***भारतीय मानक***

***Indian Standard***

**IS XXXXX-2 : 2024**

**ISO 14839-2 : 2004**

**यांत्रिक कंपन — सक्रिय चुंबकीय बियरिंग्स से युक्त घूर्णन मशीनरी का कंपन —**

**भाग 2: कंपन का मूल्यांकन**

**Mechanical Vibration — Vibration of Rotating Machinery Equipped with Active Magnetic Bearings —**

**Part 2: Evaluation of Vibration**

ICS 17.160

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भारतीय मानक ब्यूरो

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**August 2024 Price Group X**

Bearings Sectional Committee, PGD 13

**NATIONAL FOREWORD**

This Indian Standard which is identical with ISO 14839-2 : 2004 ‘Mechanical vibration — Vibration of rotating machinery equipped with active magnetic bearings — Part 2 Evaluation of vibration’ issued by the International Organization for Standardization (ISO) was adopted by the Bureau of Indian Standards on the recommendation of the Bearings Sectional Committee and approval of the Production and General Engineering Division Council.

This standard sets out general guidelines for measuring and evaluating rotating machinery equipped with active magnetic bearings (AMBs) with respect to the shaft vibratory displacement measured at the AMBs, and the working current and voltage measured in magnetic coils or power supply amplifiers.

This standard is published in five parts. Other parts in this series are:

Part 1 Vocabulary

Part 3 Evaluation of stability margin

Part 4 Technical Guidelines

Part 5 Touch Down Bearings

The text of ISO Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

1. Wherever the words ‘International Standard’ appear referring to this standard, they should be read as ‘Indian Standard’.
2. Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to the following International Standard for which Indian Standard also exists. The corresponding Indian Standard which is to be substituted in its place is listed below along with its degree of equivalence for the edition indicated.

|  |  |  |
| --- | --- | --- |
| *International Standard* | *Corresponding Indian Standard* | *Degree of Equivalence* |
| ISO 7919-1 Mechanical vibration of non-reciprocating machines — Measurements on rotating shafts and evaluation criteria — Part 1: General guidelines | IS/ISO 20816-1 : 2016 Mechanical vibration — Measurement and evaluation of machine vibration: Part 1 General guidelines | Identical |

In reporting the result of a test or analysis made in accordance with this standard, if the final value, observed or calculated, is to be rounded off, it shall be done in accordance with IS 2 : 2022 ‘Rules for rounding off numerical values (*second revision*)’.

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