## MINUTES OF THE 18th MEETING OF BEARINGS SECTIONAL COMMITTEE, PGD 13

DATE & TIME	VENUE (Hybrid)
Monday, 15th April 2024   10:30 AM – 05:00 PM	Venue: CODISSIA Board Room, Huzur Road, Coimbatore (Arranged by BIS Coimbatore Branch Office), Tamil Nadu, India
	Meeting
10:30 AW - 05:00 PW	link: https://bismanak.webex.com/bismanak/j.php?MTID=m53f2a
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### 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
1.	Mr. Jana Prasad	Austin Engineering Co. Ltd.	Jana.prasad@aec.com
2.	Dr. Soumendu Jana	CSIR - National Aerospace Laboratories, Bengaluru	sjana@nal.res.in
3.	Shri M. Solairaju	Combat Vehicles Research and Development Establishment, Ministry of Defence, Chennai	solairaju.m.cvrde@gov.in
4.	CQAV	CQAV, Ahmednagar (DGQA)	cqav-dgqa@gov.in
5.	Dr T. H. Gonsalves	Hindustan Aeronautics Limited, Bengaluru	rd.aerdc@hal-india.co.in
6.	Prof. Harish Hirani	Indian Institute of Technology Delhi, New Delhi	hirani@mech.iitd.ac.in
7.	Prof. Rajiv Tiwari	Indian Institute of Technology Guwahati, Guwahati	<u>rtiwari@iitg.ac.in</u>
8.	Shri Rajaram Mane	KSPG Automotive Private Limited, Pune	rajaram.mane@in.kspg.com
9.	Shri Milind Ghan	NRB Bearings Limited, Thane	milind.ghan@nrb.co.in
10.	Prof. Rakesh Sehgal	National Institute of Technology, Hamirpur	rakeshsehgal.nitham@gmail.com
11.	Dr. Eapen P Joseph	Nuclear Power Corporation of India Limited, Mumbai	jeapen@npcil.co.in
12.	Shri Vijay Kumar Goel	Research Designs and Standards Organization (RDSO), Lucknow	mp.directorbrake@gmail.com
13.	Shri Sandeep D Singh	SKF India Limited, Pune	sandeep.d.singh@skf.com
14.	Shri Trilochan Singh Bhatia	Schaeffler India Limited, Vadodara	bhatitil@schaeffler.com
15.	Shri Biswanath Nandi	Schaeffler India Limited, Vadodara	nandibsw@schaeffler.com
16.	Shri Anil Gaikwad	Tata Motors Limited, Pune	anil.gaikwad@tatamotors.com
17.	Shri Anoop Toby	Tata Motors Limited, Pune	att531197@tatamotors.com
18.	Shri Pravin Dixit	Tata Steel Limited - Bearing Division, Kharagpur	pravin.dixit@tatasteel.com
19.	Shri Arindam Ghosh	Tata Steel Limited - Bearing Division, Kharagpur	arindam.ghosh@tatasteel.com
20.	Shri Vijay Bhaskar	Timken India Limited, Bangalore	bhaskarg@timken.com

	practice for installation and maintenance of rolling bearings	13:P1, the P-Draft has been circulated on 27- 03-2024 for 2 Months. The comments received on the document will be discussed after the last date of circulation. The committee may please note.	information given in the agenda and asked the experts to submit their comments on the standards formulation portal.
5.	IS 6458 : 1972 – Specification for double row cylindrical roller bearings	As per the decisions made by the Panel PGD 13:P1, the P-Draft has been circulated on 26-03-2024 for 2 Months. The comments received on the document will be discussed after the last date of circulation. The committee may please note.	The committee noted the information given in the agenda and asked the experts to submit their comments on the standards formulation portal.
6.	IS 9619 : 1980 – Identification code for shell type needle bearings (Including Sealed Bearing)	The P-Draft is under development and will be circulated once the formatting has been done. The committee may please note.	The committee noted the information given in the agenda and requested to expedite the P-draft circulation for a period of 3 months.

## Item 2.5 Standard National Action Plan 2023-27

S N	IS No./ Title	Status before the Meeting	Decision of Committee
1.	Railway Bearings	Emails were sent by BIS on 26 February 2024 to Mr. Amit Srivastava ED Research, RDSO, Lucknow for holding a meeting with committee members for discussing the subject. No reply has been received. The committee may deliberate.	The committee asked shri Vijay kumar Goel to discuss with Shri Amit Shrivastava and mail to BIS regarding the status with a copy to Prof. Rakesh Sehgal. Prof. Sehgal was requested to coordinate and oversee the formation of Railway Bearings Panel under PGD 13.

# Item 2.6 New Work Items Under Development

S N	Title	Status before the Meeting	Decision of Committee
1.	ISO 4378-4 : 2009 – Plain bearings Terms definitions classification and symbols Part 4 Basic symbols	Follow up mail was sent on 23/01/2024, 11/03/2024 and 08/04/2024. Inputs awaited.	The committee finalized the document for publication and decided to keep the current ISO standard unchanged.
2.	ISO 4378-5 : 2009 – Plain bearings Terms, definitions, classification and symbols Part 5 Application of symbols		The committee finalized the document for publication and decided to keep the current ISO standard unchanged.
3.	Magnetic Bearings	ISO 14839-Part 1 to Part 3 has been wide	The committee noted the information given in

		circulated on 28-02-2024 and ISO 14839- Part 4 and Part 5 has been wide circulated on 29-02-2024 for 2 months each. The comments received on the document will be discussed after the last date of circulation. The committee may please note.	the agenda and asked the experts to submit their comments on the standards formulation portal.
4.	Aerospace Bearings	Follow up mail was sent on 7 Feb 2024. The reminder was sent on 11-03-2024. Second reminder was sent on 8 April 2024 to Dr M Solairaju. Report is yet to be received.	The committee requested reports from members representing HAL, NAL, CVRDE, and IIT Guwahati by July 2024. Additionally, Shri T. H. Gonsalves was tasked with presenting on various bearings utilized in aerospace applications during the inaugural meeting of the Aerospace Panel, to be scheduled alongside the Magnetic Bearings Panel and a workshop on R&D guidelines from BIS. The convenors of the panel were asked to hold the meeting between July 8th and 12th, 2024.

# Item 2.7 Any Other Projects

SN	Title	Status before the Meeting	Decision of Committee
1.	ISO 3228 : 2013 - Rolling bearings — Cast and pressed housings for insert bearings — Boundary dimensions and tolerances	The P-Draft has been circulated on 28-03-2024 for 2 Months. The comments received on the document will be discussed after the last date of circulation. The committee may please note.	The committee noted the information given in the agenda and asked the experts to submit their comments on the standards formulation portal.
2.	IS 14802 (Part 1) : 2000/ISO 4384-1 - Plain Bearings Hardness testing of bearing metals Part 1 Multilayer bearings materials	The document has been wide circulated on 28-02-2024. The comments received on the document will be discussed after the last date of circulation. The committee may please note.	The committee noted the information given in the agenda and asked the experts to submit their comments on the standards formulation portal.
3.	IS 10260 (Part 1) : 2017 / ISO 4378-1 : 2009 - Plain bearings Terms definitions classification and symbols Part 1 Design bearing materials and their properties	The document was circulated as preliminary draft on 10/04/2024 highlighting the changes made. The ISO 4378-1 is currently under DIS Stage and the last date for comment is 6 <sup>th</sup> May 2024. Based on comments received from Dr. Manish Roy, the ISO commenting template will be prepared as per changes in the document attached at <b>Annex 4</b> (Attached Separately). The Committee may kindly review and approve for sending the comments to ISO/TC 123.	The committee discussed the changes in the definitions and approved for sending the changes as comments to ISO for their feedback and to the committee as WC Draft.
4.	ISO 15241:2012 Rolling	The document was Wide circulated on 13-11-2023	The committee finalized the

Bearings — Symbols for	for 3 months. Since no comments have been	3	
Physical Quantities	received, the document may be approved for	publication without any	
	adoption as Indian Standard.	change.	

### Item 3 COMPOSITION OF THE SECTIONAL COMMITTEE

**3.1** The committee noted the information given in the agenda and agreed to withdraw the membership of the members who have not attended the last two meetings and have not given comments on 50 % P-draft circulated by the committee.

**3.2** a) The committee finalized the formation of the Panel on Aerospace Bearings, PGD 13/P4 with Prof. Rajiv Tiwari, IIT Guwahati as the convenor of the panel. The members of the panel will be decided based on the report of the members as mentioned at Item 2.6, Sno. 4 of the minutes.

b) The committee co-opted Austin Engineering Co. Ltd. as a member of the Bearings Sectional Committee, PGD 13 and the Aerospace Bearings Panel, PGD 13/P4.

#### Item 4. POSITION OF WORK

**4.1** The committee noted the information given in the agenda.

**4.2** The committee noted the information given in the agenda.

### Item 5. INTERNATIONAL ACTIVITIES

**5.1** The committee noted the information given in the agenda.

## 5.2Membership of PGD 13 in International Committees related to Bearings

**5.2.1** The committee noted the information given in the agenda about the memberships in ISO/ TC 4 and its sub-Committees (SC).

**5.2.2** The committee noted the information given in the agenda about the memberships in ISO/ TC 123 and its sub-Committees (SC) .

**5.2.3** The committee decided to take participating membership in ISO/TC 123/SC 6 since comments are being sent to revise terminology standards related to plain bearings.

**5.3** The committee noted the information given in the agenda.

## 5.4 Future Meetings Scheduled for ISO/TC 4 and TC 123

The committee was informed by the member secretary that the 27th meeting of ISO/TC 4 is scheduled on 28 May 2024 and 32<sup>nd</sup> meeting of ISO/TC 123 will be held from 13<sup>th</sup> to 15<sup>th</sup> November 2024 in Germany.

## Item 6. RESEARCH PROJECT TO BE TAKEN UP FOR INCLUSION OF EMPIRICAL DATA AND INSIGHTS

The committee noted the information given in the agenda.

#### Item 7. DATE AND PLACE OF NEXT MEETING

The Committee tentatively fixed the date of the upcoming meeting for FY 2024-25 as given below: