

MINUTES OF THE 17th MEETING OF BEARINGS SECTIONAL COMMITTEE, PGD 13

| DATE & TIME | VENUE (Hybrid) |
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| 11:00 AM – 04:00 PM Thursday, 14 December 2023 | Eastern Regional Office (EROL), P-230, C.I.T Scheme VII M, VIP Road, Kankurgachi, Kolkata-700054 Hybrid link : https://bismanak.webex.com/bismanak/j.php?MTID=m1a3336a7 be5e4f72e0b646f4406ff6f6 |
| 11:00 AM – 04:00 PM Friday, 15 December 2023 | INDUSTRY VISIT Venue: M/s Tata Steel Bearings Division, Kharagpur |

MEMBERS PRESENT

CHAIRMAN: Dr Manish Roy, Scientist-G, Defence Metallurgical Research Laboratory, Hyderabad

Co-Chairman: Dr Soumendu Jana, Chief Scientist & Head, Propulsion Division, CSIR-NAL, Bengaluru

MEMBER SECRETARY: Shri Kundan Giri, Scientist-C/Deputy Director (PGD), BIS, New Delhi

| S. No | Name of representative | Name of the Organization | Contact details |
|-------|------------------------|--|--|
| 3. | Manish Aggarwal | Bharat Heavy Electrical Limited, New Delhi | manishagrawal@bhel.in |
| 4. | Raveendra HS | Bimetal Bearing Limited, Coimbatore | raveendra@bimite.co.in |
| 5. | M. Solairaju | Combat Vehicles Research and Development Establishment, Ministry Of Defence, Chennai | solairaju.m.cvrde@gov.in |
| 6. | Vijay Kumar Goel | Defence Research and Development Organization, Research Centre Imarat, Hyderabad | mo.directorem@gmail.com |
| 7. | T. H. Gonsalves | Hindustan Aeronautics Limited, Bengaluru | rd.aerdc@hal-india.co.in |
| 8. | Prof. Harish Hirani | Indian Institute of Technology Delhi, New Delhi | hirani@mech.iitd.ac.in |
| 9. | Prof. Rajiv Tiwari | Indian Institute of Technology Guwahati, Guwahati | rtiwari@iitg.ac.in |
| 10. | Arun Bisht | Maruti Suzuki India Limited, Gurugram | arun.bisht@maruti.co.in |
| 11. | Milind Ghan | NRB Bearings Limited, Thane | milind.ghan@nrb.co.in |
| 12. | Avinash Sharma | National Engineering Industries Limited, Jaipur | avinash.sharma@nbcbearings.in |
| 13. | Dr. Eapen P Joseph | Nuclear Power Corporation of India Limited, Mumbai | jeapen@npcil.co.in |
| 14. | Vijay Kumar Goel | Research Designs and Standards Organization (RDSO), Lucknow | mp.directorbrake@gmail.com |
| 15. | Sandeep D Singh | SKF India Limited, Pune | sandeep.d.singh@skf.com |
| 16. | Gururaj Gaddi | SKF India Limited, Pune | gururaj.gaddi@skf.com |
| 17. | Trilochan Singh Bhatia | Schaeffler India Limited, Vadodara | bhatitil@schaeffler.com |
| 18. | Biswanath Nandi | Schaeffler India Limited, Vadodara | biswanath.nandi@schaeffler.com |
| 19. | R. R. Kulkarni | Tata Motors Limited, Pune | ramesh1.kulkarni@tatamotors.com |
| 20. | Anoop Toby | Tata Motors Limited, Pune | att531197@tatamotors.com |
| 21. | Pravin Dixit | Tata Steel Limited - Bearing Division, Kharagpur | pravin.dixit@tatasteel.com |
| 22. | Arindam Ghosh | Tata Steel Limited - Bearing Division, Kharagpur | arindam.ghosh@tatasteel.com |
| 23. | K. Shreenath Upadhya | Timken India Limited, Bangalore | shreenath.upadhya@timken.com |

Item 3.2 Standards Due for Review in 2023-24

| SN | IS No./ Title | Status before the Meeting | Decision of Committee |
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| 1 | IS 10260 (Part 3) : 2018 / ISO 4378-3 :2009 Plain bearings - Terms, definitions, classification and symbols: Part 3 lubrication (First Revision) | <p>To send the document to Dr. Manish Roy and Prof Harish Hirani for review and comments. If no comments are received in 2 months, the document may be sent to publication.</p> <p>The documents were shared with the experts on 09 August 2023 and 20 November 2023 through email. The document has been reviewed by Dr Manish Roy and Prof. Hirani.</p> | <p>Since the document was approved by the experts and no comments were received, the committee approved the publication of ISO 4373-3: 2017 as the revision of IS 10260 (Part 3) : 2018 / ISO 4378-3 :2009.</p> <p>Additionally, the committee decided to form a panel on Lubrication of bearings, the following members are currently identified for the panel:</p> <ul style="list-style-type: none"> a) Dr SAin, contact to be provided by Mr Biswanath Nandi b) IIP Dehradun, nominated by Dr Soumendu Jana c) Members from IOCL R&D Facility in Ghaziabad. |
| 2 | IS 13405 : 2018/ISO 246 : 2007 Rolling bearings - Cylindrical roller bearings, separate thrust collars - Boundary dimensions (Second Revision) | Reaffirmed as recommended in the 16 th meeting since there is no change in the base ISO standard. | Committee noted the given information. |
| 3 | IS 13406 : 2018/ISO 8443 : 2010 Rolling bearings - Radial ball bearings with flanged outer ring - Flange dimensions (First Revision) | The document has been wide circulated for 90 days on 13/11/2023. The document may be sent to publication if no comments are received till the last date of circulation. | The committee noted the information given in the agenda and finalized the document for sending to publication if no comments are received before the last date. |
| 4 | IS 13962 : 2018/ISO 10317 : 2008 Rolling bearings - Tapered roller bearings - Designation system (First Revision) | Reaffirmed as recommended in the 16 th meeting since there is no change in the base ISO standard. | Committee noted the given information. |
| 5 | IS 14478 : 1997 Plain bearings - Thick - Walled bushes, plain and flange type, full - Round (without | Archived as recommended in the 16 th meeting since the product is going out of use and currently there are no experts in the | Committee noted the given information. |

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| | any joint or slit) - Specification | committee willing to take up the review of this product. | |
| 6 | IS 14802 (Part 2) : 2019/ ISO 4384-2:2011 Plain Bearing — Hardness Testing of Bearing Metals Part 2 Solid Materials (First Revision) | The document has been wide circulated for 60 days on 11/09/2023. The document may be sent to publication since no comments are received till the last date of circulation. | The committee noted the information given in the agenda and finalized the document for sending to publication. |
| 7 | IS 15620 : 2019/ ISO 4383 : 2012 Plain Bearings — Multilayer Materials for Thin-Walled Plain Bearing (First Revision) | The document has been wide circulated for 90 days on 11/09/2023. The document may be sent to publication since no comments are received till the last date of circulation. | The committee noted the information given in the agenda and finalized the document for sending to publication. |
| 8 | IS 2399 : 2019/ ISO 5593 : 1997 Rolling Bearings — Vocabulary (Second Revision) | The document has been wide circulated for 60 days on 18/08/2023. The document may be sent to publication since no comments are received till the last date of circulation. | The committee noted the information given in the agenda and finalized the document for sending to publication. |
| 9 | IS 3823 : 2014/ ISO 76 : 2006 Rolling bearings - Static load ratings (Third Revision) | Reaffirmed as recommended in the 16 th meeting since there is no change in the base ISO standard | Committee noted the given information. |
| 10 | IS 5669 : 2019/ ISO 15 : 2017 Rolling bearings - Radial bearings - Boundary dimensions, general plan (Second Revision) | Reaffirmed as recommended in the 16 th meeting since there is no change in the base ISO standard | Committee noted the given information. |
| 11 | IS 5692 : 2019/ ISO 492 : 2014 Rolling bearings - Radial bearings - Geometrical product specifications (GPS) and tolerance values (Second Revision) | The document has been wide circulated for 90 days on 18/08/2023. The document may be sent to publication since no comments are received till the last date of circulation. | The committee noted the information given in the agenda and finalized the document for sending to publication. |
| 12 | IS 5932 : 2019/ ISO 104 Rolling bearings - Thrust bearings - Boundary dimensions, general plan (Second Revision) | Reaffirmed as recommended in the 16 th meeting since there is no change in the base ISO standard | Committee noted the given information. |
| 13 | IS 5933 : 2019/ ISO 199 : 2014 Rolling bearings - Thrust bearings - Geometrical product specification (GPS) and tolerance values (Fourth Revision) | The document has been wide circulated for 90 days on 18/08/2023. The document may be sent to publication since no comments are received till the last date of circulation. | The committee noted the information given in the agenda and finalized the document for sending to publication. |
| 14 | IS 11027 (Part 2) : 2018/ ISO 1132-2 : 2001 Rolling Bearing - | Reaffirmed as recommended in the 16 th meeting since there is no change in the base | Committee noted the given information. |

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| | Tolerances Part 2 Measuring and Gauging Principles and Methods | ISO standard | |
| 15 | IS 16605 (Part 2) : 2018/ ISO 2982-2 : 2013 Rolling Bearings - Accessories Part 2 Dimensions for Locknuts and Locking Devices | Drafts were provided by M/s Schaeffler India Ltd. for revision of adapter and withdrawal sleeve in the 15 th meeting. The committee decided to withhold the preliminary draft circulation or the wide circulation of the following documents till the time the review of other documents is over. Documents are under preparation for circulation. | The committee decided to reaffirm the standard till the time the revised standards are published. Further the committee decided to circulate the drafts provided by M/s Schaeffler India Ltd. as Preliminary drafts for 3 months for review. |
| 16 | IS 16605 (Part 1) : 2018/ ISO 2982-1:2013-1 Rolling bearings Accessories Part 1 : Dimensions for adapter sleeve assemblies and withdrawal sleeves | | |
| 17 | IS 2898 (Part 2) : 2019/ ISO 3290-2 : 2014 Rolling bearings - Balls: Part 2 ceramic balls | Members from National Aerospace Laboratories Volunteered to review the standard and to add test methods applicable for ceramic balls. The updates version of the standards are yet to be received. | The committee decided to allot 2 months' time to NAL to provide updated version of the standard after adding tests for balls. |
| 18 | IS 16478 (Part 1) : 2019/ ISO 4386-1 : 2012 Plain bearing - Metallic multilayer plain bearings: Part 1 non - Destructive ultrasonic testing of bond of thickness greater than or equal to 0.5 mm | The document has been wide circulated for 60 days on 11/09/2023. The document may be sent to publication since no comments are received till the last date of circulation. | The committee noted the information given in the agenda and finalized the document for sending to publication. |
| 19 | IS 16478 (Part 2) : 2019/ ISO 4386-2 : 2012 Plain bearing - Metallic multilayer plain bearings: Part 2 destructive testing of bond for bearing metal layer thicknesses greater than or equal to 2 mm | The document has been wide circulated for 60 days on 11/09/2023. The document may be sent to publication since no comments are received till the last date of circulation. | The committee noted the information given in the agenda and finalized the document for sending to publication. |
| 20 | IS 5935 (Part 2) : 2019/ ISO 5753-2 : 2010 Rolling bearings - Internal clearance: Part 2 axial internal clearance for four - Point - Contact ball bearings | Reaffirmed as recommended in the 16 th meeting since there is no change in the base ISO standard | Committee noted the given information. |
| 21 | IS 5935 (Part 1) : 2019/ ISO 5753-1 : 2009 Rolling bearings - Internal clearance: Part 1 radial internal clearance for radial bearings (Second Revision) | Reaffirmed as recommended in the 16 th meeting since there is no change in the base ISO standard | Committee noted the given information. |
| 22 | IS 2898 (Part 1) : 2019/ ISO 3290-1 : 2014 Rolling bearings - Balls: Part 1 steel balls (Second Revision) | Members from National Aerospace Laboratories Volunteered to review the standard and to add test methods applicable for ceramic balls. The updates version of the | The committee decided to allot 1 months' time to NAL to provide updated version of the standard after adding |