
**Mechanical vibration — Rotor
balancing —**

**Part 2:
Vocabulary**

*Vibrations mécaniques — Équilibrage des rotors —
Partie 2: Vocabulaire*

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ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is Technical Committee ISO/TC 108, *Mechanical vibration, shock and condition monitoring*, Subcommittee SC 2, *Measurement and evaluation of mechanical vibration and shock as applied to machines, vehicles and structures*.

This first edition of ISO 21940-2 cancels and replaces ISO 1925:2001, which has been technically revised. All terms and definitions formerly contained in different balancing standards have been reviewed and compiled in this document.

A list of all parts in the ISO 21940 series can be found on the ISO website.

Mechanical vibration — Rotor balancing —

Part 2: Vocabulary

1 Scope

This document defines terms on balancing. It complements ISO 2041, which is a general vocabulary on mechanical vibration and shock.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

NOTE An illustrated terminology for balancing machines is provided in [Annex A](#).

3.1 Mechanics

3.1.1

principal axis of inertia

one of three mutually perpendicular axes intersecting each other at a given point about which the products of inertia of a solid body are zero

Note 1 to entry: In *balancing* ([3.4.1](#)), the term principal axis of inertia is used to designate the central principal axis of inertia (of the three such axes) most nearly coincident with the *shaft axis* ([3.2.7](#)) of the rotor.

[SOURCE: ISO 2041:2009, 1.34, modified — converted to singular and the notes to entry have been changed.]

3.1.2

speed

angular velocity of a rotor

Note 1 to entry: Speed is measured in revolutions per unit time or in angle (in radians) per unit time. Note 2 to entry: The quantities most frequently used for specifying speed are

- n rotational speed measured in revolutions per minute;
- f rotational frequency measured in revolutions per second;
- Ω angular velocity measured in radians per second.