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International

ISO 21940-14

Mechanical vibration — Rotor balancing —

Part 14: Procedures for assessing balance errors

Vibrations mécaniques — Équilibrage des rotors —

Partie 14: Modes opératoires d'évaluation des erreurs d'équilibrage

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This document was prepared by 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 second edition cancels and replaces the first edition (ISO 21940-14:2012), which has been technically revised. It also incorporates the Amendment ISO 21940-14:2012/Amd.1:2022.

The main changes are as follows:

— the extension of the term “error” to "deviations" of the rotor’s state of assembly on the balancing machine from the fully assembled rotor in service.

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The balance quality of a rotor is assessed in accordance with the requirements of ISO 21940-11 [1] or ISO 21940-12 [2] by measurements taken on the rotor. These measurements can contain errors which originate from a number of sources. Where those errors are significant, they should be taken into account when defining the required balance quality of the rotor.

ISO 21940-11 [1] and ISO 21940-12 [2] do not consider balancing errors in detail. Therefore this document gives examples of typical errors that can occur and provides recommended procedures for their evaluation.

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