***Bureau of Indian Standards***

*For BIS use only*

*AGENDA*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of the Committee** | **No of meeting** | **Date and Time** | **Day** | **Mode : Hybrid** |
| Automotive Prime Movers, Transmission Systems and Internal Combustion Engine Sectional Committee, TED 2 | 23rdMeeting |  21st November202410:30 AMonwards | Thrusday | PHYSICAL VENUECentral Institute of Road TransportPost Box No. 1897, Pune- Nasik Road,Pune – 411 026.VIRTUAL LINK**URL:** https://bismanak.webex.com/bismanak/j.php?MTID=ma83dd9e603d45e51b2d0ac27e65b5389 **Meeting ID:** 2517 810 2368**Password**: Ted@1234 |

**CHAIRMAN:** Dr Devendra Singh **MEMBER SECRETARY:** Shri Mitra Sen Verma

**HEAD (TED):** Shri A.P.D. Dwivedi

# ITEM 0 GENERAL

* 1. Welcome by Head (TED)
	2. Opening remarks by the Chairman

# ITEM 1 CONFIRMATION OF THE MINUTES OF LAST MEETING

The Minutes of “22nd Meeting of ‘Automotive Prime-movers, Transmission Systems and Internal Combustion Engine Sectional Committee, TED-02,” were circulated through email and BIS Portal. Few comments were received and are given below in [Annex 1](#Annex1).

The committee **may kindly confirm the Minutes**.

# ITEM 2 SCOPE AND COMPOSITION OF THE SECTIONAL COMMITTEE

* 1. Scope of Sectional Committee TED 02 is as follows:
1. *Standardization relating to automotive engines and transmission, components, stationary internal combustion engines for agriculture.*
2. *Co-ordination of work with ISO/ TC 22, ISO/ TC 22/ SC 34, ISO/ TC 70, ISO/ TC 70/ SC 7 and ISO/ TC 70/ SC 8*

The Committee may please note.

**2.1** The fresh nominations were sought from following organization and the status is as under:

1. **CIRT Pune**- Not received
2. **M/s Greaves Cotton Limited (Diesel Engines Unit), Pune-** Received
3. **ICAT Manesar**- Not Received

The received nomination at Sl No 2 above has been updated at portal.

Committee may pl deliberate.

**2.2** The committee may note that following organizations failed to attend last 3 consecutive meeting of SC TED 02 and have been removed from the composition:

1. BEML Limited, Bengaluru

2. Central Pollution Control Board, New Delhi

3. Indian Institute of Technology Delhi, New Delhi

4. Ministry of Road Transport & Highways, New Delhi

5. Ordnance Factory Board, Kolkata

6. Vehicle Research and Development Establishment, Ahmednagar

**2.3** The Committee may note that Email reminders have also been sent by TED 02 Secretariat to the organizations which failed to attend last TED 02 Meeting. The organizations are listed below:

1. Directorate General of Quality Assurance, Ministry of Defence, New Delhi

2. Denso International India Private Limited, Gurugram

3. Eaton Industrial System Private Limited, Pune

4. MG India Motor (P) Ltd

5. Rajkot Engineering Association, Rajkot

6. U.P. Diesel Engine Manufacturers Association, Agra (Mr Manish Doneria, Secretary in response to our email confirmed their participation in upcoming meeting)

**2.4** As per the discussion held in the last Committee meeting M/s Shri ram Pistons and M/s Cummins was Co-opted in the Committee Composition and same was updated at BIS portal. No response is received from M/s Shri ram Pistons to our emails.

Committee may please note and deliberate

**2.5** IDEMA was previously requested to assist in identifying expert organizations in the field of gensets, specifically focusing on the electrical aspect. A response from IDEMA is received. Shri Manish Doneria from Uttar Pradesh Diesel Engine Manufacturers Association, Agra, had suggested contacting ERDA, Vadodara, and an email was sent to ERDA for their nominations.

Response has been received and IDEMA had sent the nomination for gensets.

Mr. Shivaprakash. K.R

Engineering Manager

Electric Power Division (Gensets and Alternators)

Caterpillar India

Email: shivaprakash.kr@cat.com

Committee may deliberate and decide please.

**2.6** The committee may review the present composition of the Committee given in [Annex 2.](#Annexure_2) The committee may deliberate and decide on further continuation/ deletion of organizations from the committee composition and co-option of new organizations in the committee composition.

**2.7** Dr Sandeep Garg helped to connect Ordnance Factory, Jabalpur being an important government organization dealing with the vehicles and other IC engines. Shri S K Bhola, CGM joined the meeting and informed that they are having R & D Center, manufacturing of vehicles for defence etc. Committee deliberated and decided to co-opt members from Ordnance factory, Jabalpur and requested to Shri S K Bhola, CGM to share the nomination through email to BIS. Chairman also requested to include Ordinance Factor, Jabalpur in both the Panels.

Email was sent to seek nomination which is yet to be received.

* 1. **New Nominations:**

**2.8.1** An Email has been received from Dr. Ashok Kumar Vaikuntam due to change in his organization. It was decided to co-opt Dr Ashok Kumar Vaikuntam. Dr Vaikuntham has been added in the committee in personal capacity.

**2.8.2** Based on the decision in 21st meeting of TED 02, committee recommended for co-option M/s Kirloskar Oil Engine Ltd. The details have been updated at portal.

Committee may please note.

**2.9 Nomination Update**: The updated nominations of following organizations have been received:

1. International Centre for Automotive Technology

2. Fleetguard Filters Pvt Ltd

The committee may deliberate.

**Item 3.0 Restructure of Panel and working group:**

The following panels and working groups have been worked out aligning with the liaison committee at ISO which is ISO TC 22, ISO TC 70. Being NSB, we are getting ballots under below mentioned working group for voting in best interest of our Nation.

Committee may kindly nominate experts in the respective working groups based on expertise. This will help giving comments to the documents received under these working groups showcasing strong representation at International Level.

|  |  |  |
| --- | --- | --- |
| **Committee** | **Panel** | **Working Groups** |
| **Automotive Primemovers, Transmission Systems and Internal Combustion Engine Sectional Committee (TED 02)** | Tests for lubricating oil filters | Terms and definitions Working Group |
| Reciprocating internal combustion engine driven generating sets - Electrical aspect |
| Air-borne noise |
| Reciprocating internal combustion engine driven generating sets - Mechanical aspect |
| Fuel filters  |
| Injection equipment |
| Air filters |
| Exhaust gas emission measurement | Piston rings |
| Engine test code |
| Water injection |
| Piston Pins |
| Separator performance, laboratory and engine test methods for crankcase ventilation systems |
| NOx reduction additive  |
| Road vehicles – Cleanliness of components  |

Committee may deliberate and decide.

# ITEM 3 PROCESS REFORMS AT BIS

* 1. Discussion of process reforms as indicated in Circular P&C/09/18/2023-PNC-BIS.

The circular is already shared with the members through email.

The Committee may please note.

# ITEM 4 ACTIONS ARISING OUT OF THE PREVIOUS MEETING(S)

**4.0** The following Indian Standards/Amendments are published:

1. **IS/ISO 8528-5 : 2024 ISO 8528-5:2022**- Reciprocating Internal Combustion Engine Driven Alternating Current Generating Sets Part 5 Generating Sets (Second Revision)

2. **IS/ISO 8528-10: 2022 ISO 8528-10:2022**- Reciprocating Internal Combustion Engine Driven Alternating Current Generating Sets Part 10 Measurement of Airborne Noise (First Revision)

3. **Revision of IS 17458: 2018-** Reciprocating Internal Combustion Engines â€” Fire Protection (First Revision)

Committee may please note.

**4.1** A brief summary of actions arising out of minutes of last meeting(s) is given below in Table 1.

**Table – 1**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.****No.** | **Subject** | **Decision in Previous Meeting(s)** | **Decision in 21st Meeting** | **Present status** |
| **1.** | **Revision of IS 14599:1999** ‘Automotive vehicles - Performance requirements (Measurement Of Power, SFC, Opacity) of positive and compression ignition engines - Method of test’ | Doc no TED 2 (16879) Pcirculated as preliminary draft vide mail dated 26 01 2021 for comments among committee members.**Status in 18th Meeting:**Wide circulation draft is under preparation as per BIS drafting guidelines.**Decision in 18th Meeting:**The committee noted the information.The committee advised member secretary to wide circulate the draftDocument for comments for 60 days at the earliest.**Status in 19th Meeting:**Wide circulation draft was prepared and circulated dt. 21/03/2022 for 60 days through BIS Portal.No CommentsHave been received in this regard on BIS Portal.The committee may deliberate and decide.**Decision in 19th Meeting:**The committee decided to send the document again for 30 days on request of members for comments.**Status in 20th Meeting:**The Document has been uploaded on BIS Portal and will be circulated after HoD approval.The committee may please note.**Decision in 20th Meeting:**The committee noted. | Doc no TED 2 (16879) WThis was reverted back for editorial corrections. It will be sent for WC after said corrections. The committee may please note.**Decision in 22nd Meeting**Shri Faustino V from Ashok Leyland informed that they has sent some comment of the referred document which were editorial in nature. Chairman requested member secretary to re-visit that it is incorporated. Shri Faustino was requested to re-forward the email to BIS. | Necessary Corrections are done and document is ready to be circulated in WC.The Committee may please note. |
|  **2.** | **Revision of IS 8422 (Part 1 to 8)** | **In 20th Meeting of SC TED 02**,Member secretary was requested to prepare an observation table for tracking the status of Base standards from which assistance was derived while preparing the IS 8422 Series of standards along with latest version of ISO Standards which covers the scope of IS 8422, if any and circulate it along with the minutes | The committee discussed the recommendations. Shri Neeraj Singh from Shri Ram Pistons also informed that several BIS Officers who were allocated these standards as Action Research Project have discussed the matter with him and also have visited his premises. He also informed the committee the IS Standards mentioned in the recommendations are currently being used by the industry. The committee discussed the matter and decided as per [Annex-3](#Annex___3)**Decision in 22nd Meeting**The national foreword is being prepared for the following documents:The deliberation is given in [Annex-3](#Annex___3) | The following documents have completed their WC stage and will sent in printing soon:**ISO 6622-1, ISO****6622-2, ISO 6622-3, ISO 6623, ISO 6624-1, ISO 6624-2, ISO 6624-3, ISO 6625**The deliberation is given in [Annex-3](#Annex___3)The Committee may please deliberate. |
| **3.** | **Revision of IS/ISO 8528 : PART 12: 1997**(Identical To: ISO 8528-12:2022)**Doc No. TED 02 (23615)** | In the 20th Meeting The committee decided to adopt the latest ISO Standard i.e., ISO 8528-12:2022.The document was discussed in the meeting and it was decided to send National Foreword Corresponding to this ISO Document (i.e. ISO 8528-12:2022) for widecirculation of 60 days. | The committee decided to send the document for printing.**Decision in 22nd Meeting**The Document TED 02 (23615), accepted by Publication. | The Document TED 02 (23615), is ready for Gazette. The Committee may please note. |

# ITEM 5 RESEARCH PROJECTS TO BE TAKEN UP

**5.0** Guideline for R&D project has been circulated with committee members vide mail dated 17.11.2023.

**5.1** Terms of References (ToR) was prepared and offered R & D on IS 10001, IS 10002 and IS 11170. Total 4 Bids were received which is under evaluation. The project will be awarded once the process is finalized.

Committee may deliberate and suggest R& D project topics, if any.

**ITEM 6: REVIEW of INDIAN STANDARDS**

**6.0** The input of ACMA regarding identification of expert is placed in Annex 4.

Committee may please deliberate.

**6.1** Following documents completed WC.

Committee may please deliberate.

|  |  |  |  |
| --- | --- | --- | --- |
| **IS no** | **IS Title** | **Stage** | **Recommendation** |
| IS 1543 : 1964(TED/02/20894)  | Specification for single cylinder fuel injection pumps (Revised) | WC - Draft |  |
| IS 3174 : 1974(TED/02/20895) | Specification for pipe union bolt (First Revision) | WC - Draft |  |
| IS 7657 : Part 2 : 1975(TED/02/20898) | Specification for starter ring gears for internal combustion engines: Part 2 gears for axial and coaxial starters | WC - Draft |  |
| IS 7657 : Part 1 : 1975(TED/02/20900) | Specification for starter ring gears for internal combustion engines: Part 1 gears for inertia and solenoid pre - Engaged starters | WC - Draft |  |
| IS 8422 : Part 1 : 1977(TED/02/24548) | Specification for piston rings for IC engines: Part 1 plain compression rings from 30 up to 200 mm nominal diameter R - Rings | WC - Draft |  |
| IS 8422 : Part 2 : 1977(TED/02/24549) | Specification for piston rings for IC engines: Part 2 taper faced compression rings from 30 up to 200 mm nominal diameter M - Rings | WC - Draft |  |
| IS 8422 : Part 3 : 1977(TED/02/24550) | Specification for piston rings for IC engines: Part 3 keystone rings from 82 up to 200 mm nominal diameter T - Rings 15 | WC - Draft |  |
| IS 8422 : Part 4 : 1977(TED/02/24552) | Specification for piston rings for IC engines: Part 4 napier oil scraper rings from 30 up to 200 mm nominal diameter N - Rings | WC - Draft |  |
| IS 9262 : 1979(TED/02/21508)  | Recommendations for gear positions for road vehicles | WC - Draft |  |
| **Point for Discussion:** IS 8422 Part 6,7 &8 is available as Indian Standard however, ISO 6625 published which specifies the essential dimensional features of S-, G-, D- and DV-oil control piston ring types. Committee may kindly discus the whether we need individual Indian Standard or go for Identical adoption of ISO 6625 (TED/02/24621). The status of both kind of documents are as under.Committee may kindly deliberate  |
| IS 8422 : Part 7 : 1977(TED/02/20908) | Specification for piston rings for IC engines: Part 7 double bevelled slotted oil control rings from 50 up to 200 mm nominal diameter G - Rings | P- Draft  |  |
| IS 8422: Part 8 : 1977(TED/02/20909) | Specification for piston rings for IC engines: Part 8 narrow land slotted oil control rings from 50 up to 200 mm nominal diameter D - Rings | P- Draft | THEREFORE, IT IS RECOMMENDED THAT THIS STANDARDS MAY BE WITHDRAWN AND INTERNATIONAL STANDARD ISO 6621-5:2000 MAY BE ADOPTED FOR IS 5791. |
| IS 8422 : Part 6 : 1977IS 8422 : Part 7 : 1977IS 8422: Part 8 : 1977(TED/02/24621) | Internal Combustion Engines - Piston Rings - Oil Control Rings | WC – Draft | Identical ISO 6625 |
| **Point for discussion:** Following Standards were circulated as P-draft and no comment is received. As per the direction of Competent Authority, all the reviews to be taken up through ARP. Committee may kindly deliberate and allocate the Indian Standard to members comprising at least two members from industry and one from testing agency.  |
| IS 12025 : 1987 | Recommendations for measurement of quality characteristics for pistons | P - Draft |  |
| IS 8422 : Part 5 : 1977(TED/02/20906) | Specification for piston rings for IC engines: Part 5 stepped oil scraper rings from 30 up to 200 mm nominal diameter Z - Rings | P- Draft |  |
| IS 7347 : 1974 | Specification for performance of small size spark ignition engines | P - Draft |  |
| IS 13051 : 1991 | Internal combustion engines radiator fans - Specification | P - Draft |  |
| IS 13029 : 1991 | Internal combustion engines - setting ignition timing in spark ignition engines - Code of practice | P - Draft |  |
| IS 12996 : 1990 | Internal combustion engines radiator pressure caps - Specification | P - Draft |  |
| IS 12460 : 1988 | Automotive vehicles - Transmission systems - Manual control sequence in automatic transmissions - Recommendations | P - Draft |  |
| IS 13686: 1993 | Internal combustion engines Radiators - Methods of test | P - Draft |  |
| IS 13687: 1993 | Internal combustion engines - Radiators - Heat dissipation performance - Method of test | P - Draft |  |
| IS 14273: 1999 | Automotive vehicles - Exhaust emissions - Gaseous pollutants from vehicles fitted with compression ignition engines - Method of measurement | P - Draft |  |
| IS 7611: 1993 | Internal combustion engines radiators - Specification (First Revision) | P - Draft |  |

|  |  |  |  |
| --- | --- | --- | --- |
| IS no | Title | Stage Development | Review allocated  |
| **Point for Discussion**: As per the direction of Competent Authority, all the reviews to be taken up through ARP. Committee may kindly deliberate and allocate the Indian Standard to members comprising at least two members from industry and one from testing agency.  |
| IS 8422 : Part 6 : 1977 | Specification for piston rings for IC engines: Part 6 slotted oil control rings from 50 up to 200 mm nominal diameter S - Rings | Action to be Initiated  |  |
| IS 7449 : Part 1 : 1974 | Glossary of terms for IC engines: Part 1 fuel injection equipment | Action to be Intiated | It is recommended that IS 7449 (Part 1): 1974 may be revised incorporating the Editorial Modifications and other changes as deemed fit by the committee.**To be revied through ARP by**:ARAI, ICAT, CIRT, Denso, TMA, Mahindra, TATA Motors, Ashok Leyland, Maruti Suzuki, TMA |
| IS 3173 : 1965 | Specification for high pressure connections for fuel injection equipment for diesel engines | Action to be Intiated | It is recommended that IS 3173: 1965 may be revised incorporating the above mentioned changes and other changes as deemed fit by the committee.)  |
| IS 2765 : 1982 | Specification for radiator hose (First Revision) | Action to be Intiated | Earlier standard was published in 1982 since then a lot of technological advancement happened in field of hose pipe. All Test Method standards cross referred in IS 2765 have already adopted respective ISO standards. Therefore ISO 4081 may be adopted |
| IS 10105 : 1982 | Specification for fittings for cylinder pressure indicators for internal combustion engines | Action to be Intiated | Standard was published in 1982 since then a lot of technological advancement happened in field of Internal Combustion Engines .Further this standards was based on DIN 6273 :1973 General purpose internal combustion engines indicator valves which has been already withdrawn .**To be revied through ARP by**:ARAI, ICAT, Greaves Cotton Limited, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Mahindra |
| IS 10533 : 1983 | Specification for valve guides for internal combustion engines | Action to be Intiated | Since its publication in 1982, the standard IS 10533:1983 has remained static amidst significant technological advancements in the field of Internal Combustion Engines. Over time, this sector has witnessed remarkable progress, particularly in valve guide designs. However, the existing standard only delineates two types of valve guides, thereby constraining innovation. As a result, many manufacturers have developed their own diverse and more advanced designs for valve guides, rendering the standard somewhat outdated and limited in its applicability. Therefore, it is recommended that IS 10533:1983 be considered for withdrawal due to its lack of accommodation for the advancements in valve guide technology. Instead, adopting the ISO 7967:2022 series, which encompasses a more comprehensive and updated framework, would facilitate a more inclusive and progressive approach towards standardizing valve guide specifications within the realm of Internal Combustion Engines**To be revied through ARP by**:ARAI, ICAT, Greaves Cotton Limited, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Tractor and Mechanization Association , Mahindra |
| IS 6750 : 1985 | Specification for cylinder liners for internal combustion engines (First Revision) | Action to be Intiated | It is recommended that IS 6750: 1985 may be revised to incorporate the above-mentioned changes and other changes as deemed fit by the committee. |
| IS 6740 : 1985 | Specification for gudgeon pins for internal combustion engines (First Revision) | Action to be Intiated | It is recommended that IS 6740: 1985 may be revised to incorporate the above-mentioned changes and other changes as deemed fit by the committee. |
| IS 9418 : 1980 | Dimensions for mounting flanges for in - Line fuel injection pumps for multi - Cylinder compression ignition engines | Action to be Intiated | Review document is made submission is yet pending In view of above, it is recommended that IS 9418: 1980 may be revised incorporating the above mentioned changes and other changes as deemed fit by the committee. |
| IS 9465 : 1980 | Mounting dimensions for in - Line injection pump assemblies for fuel injection equipment for multi - Cylinder compression ignition engines | Action to be Intiated | Review document is made submission is yet pending In view of above, it is recommended that IS 9465: 1980 may be revised incorporating the above mentioned changes and other changes as deemed fit by the committee.  |
| IS 12352 : 1988 | Specification for fuel injection pump mounting bolts | Action to be Intiated | ARAI, ICAT, Denso, Greaves Cotton Limited, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Tractor and Mechanization Association , Mahindra |
| IS 9420 : Part 1 : 1988 | Specification for feed pumps for diesel fuel injection equipment: Part 1 external dimensions(First Revision) | Action to be Intiated | ARAI, ICAT, CIRT, Denso, Mahindra, Ashok Leyland, TATA Motors, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Rajkot Engineering Association, TMA |
| IS 12499 : 1988 | Specification for two stage, 0.5 litre diesel fuel filters | Action to be Intiated | It is recommended that IS 12499: 1988 may be revised incorporating more tests and passing criteria as introduced in IS 3351 which is the test method standard for Fuel Filters and is aligned with latest ISO Standard (ISO 4020).CSIR - Indian Institute of Petroleum, Fleetguard Filters Private Limited, Ashok Leyland, Tractors and Mechanization Association, TMA, Mahindra, TATA Motors, |
| IS 9420 : Part 2 : 1988 | Specification for feed pumps for diesel fuel injection equipment: Part 2 types of drives | Action to be Intiated | ARAI, ICAT, CIRT, Denso, Mahindra, Ashok Leyland, TATA Motors, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Rajkot Engineering Association, TMA |
| IS 12500 : 1988 | Specification for 0.2 litre diesel fuel filters | Action to be Intiated | It is recommended that IS 12500: 1988 may be revised incorporating more tests and passing criteria as introduced in IS 3351 which is the test method standard for Fuel Filters and is aligned with latest ISO Standard (ISO 4020).CSIR - Indian Institute of Petroleum, Fleetguard Filters Private Limited, Ashok Leyland, Tractors and Mechanization Association, TMA, Mahindra, TATA Motors, |
| IS 11838 : 1986 | Recommendations for measurement of quality characteristics of gudgeon pins | Action to be Intiated |  |
| IS 12404 : 1988 | Specification for couplings for driving fuel injection pumps | Action to be Intiated | It is proposed that IS 12404: 1988 may be taken up for further research keeping in view the technological advancements in the sector and the current manufacturing practices followed by industry.Denso, Greaves Cotton Limited, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Tractor and Mechanization Association , Mahindra, Ashok Leyland |
| IS 13824: 1993 | Internal combustion engines - Method of verification of emission of crankcase gases for vehicles powered with four stroke spark ignition engines | Action to be Intiated |  |

**Reaffirmation and Archiving:** Based on the decision taken in the previous meeting against the justification, following standards were reaffirmed and archived:

Committee may please note.

|  |  |  |  |
| --- | --- | --- | --- |
| IS no | Title | Stage Development | Recommendation |
| IS 3171 : Part 1 : 1997 | Internal Combustion Engines - Fuel Injection Nozzle Holders - Part 1 : Flange Mounted Fuel Injectors Size `S' Types 2, 3, 4, 5 and 6 | To be archived | This standard is identical adoption of ISO 2699: 1994 which has not been revised ever since its publication by ISO/TC 22/SC 34. ISO 2699: 1994 was last reviewed and confirmed in 2021 by ISO Secretariat. In view of above, the committee may consider reaffirming IS 3171 (Part 1): 1997/ ISO 2699: 1994. The committee may also consider archiving the standard. |
| IS 3171 : Part 3 : 1997 | Internal combustion engines - Fuel injection nozzle holders: Part 3 screw mounted injection nozzle holders, types 12,13,14,15,16,17,18 and 19 | To be archived | This standard is identical adoption of ISO 7030: 1987 which has not been revised ever since its publication by ISO/TC 22/SC 34. ISO 7030: 1987 was last reviewed and confirmed in 2021 by ISO Secretariat. In view of above, the committee may consider reaffirming IS 3171 (Part 3): 1997/ ISO 7030: 1987. The committee may also consider archiving the standard. |
| IS 12902 : 1990 | Commercial vehicles and buses - Gearbox flanges - Type A | To be archived | This standard is identical adoption of ISO 7646: 1986 which has not been revised ever since its publication by ISO/TC 22/SC 40. ISO 7646: 1986 was last reviewed and confirmed in 2021 by ISO Secretariat. In view of above, the committee may consider reaffirming IS 12902: 1990/ ISO 7646: 1986. The committee may also consider archiving the standard. |
| IS 12903 : 1990 | Commercial vehicles and buses - Gearbox flanges - Type S | To be archived | This standard is identical adoption of ISO 7647: 1986 which has not been revised ever since its publication by ISO/TC 22/SC 40. ISO 7647: 1986 was last reviewed and confirmed in 2021 by ISO Secretariat. In view of above, the committee may consider reaffirming IS 12903: 1990/ ISO 7647: 1986. The committee may also consider archiving the standard. |
| IS 12973 : 1990 | Commercial road vehicles - Side openings for truck power take - Offs (PTO) | To be archived | This standard is identical adoption of ISO 7804: 1985 which has not been revised ever since its publication by ISO/TC 22/SC 40. ISO 7804: 1985 was last reviewed and confirmed in 2021 by ISO Secretariat. In view of above, the committee may consider reaffirming IS 12973: 1990/ ISO 7804: 1985. The committee may also consider archiving the standard. |
| IS 12905 : 1990 | Commercial Vehicles-couplings Between Power Take-offs (PTO's) and Ancillary Driven Units | To be archived | This standard is identical adoption of ISO 7653: 1985 which has not been revised ever since its publication by ISO/TC 22/SC 40. ISO 7653: 1985 was last reviewed and confirmed in 2018 by ISO Secretariat. In view of above, the committee may consider reaffirming IS 12905: 1990/ ISO 7653: 1985. The committee may also consider archiving the standard. |
| IS 12972 : 1990 | Commercial road vehicles - Connections for rear - Mounted power take - Offs (PTO) | To be archived | This standard is identical adoption of ISO 7707: 1986 which has not been revised ever since its publication by ISO/TC 22/SC 40. ISO 7707: 1986 was last reviewed and confirmed in 2021 by ISO Secretariat. In view of above, the committee may consider reaffirming IS 12972: 1990/ ISO 7707: 1986. The committee may also consider archiving the standard. |
| IS 12904 : 1990 | Flywheel housings for reciprocating internal combustion engines - Nominal dimensions and tolerances | To be archived | This standard is identical adoption of ISO 7648: 1987 which has not been revised ever since its publication by ISO/TC 22/SC 40. ISO 7648: 1987 was last reviewed and confirmed in 2021 by ISO Secretariat. In view of above, the committee may consider reaffirming IS 12904: 1990/ ISO 7648: 1987. The committee may also consider archiving the standard. |

# ITEM 7 INTERNATIONAL ACTIVITIES

**7.1** BIS membership in various ISO Committees related to scope of SC TED 02 is indicated below:

|  |  |  |
| --- | --- | --- |
| **ISO Committee** | **Title** | **Membership Status** |
| ISO TC 22 | Road Vehicles | Principle (P) |
| ISO TC 22 / SC 34 | Propulsion, Power-train andPower-train Fluids | Principle (P) |
| ISO TC 70 | Internal Combustion Engines- | Principle (P) |
| ISO TC 70 / SC 7 | Tests for Lubricating OilFilters | Principle (P) |
| ISO TC 70 / SC 8 | Exhaust Gas EmissionMeasurement | Principle (P) |

**7.2** India is a ‘Participating’ member on various documents generated by these Sub-committees. Being ‘P’ member, it is obligatory for India to vote on all the documents. The documents are received from ISO Secretariat time to time are being circulated to members for comments. Accordingly, voting is being done.

**7.3** There are limited standards are published at ISO level i.e. 74 published and 9 standards under development. BIS, so far published 132 Indian Standards. Committee may deliberate and identify subjects to be proposed as NWIP in ISO from India.

The committee may DELIBERATE.

# ITEM 8 PUBLISHED STANDARDS UNDER TED 02

# Total 132 standards are published under TED 02 SC, the details are as under:

|  |  |
| --- | --- |
| Product |  70 |
|  Code of Practices  |  7 |
|  Methods of Test  |  39 |
|  Terminology  |  7 |
|  Dimensions  |  7 |
|  Others  |  2 |

# ITEM 9 DATE AND PLACE FOR THE NEXT MEETING

# Committee may please decide the next date and place of meeting.

# ITEM 10 ANY OTHER BUSINESS

**[ANNEXURE - 2](#Annexure2)**

[(Item 2.6)](#_bookmark0)

**COMPOSITION OF AUTOMOTIVE PRIMEMOVERS, TRANSMISSION SYSTEM ANDINTERNAL COMBUSTION ENGINES SECTIONAL COMMITTEE, TED 2**

|  |  |  |
| --- | --- | --- |
| 20th Meeting | 26th June 2023 | Virtual (Webex) |
| 21st Meeting  | 30th November 2023 | Virtual (Webex) |
| 22st Meeting  | 14th June 2024 | IIP Dehradun (Hybrid) |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl.** | **Organization** | **REPRESENTED BY** | **Attendance** | **Total** | **Status** |
| **No.** |  |  |  |  |  |
|  |  | Principal member (P) | **20th** | **21st** | **22nd**  |  |  |
|  |  | Alternate member (A) |  |  |  |  |  |
|  |  | Young Professional (YP) |  |  |  |  |  |
| 1) | CSIR- Indian Institute of Peroleum | Dr. Devendra Singh**(Chairperson)** | - | - | P | 1/1 | E |
| 2) | Automotive Research Association of India, Pune | Dr. Prasanna G Bhat (P) Dr. S S Ramdasi (A) Shri N V Pawar (YP) | Y | Y | Y | 3/3 | E |
| 3) | Ashok Leyland Limited, Chennai | Shri Muthukumar N (A) SHRI FAUSTINO V (P)Shri Harish V (YP) | Y | Y | Y | 3/3 | I |
| 4) | Association of State Road Transport Undertakings, New Delhi | Shri R R K Kishore (P) Shri Praful Math (A)Shri Sachin Motiram Chachare (YP) | Y | Y | Y | 3/3 | G |
| 5) | Automotive Components Manufacturers Association, | Ms. Seema Babal (A) Shri Sanjay Tank (P) | Y | Y | Y | 3/3 | I |
| 6) | Bajaj Auto Ltd,Pune | Shri Arvind V. Kumbhar (P)Shri Adish Aggarwal (A) | Y | Y | Y | 3/3 | I |
| ~~7)~~  | ~~BEML Limited, Bengaluru~~ | ~~Shri M. Sasi Kumar (A) Shri Mahadev Nellur (P)~~ | ~~N~~ | ~~N~~ | ~~N~~ | ~~0/3~~ | ~~I~~ |
| ~~8)~~ | ~~Bosch Limited, Bangalore~~ | ~~Shri K U Ravindra (P)~~ ~~Shri H Shivaprakash (A)~~ | ~~N~~ | ~~N~~ | ~~N~~ | ~~0/3~~ | ~~I~~ |
| 9) | Central Institute of Road Transport, Pune | Shri Mangesh M. Pathak (P) Shri Nilesh Tagad (A)Shri Shivraj Dudhe (YP) | Y | Y | N | 2/3 | T |
| ~~10)~~  | ~~Central Pollution Control Board, New Delhi~~ | ~~Shri Suneel Dave (A) Shri A Sudhakar (P)~~ | ~~N~~ | ~~N~~ | ~~N~~ | ~~0/3~~ | ~~G~~ |

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| --- | --- | --- | --- | --- | --- |
| **Sl.** | **Organization** | **REPRESENTED BY** | **Attendance** | **Total** | **Status** |
| **No.** |  |  |  |  |  |
|  |  | Principal member (P) | **20th** | **21st** | **22nd** |  |  |
|  |  | Alternate member (A) |  |  |  |  |  |
|  |  | Young Professional (YP) |  |  |  |  |  |
| 11) | Directorate General of Quality Assurance, Ministry of Defence, New Delhi | Brig BK Pokhriyal (P) Col. OP Bharati (A) | N | Y | N | 1/3 | G |
| 12) | Denso International India Private Limited, Gurugram | Shri Alok Kumar (A)Shri Noel Alexander Peters (P) Ms. Alka Sharma (YP) | N | Y | N | 1/3 | I |
| 13) | Eaton Industrial System Private Limited, Pune | Shri Hemang Raval (P) Shri K V Rao (A) | N | Y | N | 1/3 | I |
| 14) | Fleetguard Filters Private Limited, Pune | Dr Ashok Kumar Vaikuntam(P)Shri Vikas Salunke (A) | N | Y | Y | 2/3 | I |
| 15) | Greaves Cotton Limited (Diesel Engines Unit), Pune | Dr Kaleemuddin Syed (P) Shri Kedar A Kanase (A) | Y | Y | Y | 3/3 | I |
| 16) | Hero Motocorp Limited, New Delhi | Shri Feroz Ali Khan (A)Shri Rakesh Sharma (P) | N | Y | Y | 2/3 | I |
| ~~17)~~ | ~~Honda India Power Products Limited, UP~~ | ~~Shri Tariq Mahmood (P) Shri Rajinder Khurana (A)~~~~Shri Dharmendra Kumar (YP)~~ | ~~N~~ | ~~N~~ | ~~N~~ | ~~0/3~~ | ~~I~~ |
| 18) | ~~India Pistons Limited Perambur, Chennai~~ | ~~Shri Balasubramani K (A)~~ | ~~N~~ | ~~N~~ | ~~N~~ | ~~0/3~~ | ~~I~~ |
| 19) | Indian Diesel Engine Manufacturers Association, New Delhi | Shri Arvind Ranganathan (P)Shri Prashanth Ravi (A) | Y | Y | N | 2/3 | I |
| 20) | Indian Institute of Petroleum, Dehradun | Dr Sunil Kumar Pathak (A)  | Y | Y | N | 2/3 | T |
| ~~21)~~  | ~~Indian Institute of Technology Delhi, New Delhi~~ | ~~Dr Sudipto Mukherjee (A)~~~~Dr S. P. Singh (P)~~ | ~~N~~ | ~~N~~ | ~~N~~ | ~~0/3~~ | ~~T~~ |
| 22) | International Centre for Automotive Technology, Manesar | Shri Vaibhav Prashant Yadav(P) Shri Vijayanta Ahuja (A)Shri Deepanshu Dwivedi (A) | N | Y | Y | 2/3 | L |
| 23) | Kirloskar Oil Engines Limited, Pune | Mr. Ravikant SinhaMr. Yogesh Aghav | - | - | - | 0/0 | I |
| 24) | Mahindra and Mahindra Limited, Mumbai | Shri Shashikant Nikam (P) Shri S Sakthivelan (A) Shri Sekar Ganesh (YP) | Y | Y | Y | 3/3 | I |
| 25) | Maruti Suzuki India Limited, Gurugram | Shri Gururaj Ravi (P)Shri Rajesh Kumar (YP) Shri Arun Kumar (A) | Y | Y | Y | 3/3 | I |
| 26) | Ministry of Heavy Industries & Public Enterprises, New Delhi | Shri R K Jaiswal (P) | Y | Y | N | 2/3 | G |
| ~~27)~~  | ~~Ministry of Road Transport & Highways, New Delhi~~ | ~~Shri K C Sharma (A)~~ | ~~N~~ | ~~N~~ | ~~N~~ | ~~0/3~~ | ~~G~~ |
| 28) | MG India Motor (P) Ltd | Shri Vaibhav Utpat (P) | Y | N | N | 1/3 | I |
| 29) | National Small Industries Corporation, Rajkot | Shri Mr. Upender Kumar Kohli (P) Shri Dharmendra Rajput (A)Shri Kamal Kant Sahu (YP) | Y | Y | Y | 3/3 | L |

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| **Sl.****No.** | **Organization** | **REPRESENTED BY**Principal member (P) Alternate member (A) Young Professional (YP) | **Attendance** | **Total** | **Status** |
| **20th** | **21st** | **22nd** |
| 30)  | ~~Ordnance Factory Board, Kolata~~ | ~~Shri S.K. Gund (P) Shri Surender Pati (A)~~ | ~~N~~ | ~~N~~ | ~~N~~ | ~~0/3~~ | ~~G~~ |
| 31)  | Rajkot Engineering Association, Rajkot |  Shri Mayur N Shah (P) Shri Abhishek Gondaliya (A) | N | Y | N | 1/3 |  I |
| 32) | Shri Ram Pistons And Rings Limited, Ghaziabad |  Shri Shankar Brahma (P) Shri Vineet Ahluwalia (A) | - | Y | N | 1/2 | I |
| 33) | Society of Indian Automobile Manufacturers (SIAM), Delhi |  Shri Prashant Kumar Banerjee(P) Dr. Sandeep Garg (A) | N | Y | Y | 2/3 | I |
| 34) | Tata Motors Limited, Pune |  Shri Abhijit Athawale. (P) Shri Sujit Mohire (P) | N | Y | N | 1/3 | I |
| 35) | ~~Tenneco, Bengaluru~~ |  ~~Shri Visesh C Challa (P)~~ | ~~N~~ | ~~N~~ | ~~N~~ | ~~0/3~~ | ~~I~~ |
| ~~36)~~ | ~~Tractor Manufacturers Association, New Delhi~~ |  ~~Shri Philip Koshi (P)~~ ~~Shri Pradeep Shinde (A)~~ | ~~N~~ | ~~N~~ | ~~N~~ | ~~0/3~~ | ~~I~~ |
| 37) | U.P. Diesel Engine Manufacturers Association, Agra |  Shri Rajesh Garg (P)  Shri Manish Doneria (A) | N | Y | N | 1/3 | I |
| ~~38)~~  | ~~Vehicle Research and~~~~Development Establishment, Ahmednagar~~ | ~~Shri Rupesh Kumar (P) Shri D.M. Vaidya (P)~~ | ~~N~~ | ~~N~~ | ~~N~~ | ~~0/3~~ | ~~G~~ |

 **Committee Composition:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Consumer (C)** | **Govt / Regulator (G)** | **Industry (I)** | **Technical / Scientific bodies (T)** | **Testing Lab (L)** | **Expert (E)** |
| 0 | 3 | 20 | 2 | 4 | 1 |

**Technical Committee Composition**

* + - 1. The composition shall be categorized into Consumer(C), Govt/ Regulator (G), Industry (I), Tech/Scientific bodies (T), Testing Lab (L) and fixed number of members in each category shall be assigned.
			2. The balance of representation shall be maintained such that consumer interest shall prevail.
			3. Definition of categories of members to be considered for classifying members are as given below:
				1. CONSUMERS

**Organized Buyers (OB)** – Includes government organizations, PSUs andother large industries who buy the product for their use as raw material.

**Consumer Organizations (CO)** – Includes consumer bodies predominantly composed of citizens.

**Individual Consumers (IC)** – Includes consumers not included in above categories of consumers.

* + - * 1. **GOVERNMENT & REGULATORY BODIES (G)**- To include Govt departments/Ministries/Regulators/Local bodies
				2. **INDUSTRY(I)-**Includes manufacturers (including Government organizations and PSUs into manufacturing business), relevant raw material manufacturers and industry/manufacturer associations, service industry, consultancy firms, etc.
				3. **TECHNICAL/SCIENTIFIC BODIES(T)** – Includes Scientist, technologists, R&D organizations, academic & technical institutions, concerned officer of the Bureau.
				4. **TESTING LABORATORIES(L)** – Testing Laboratories/ Organizations.
				5. **EXPERTS (E)**– All persons not included in any of the other categories.

The above defines PSUs and other industries as user in a Technical Committee where they are represented as consumer of a particular raw material/intermediate product. Manufacturer of the raw material has been included as industry.

[Annexure – 3](#Annex_3)

## Status of Base Documents for IS 8422 Series of Standards along with Corresponding ISODocuments

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **IS****Number** | **Title** | **Base Document/ Assistance****Taken** | **Status of Base document** | **Remarks** | **Status**  |
| **IS 8422****(Part 1)****: 1977** | Specification for piston rings for IC engin es: Part 1- plain compress ion rings from 30up to 200 mm nominal diameter **R -****Rings** | **DIN 70910**‘Piston rings for automotive engineering, R-rings, plain compression rings from 30 up to 200 mm nominal diameter’ | As per the Information Available on the website of ‘Beuth Verlag’ which is a subsidiary of DIN, the German Institute for Standardizatio n, DIN 70910has been withdrawn and has been replaced by adopting **ISO 6622-1** as DINStandard.{https://www.b euth.de/en/standard/din- 70910/1970320 } | **Decision in 21st Meeting:** **As Scope of ISO 6622-1 and ISO****6622-2 includes R Rings along with B, BA and M Types of Rings, IS 8422-****1 may be superseded by adopting ISO 6622-1 and ISO****6622-2.****Present Status:** **-**TED/02/24548IS 8422 : Part 1: 1977IS 8422 : Part 2: 1977 (Identical To: ISO 6622-1: 2021) completed WC. - TED/02/24549IS 8422 : Part 1: 1977IS 8422 : Part 2: 1977(Identical To: ISO 6622-2: 2013)WC completed and no comment received.**Decision in 22nd Meeting:**Committee decided to process the document for printing and authorized Member Secretary to carry out editorial corrections, if any | **Status in 23rd Meeting:**F- Draft prepared. Being sent in Printing Committee may please note. |
| **IS 8422****(Part 2)****: 1977** | Specification for piston rings for ICengines: Part 2 taper faced compress ion rings from 30up to 200 mm nominal diameter **M -****Rings** | **DIN 70911**‘Piston rings for automotive engineering, M-rings, taper faced compression rings from 30 up to 200 mm nominal diameter’ | As per the Information Available on the website of ‘Beuth Verlag’ which is a subsidiary of DIN, the German Institute for Standardizatio n, DIN 70911has been withdrawn and has been replaced with **ISO 6622-1**.{https:/[/ww](http://www/)w[.](http://www/) beuth.de/en/standard/din- 70911/1970377} | **Decision in 21st Meeting:****As Scope of ISO 6622-1 and ISO****6622-2 includes M Rings along with R, B and BA Types of Rings, IS 8422-****2 may be superseded by adopting ISO 6622-1 and ISO 6622-2.****Present Status:** **-**TED/02/24548IS 8422 : Part 1: 1977IS 8422 : Part 2: 1977 (Identical To: ISO 6622-1: 2021) completed WC. - TED/02/24549IS 8422 : Part 1: 1977IS 8422 : Part 2: 1977(Identical To: ISO 6622-2: 2013)WC completed and no comment received.Committee may please deliberate**.****Decision in 22nd Meeting:**Committee decided to process the document for printing and authorized Member Secretary to carry out editorial corrections, if any | **Status in 23rd Meeting:**F- Draft prepared. Being sent in Printing Committee may please note. |
| **IS 8422****(Part 3)****: 1977** | Specification for piston rings for ICengines: Part 3 keystone rings from 82up to 200 mm nominal diameter **T -****Rings15”** | **DIN 70914**‘ Piston rings for automotive engineering, T-rings 15”, keystone rings 15”from 82 upto 200 mm nominal diameter ’ | As per the Information Available on the website of ‘Beuth Verlag’ which is a subsidiary of DIN, the German Institute for Standardizatio n, DIN 70914has been withdrawn and has been replaced by adopting **ISO 6624-1**.{https:/[/ww](http://www/)w[.](http://www/) beuth.de/en/standard/din- 70914/1970420} | **Decision in 21st Meeting:**As Scope of ISO 6624-1 and ISO 6624-3 includes T Rings along with TB, TBA, TM, K, KB, KBA and KM Types of Rings, IS 8422-3 maybe superseded by adopting ISO 6624-1 and ISO 6624-3.ISO 6624-2 and ISO 6624-3 may also be considered for adoption for Half Keystone Rings.**Present Status:** TED/02/24551 IS 8422 : Part 3: 1977 (Identical To: ISO 6624-1: 2017) TED/02/24622 (Identical To: ISO 6624-2) -TED/02/24550IS 8422 : Part 3: 1977(Identical To: ISO 6624-3: 2017)WC completed and no comment received.**Decision in 22nd Meeting:**Committee decided to process the document for printing and authorized Member Secretary to carry out editorial corrections, if any.Chairman requested member secretary to send email to M/s Shri Ram piston for their comments in the field they are working.  | **Status in 23rd Meeting:**The document will be sent in printing soon.and email has been sent to Shri ram Pistons for seeking their field of work. No response is received yet.Committee may please deliberate  |
| **IS 8422****(Part 4)****: 1977** | Napier Oil Scraper Rings From 30 Up To 200 mm Nominal Diameter **N-Rings** | **DIN 70930**‘Piston rings for automotive engineering, N-rings, oil- scraper rings from 30 upto 200 mm nominal diameter’, | As per the Information Available on the website of ‘Beuth Verlag’ which is a subsidiary of DIN, the German Institute for Standardizatio n, DIN 70930has been withdrawn and has been replaced byadopting **ISO 6623**.{https:/[/ww](http://www/)w[.](http://www/) beuth.de/en/standard/din- 70930/1970585} | **Decision in 21st Meeting:**As Scope of ISO 6623 includes N Rings along with NM, E and EM Types of Rings, IS 8422-4 may be superseded by adopting ISO 6623.**Present Status:**TED/02/24552IS 8422 : Part 4: 1977(Identical To: ISO 6623: 2013). WC completed and no comment received.Committee may please deliberate.**Decision in 22nd Meeting:**Committee decided to process the document for printing and authorized Member Secretary to carry out editorial corrections, if anyChairman requested member secretary to send email to M/s Shri Ram piston for their comments in the field they are working. | **Status in 23rd Meeting:**The document will be sent in printing soon.and email has been sent to Shri ram Pistons for seeking their field of work. No response is received yet.Committee may please deliberate |
| **IS 8422****(Part 5)****: 1977** | Specification for piston rings for ICengines: Part 5 stepped oil scraper rings from 30up to 200 mm nominal diameter **Z -****Rings** | Draft British Standard Specification of piston rings up to 200 mm diameter for internal combustion engines : Part I Single piece designs, dimensions, materials and designations’, | Status of Base Standard could not be traced due to unavailability of Document Number of Draft British Standard. |  **Decision in 21st Meeting:**Inputs are requested from Committee members for Revision of this standard.**Present Status:**TED/02/20906IS 8422: Part 5: 1977. P-Draft Circulated and no comment received.Committee may please deliberate **Decision in 22nd Meeting**: Committee deliberated and decided to place the document in WC and if not comment is received, process the document for printing. Committee authorized Member Secretary to carry out editorial corrections, if any | **Status in 23rd meeting**WC Document prepared and will be placed in WC.Committee may please note |
| **IS 8422****(Part 6)****: 1977** | Specification for piston rings for ICengines: Part 6 slotted oil control rings from 50up to 200 mm nominal diameter **S - Rings** | **DIN 70946**‘Piston rings for automotive engineering, S-rings, slotted oil control rings from 50 upto 200 mm nominal diameter’, | As per the Information Available on the website of ‘Beuth Verlag’ which is a subsidiary of DIN, the German Institute for Standardizatio n, DIN 70946has been withdrawn and has been replaced by adopting **ISO 6625.**{https:/[/ww](http://www/)w[.](http://www/) beuth.de/en/standard/din- 70946/1970633} | **Decision in 21st Meeting:**The Scope of ISO 6625 includes S Rings along with G, D and DV types of oil control piston rings.Hence IS 8422-6 may be superseded by adopting ISO 6625.**Present Status:**TED/02/24621IS 8422 : Part 6: 1977IS 8422 : Part 7: 1977IS 8422 : Part 8: 1977(Identical To: ISO 6625). WC completed and no comment received.Committee may please deliberate**Decision in 22nd Meeting:** Committee decided to process the document for printing and authorized Member Secretary to carry out editorial corrections, if any | **Status in 23rd meeting**F- Draft prepared. Being sent in Printing Committee may please note.  |
| **IS 8422****(Part 7)****: 1977** | Specification for piston rings for ICengines: Part 7 double bevelled slotted oil control rings from 50up to 200 mm nominal diameter **G -****Rings** | **DIN 70948**‘Piston rings for automotive engineering, G-rings, double bevelled slotted oil control rings from 50 upto 200 mm nominal diameter’. | As per the Information Available on the website of ‘Beuth Verlag’ which is a subsidiary of DIN, the German Institute for Standardizatio n, DIN 70948has been withdrawn and has been replaced by adopting **ISO 6625.**{https:/[/ww](http://www/)w[.](http://www/) beuth.de/en/standard/din- 70948/1970748} | **Decision in 21st Meeting:**The Scope of ISO 6625 includes G Rings along with S, D and DV types of oil control piston rings.Hence IS 8422-7 may be superseded by adopting ISO 6625.**Present Status:**TED/02/24621IS 8422 : Part 6: 1977IS 8422 : Part 7: 1977IS 8422 : Part 8: 1977(Identical To: ISO 6625). WC completed and no comment received.Committee may please deliberate**Decision:** Committee decided to process the document for printing and authorized Member Secretary to carry out editorial corrections, if any. | **Status in 23rd meeting**F- Draft prepared. Being sent in Printing Committee may please note. |
| **IS 8422****(Part 8)****: 1977** | Specification for piston rings for ICengines: Part 8 narrow land slotted oil controlrings from 50up to 200 mm nominal diameter **D -****Rings** | **DIN 70947**‘Piston rings for automotive engineering, D-rings, narrow land drain oil control rings, 50 upto 200 mm nominal diameter, | As per the Information Available on the website of ‘Beuth Verlag’ which is a subsidiary of DIN, the German Institute for Standardizatio n, DIN 70948has been withdrawn and has been replaced by adopting **ISO 6625.**{https:/[/ww](http://www/)w[.](http://www/) beuth.de/en/standard/din- 70947/1970671} | **Decision in 21st Meeting:**The Scope of ISO 6625 includes D Rings along with S, G and DV types of oil control piston rings.Hence IS 8422-8 may be superseded by adopting ISO 6625.**Present Status:**TED/02/24621IS 8422 : Part 6: 1977IS 8422 : Part 7: 1977IS 8422 : Part 8: 1977(Identical To: ISO 6625). WC completed and no comment received.Committee may please deliberate**Decision:** Committee decided to process the document for printing and authorized Member Secretary to carry out editorial corrections, if any | **Status in 23rd meeting**F- Draft prepared. Being sent in Printing Committee may please note. |

**Other ISO Standards on Piston Rings**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ISO****Standards** | **Title of the Standard** | **Scope of the Standard** | **If Corresponding Indian Standards****Exists** | **Status of Doc** |
| ISO 6621-1:2018 | Internal combustion engines — Piston rings — Part 1: Vocabulary | This document classifies materials intended for the manufacture of piston rings, based on their mechanical properties and the stresses the materials are capable of withstanding.This document is applicable to piston rings for reciprocating internal combustion engines up to and including those of 200 mm in diameter. It is also applicable to piston rings ofcompressors working under similar conditions. | Yes{IS/ISO 6621-1 :2018} | Latest Version of ISO Document is adopted.ARP may be allocated to Committee members.Committee may nominate the members |
| ISO 6621- 2:2020 | Internal combustion engines — Piston rings — Part 2: Inspection measuringprinciples | This document defines the measuring principles to be used for measuring piston rings; it applies to piston rings up to and including 200 mm diameter for reciprocating internal combustion engines.This document can be used for piston rings for compressors working under analogous conditions. | Yes{IS/ISO 6621-2 :2020} | Latest Version of ISO Document is adopted. Hence No action is recommended. |
| ISO 6621-3:2021 | Internal combustion engines — Piston rings — Part 3: Material specifications | This document classifies materials intended for the manufacture of piston rings, based on their mechanical properties and the stresses the materials are capable of withstanding.This document is applicable to piston rings for reciprocating internal combustion engines up to and including those of 200 mm in diameter. It is also applicable to piston rings ofcompressors working under similar conditions. | Yes{IS 5791 : 2006,Adoption of ISO 6621-3 : 2000} | Latest Version of ISO Document i.e. ISO 6621-3: 2021 may be adopted.Justification for adoption may be prepared.  |
| ISO 6621-4:2015 | Internal combustion engines — Piston rings — Part 4: General specifications | This part of ISO 6621 specifies the general characteristics of piston rings for reciprocating internal combustion engines for road vehicles and other applications (the individual dimensional criteria for these rings are given in the relevant International Standards). It also provides a system for ring coding, designation, and marking. It is applicable to all such rings of a nominal diameter from 30 mm up to andincluding 200 mm. | No | ISO 6621-4:2024 is published by ISO. May be Considered for Adoption |
| ISO 6621-5:2020 | Internal combustion engines — Piston rings — Part 5: Quality requirements | This document specifies quality aspects that can be defined but that are not normally found on a drawing specification.It covers the following:* single‑piece piston rings of grey cast iron or steel;
* multi‑piece piston rings (oil control rings) consisting of cast iron parts and spring components; and
* single‑piece and multi‑piece oil control rings of steel, i.e. oil control rings in the form of strip steel components or steel segments (rails) with spring expander components.

In addition to specifying some of the limits of acceptance relating to inspection measuring principles (covered by ISO 6621-2), this document also covers those features for which no recognized quantitative measurementprocedures exist and which are only checked visually with normal eyesight (glasses if worn | No | May be Considered for Adoption |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | normally) and without magnification. Such features (superficial defects) are additional to the standard tolerances of ring width, radial wall thickness and closed gap.This document does not establish acceptable quality levels (AQL), it being left to manufacturer and customer to decide the appropriate levels jointly. In this case, the recommendations of ISO 2859-1 are followed. This document specifies the quality requirements of piston rings for reciprocating internal combustion engines for road vehicles and other applications. It is applicable to all such rings of a nominal diameter from 30 mmup to and including 200 mm. |  |  |
| ISO 6626-1(DIS Stage){As per the information available on ISO Portal, It Will Supersede ISO6626:1989} | Internal combustion engines — Piston rings — Part 1: Coil spring loaded oil control rings made of cast iron | - | - | No Recommendation as document is still under formulation stage at ISO. |
| ISO 6626-2:2013 | Internal combustion engines — Piston rings — Part 2: Coil- spring-loaded oil control rings of narrow width made of castiron | This part of ISO 6626 specifies the essential dimensional features of coil-spring-loaded oil control rings made of cast iron, types DSF-C, SSF, GSF, DSF, SSF-L, DSF-NG and DSF-CNP. It is applicable to those piston rings in sizes 60 mm to 110 mm, inclusive, for reciprocating internal combustion engines for road vehicles and other applications. | No | May be Considered for Adoption |
| ISO 6626-3:2019 | Internal combustion engines — Piston rings — Part 3: Coil- spring-loaded oil control rings made of steel | This document specifies the essential dimensions of coil-spring-loaded oil control rings made of steel, of piston ring types SOR (with R-shaped groove) and SOV (with V- shaped groove).This document applies to coil-spring-loaded oil control rings made of steel with a diameter from 60 mm up to and including 160 mm for reciprocating internal combustion engines. It can also be used for piston rings in compressors working under analogousconditions. | No | May be Considered for Adoption |
| ISO 6627:2022 | Internal combustion engines — Piston rings — Expander/rail oil-control rings | This document specifies the essential dimensional features of expander/rail oil- control rings, without providing a complete product description (because expander‑rail designs vary from piston-ring manufacturer to piston-ring manufacturer, the interaction between the manufacturer and the client will determine specific design details).This document applies to expander/rail oil- control rings of nominal diameters ranging from 40 mm to 140 mm for reciprocating internal combustion engines for road vehicles and other applications. It also applies to pistonrings for compressors working under analogous conditions. | No | May be Considered for Adoption |

[**ANNEX**](#Annnneeeex_1) **4**

**Note from Sanjay Tank, Technical expert, ACMA Date: 17.07.2024**

To: Dr. Shri Devendra Singh – Chairman TED02

 Shri Mitra Sen Verma – Member Secretary TED02

First of all, thanks for the opportunity given to me for contributing towards work related to TED02.

At the same time, would like to admit that at the time of the agenda point 6 discussion during our 14th June’24 meeting, I was at Hospital to attend a critical cousin brother and hence could not got 100% involved in the agenda point discussion.

Later on with the help of Shri Mitra Sen got the clarity about the task assigned to me. Let me try to start working towards the same though many of the 35 IS listed for review are not relevant to my expertise as well as my role with ACMA.

Right now submitting below inputs based on my review of the list as well as relevant other annextures of the MoM.

1. Two (2) items , according to me, are related to electrical engineering and may be referred to other related TED/ETD as may find suitable by BIS (sr no. 1 & 34 in the list below, highlighted in RED)
2. Ten (10) items highlighted in Green appears to be have been almost completed workwise as per the status given , mainly in Annexture 3 (highlighted in Green in the list below) of the MoM
3. Three (3 ) items highlighted in Yello appears to have reached significant stage of progress , again as seen from the annexture 3 and earlier agenda point of the MoM.
4. I request Shri Mitra Sen to please check and confirm above points.

Thus around 20 items are there to work upon (out of which two items with due dates in 2025 can be taken up as second priority)

In the table, I have logically put up members (not included Cummins, COG and can be put up later on) who seems to be related to the respective members.

I request Shri Mitrasen to please make a sum total of these members and be listed in proposed Panel 2

I have not contacted any of them to get their confirmation and request Shri Mitra Sen’s help as member secretary to do the same. )To make a formal invitation to them.

As a next step in a meeting, distribution of IS to willing Panel members be done for the actual work.

Let’s try accordingly and hope for the best.

Best Regards, Sanjay Tank (M:9890979446)

From MoM of 22nd meeting of TED02, dt. 14.06.34 ITEM 6: REVIEW of INDIAN STANDARDS

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 | IS/ISO 8528-4 : 2005 Reviewed In : 2019  | Reciprocating internal combustion engine driven alternating current generating sets: Part 4 control gear and switchgear | Sept’24 | Not the subject of expertise. Electrical Products, BIS to identify suitable TED/ETD |
| 2 | IS/ISO 8528-10 : 1998ISO 8528-10 : 1998Reviewed In : 2019 | Reciprocating Internal Combustion Engine Driven Alternating Current Generating Sets: Part 10 Measurement of Airborne Noise by the Enveloping Surface Method | Sept’24 | ARAI, ICAT, Greaves Cotton Limited, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association. Mahindra |
| 3 | IS/ISO 8528-12 : 1997Reviewed In : 2019 | Reciprocating internal combustion engine driven alternating current generating sets: Part 12 emergency power supply to safety services | Sept’24 | ARAI, ICAT, Greaves Cotton Limited, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Mahindra |
| 4 | IS/ISO 8528-6 : 2005Reviewed In : 2019 | Reciprocating internal combustion engine driven alternating current generating sets: Part 6 test methods | Sept’24 | ARAI, ICAT, Greaves Cotton Limited, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Mahindra |
| 5 | IS 10105 : 1982Reviewed In : 2019 | Specification for fittings for cylinder pressure indicators for internal combustion engines | Sept’24 | ARAI, ICAT, Greaves Cotton Limited, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Mahindra |
| 6 | IS 10533 : 1983Reviewed In : 2019 | Specification for valve guides for internal combustion engines | Sept’24 | ARAI, ICAT, Greaves Cotton Limited, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Tractor and Mechanization Association , Mahindra |
| 7 | IS 12352 : 1988Reviewed In : 2019 | Specification for fuel injection pump mounting bolts | Sept’24 | ARAI, ICAT, Denso, Greaves Cotton Limited, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Tractor and Mechanization Association , Mahindra |
| 8 | IS 12404 : 1988Reviewed In : 2019 | Specification for couplings for driving fuel injection pumps | Sept’24 | Denso, Greaves Cotton Limited, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Tractor and Mechanization Association , Mahindra, Ashok Leyland |
| 9 | IS 12455 : 1988Reviewed In : 2019 | Performance requirements of aircooled spark ignition automotive engines | Sept’24 | ARAI, ICAT, , Greaves Cotton Limited, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Tractor and Mechanization Association , Mahindra, Ashok Leyland, Rajkot Engineering Association, Bajaj Auto  |
| 10 | IS 12460 : 1988Reviewed In : 2019 | Automotive vehicles - Transmission systems - Manual control sequence in automatic transmissions - Recommendations | Sept’24 | ARAI, ICAT, CIRT, Mahindra, Bajaj Auto, Ashok Leyland, Maruti Suzuki, TATA Motors, MG Motors,  |
| 11 | IS 12499 : 1988Reviewed In : 2019 | Specification for two stage, 0.5 litre diesel fuel filters | Sept’24 | CSIR - Indian Institute of Petroleum, Fleetguard Filters Private Limited, Ashok Leyland, Tractors and Mechanization Association, TMA, Mahindra, TATA Motors, |
| 12 | IS 12500 : 1988Reviewed In : 2019 | Specification for 0.2 litre diesel fuel filters | Sept’24 | CSIR - Indian Institute of Petroleum, Fleetguard Filters Private Limited, Ashok Leyland, Tractors and Mechanization Association, TMA, Mahindra, TATA Motors,  |
| 13 | IS 12535 (Part 1) : 1988Reviewed In : 2019 | Automotive vehicles - Transmission systems - Glossary: Part 1 general definitions | Sept’24 | ARAI, ICAT, CIRT, Ashok Leyland, Mahindra. Maruti Suzuki, Bajaj Auto, Hero Motocorp, TATA Motors, MG Motors, Tractor and Mechanization Association, TMA |
| 14 | IS 12587 : 1989Reviewed In : 2019 | Automotive vehicles - Transmission system - Gear arrangement - Recommendations | Sept’24 | ARAI, ICAT, CIRT, Mahindra, Bajaj Auto, Hero Motocorp, Ashok Leyland, Maruti Suzuki, TATA Motors, MG Motors, Tractor and Mechanization Association, TMA |
| 15 | IS 12996 : 1990Reviewed In : 2019 | Internal combustion engines radiator pressure caps - Specification | Sept’24 | ARAI, ICAT, CIRT, Mahindra, Bajaj Auto, Ashok Leyland, Maruti Suzuki, TATA Motors, MG Motors, Tractor and Mechanization Association, TMA |
| 16 | IS 13018 : 1990Reviewed In : 2019 | ~~Internal combustion of test for pressure engines - Method charged engines~~ Internal Combustion Engines - Method of Test for Pressure Charged Engines | Sept’24 | ARAI, Greaves Cotton Limited, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Rajkot Engineering Association, Mahindra, Tractor and Mechanization Association |
| 17 | IS 14599 : 1999Reviewed In : 2019 | Automotive vehicles - Performance requirements (Measurement Of Power, SFC, Opacity) of positive and compression ignition engines - Method of test | Sept’24 | ARAI, ICAT, CIRT, Greaves Cotton Limited, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Rajkot Engineering Association, Ashok Leyland, Mahindra, TMA |
| 18 | IS 14600 : 1999Reviewed In : 2019 | Automotive vehicles - Exhaust emissions - Gaseous pollutants from vehicles equipped with internal combustion engines - Method of measurement | Sept’24 | ARAI, ICAT, CIRT, Greaves Cotton Limited, Rajkot Engineering Association, Ashok Leyland, Mahindra, TATA Motors, MG Motors, Bajaj Auto, Hero Motocorp, TMA |
| 19 | IS 4530 : 2006Reviewed In : 2020 | GeneraL requirements for positioning and routing of engine exhaust pipes in motor vehicles (First Revision) | Jan’25 | ARAI, ICAT, CIRT, Mahindra, Maruti Suzuki, Ashok Leyland, MG Motors |
| 20 | IS 7449 (Part 1) : 1974Reviewed In : 2019 | Glossary of terms for IC engines: Part 1 fuel injection equipment | Sept’24 | ARAI, ICAT, CIRT, Denso, TMA, Mahindra, TATA Motors, Ashok Leyland, Maruti Suzuki, TMA |
| 21 | IS 7451 (Part 1) : 2020ISO 2710-1:2017 | Reciprocating Internal Combustion Engines — Vocabulary Part 1 Terms for Engine Design and Operation ( Second Revision ) | Mar’25 | ARAI, ICAT, CIRT, Greaves Cotton Limited, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Rajkot Engineering Association, Ashok Leyland, Mahindra, TMA, Bajaj Auto, Hero Motocorp, TATA Motors, Maruti Suzuki, MG Motors, Fleetgaurd Filters, ShriramPistons, TMA |
| 22 | IS 8422 (Part 4) : 1977Reviewed In : 2019 | Specification for piston rings for IC engines: Part 4 napier oil scraper rings from 30 up to 200 mm nominal diameter N - Rings | Sept’24 | ARAI, ICAT, CIRT, India Pistons, Shriram Pistons, Mahindra, Ashok Leyland, TATA Motors, Maruti Suzuki, Bajaj Auto, Hero Motocorp, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Rajkot Engineering Association, TMA |
| 23 | IS 8422 (Part 5) : 1977Reviewed In : 2019 | Specification for piston rings for IC engines: Part 5 stepped oil scraper rings from 30 up to 200 mm nominal diameter Z - Rings | Sept’24 | ARAI, ICAT, CIRT, India Pistons, Shriram Pistons, Mahindra, Ashok Leyland, TATA Motors, Maruti Suzuki, Bajaj Auto, Hero Motocorp, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Rajkot Engineering Association, TMA |
| 24 | IS 8422 (Part 6) : 1977Reviewed In : 2019 | Specification for piston rings for IC engines: Part 6 slotted oil control rings from 50 up to 200 mm nominal diameter S - Rings | Sept’24 | ARAI, ICAT, CIRT, India Pistons, Shriram Pistons, Mahindra, Ashok Leyland, TATA Motors, Maruti Suzuki, Bajaj Auto, Hero Motocorp, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Rajkot Engineering Association, TMA |
| 25 | IS 8422 (Part 7) : 1977Reviewed In : 2019 | Specification for piston rings for IC engines: Part 7 double bevelled slotted oil control rings from 50 up to 200 mm nominal diameter G - Rings | Sept’24 | ARAI, ICAT, CIRT, India Pistons, Shriram Pistons, Mahindra, Ashok Leyland, TATA Motors, Maruti Suzuki, Bajaj Auto, Hero Motocorp, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Rajkot Engineering Association, TMA |
| 26 | IS 8422 (Part 8) : 1977Reviewed In : 2019 | Specification for piston rings for IC engines: Part 8 narrow land slotted oil control rings from 50 up to 200 mm nominal diameter D - Rings | Sept’24 | ARAI, ICAT, CIRT, India Pistons, Shriram Pistons, Mahindra, Ashok Leyland, TATA Motors, Maruti Suzuki, Bajaj Auto, Hero Motocorp, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Rajkot Engineering Association, TMA |
| 27 | IS 9420 (Part 1) : 1988Reviewed In : 2019 | Specification for feed pumps for diesel fuel injection equipment: Part 1 external dimensions(First Revision) | Sept’24 | ARAI, ICAT, CIRT, Denso, Mahindra, Ashok Leyland, TATA Motors, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Rajkot Engineering Association, TMA |
| 28 | IS 9420 (Part 2) : 1988Reviewed In : 2019 | Specification for feed pumps for diesel fuel injection equipment: Part 2 types of drives | Sept’24 | ARAI, ICAT, CIRT, Denso, Mahindra, Ashok Leyland, TATA Motors, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Rajkot Engineering Association, TMA |
| 29 | IS 7657 (Part 1) : 1975Reviewed In : 2023 | Specification for starter ring gears for internal combustion engines: Part 1 gears for inertia and solenoid pre - Engaged starters | Sept’24 | Mahindra, Ashok Leyland, TATA Motors, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Rajkot Engineering Association, TMA |
| 30 | IS 7657 (Part 2) : 1975Reviewed In : 2019 | Specification for starter ring gears for internal combustion engines: Part 2 gears for axial and coaxial starters | Sept’24 | Mahindra, Ashok Leyland, TATA Motors, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Rajkot Engineering Association, TMA |
| 31 | IS 8422 (Part 1) : 1977Reviewed In : 2019 | Specification for piston rings for IC engines: Part 1 plain compression rings from 30 up to 200 mm nominal diameter R - Rings | Sept’24 | ARAI, ICAT, CIRT, India Pistons, Shriram Pistons, Mahindra, Ashok Leyland, TATA Motors, Maruti Suzuki, Bajaj Auto, Hero Motocorp, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Rajkot Engineering Association, TMA |
| 32 | IS 8422 (Part 2) : 1977Reviewed In : 2019 | Specification for piston rings for IC engines: Part 2 taper faced compression rings from 30 up to 200 mm nominal diameter M - Rings | Sept’24 | ARAI, ICAT, CIRT, India Pistons, Shriram Pistons, Mahindra, Ashok Leyland, TATA Motors, Maruti Suzuki, Bajaj Auto, Hero Motocorp, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Rajkot Engineering Association, TMA |
| 33 | IS 8422 (Part 3) : 1977Reviewed In : 2019 | Specification for piston rings for IC engines: Part 3 keystone rings from 82 up to 200 mm nominal diameter T - Rings 15 | Sept’24 | ARAI, ICAT, CIRT, India Pistons, Shriram Pistons, Mahindra, Ashok Leyland, TATA Motors, Maruti Suzuki, Bajaj Auto, Hero Motocorp, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Rajkot Engineering Association, TMA |
| 34 | IS/ISO 8528-3 : 2020 | Reciprocating internal combustion engine driven alternating current generating sets Part 3: Alternating current generators for generating sets | Feb;25 | Not the subject of expertise. Electrical Products, BIS to identify suitable TED/ETD |
| 35 | IS/ISO 8178-4 : 2020 | Reciprocating internal combustion engines Exhaust emission measurement Part 4: Steady-state and transient test cycles for different engine applications | Mar’25 | ARAI, ICAT, CIRT, Greaves Cotton Limited, Indian Diesel Engine Manufacturers Association, Uttar Pradesh Diesel Engine Manufacturers Association, Rajkot Engineering Association, Ashok Leyland, Mahindra, TMA |