporation Ltd, Mumbai | Shri Soumitra Chakraborty  Shri Chandrakant Ghatol (*Alt*) | Y | Y | Y | 3/3 |
| 14 | Indraprastha Gas Limited, New Delhi | Shri Rakesh Kishan Agrawal  Shri Bimal Karan (*Alt*)  Shri Aviral Rajeev (YP) | N | N | Y | 1/3 |
| 15 | International Industrial Gases Ltd, Howrah | Shri D. K. Garg  Shri N.K. Garg (Alt) | Y | N | N | 1/3 |
| 16 | Jai Maruti Gas Cylinders Pvt Ltd Gwalior | Shri Ashok K. Nigam  Shri. Manu K. Nigam (Alt) | Y | Y | Y | 3/3 |
| 17 | KVK Corporation, Mumbai | Shri R. Chandgothia  Shri V. Chandgothia (Alt) | Y | Y | N | 2/3 |
| 18 | Luxfer Uttam India Pvt Ltd, Faridabad | Shri Karan Bhatia  Shri Sandeep Bhasin (Alt) | Y | N | Y | 2/3 |
| 19 | Natural Gas Society, Noida | Shri Shivaji Basu  Shri Vipin Chandra Chittoda (*Alt*) | Y | Y | Y | 3/3 |
| 20 | Petroleum and Explosive Safety Organization, Nagpur | Shri P.Seeniraj  Shri Seenivas Rao Keta (Alt) | Y | Y | Y | 3/3 |
| 21 | Protego India Pvt. Ltd. | Shri Prasad Jawaji  Shri Yogesh Sahni (Alt) | N | N | Y | 1/3 |
| 22 | Rama Cylinders Pvt Ltd,  Mumbai | Shri Milind W Khadke  Shri C L Kshirsagar (Alt 1)  Shri Pramod W Sangwai (Alt 2) | Y | N | Y | 2/3 |
| 23 | Sahuwala High Pressure Cylinder (P) Ltd, Visakhapatnam | Shri P K Gupta | N | N | N | 0/3 |
| 24 | Society of Indian Automobile Manufacturers, New Delhi | Shri K.K. Gandhi  Shri Amit Kumar (Alt) | N | N | N | 0/3 |
| 25 | Tata Motors Ltd, Pune | Shri Pallipalayam Gowrishankar  Shri Shailendra Dewangan (Alt) | Y | N | Y | 2/3 |
| 26 | Tekno Valves , Kolkata | Shri Y.K. Behani  Shri Rohit Behani (Alt) | Y | Y | Y | 3/3 |
| 27 | Vanaz Engineers Limited, Pune | Shri S.J. Vispute  Shri A.S. Wagh (*Alt*)  Shri A.S. Athalye (*YP*) | Y | Y | Y | 3/3 |