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First edition
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Mechanical vibration — Measurement and evaluation of machine vibration —

Part 3: Industrial machinery with a power rating above 15 kW and operating speeds between 120 r/min and 30 000 r/min

Vibrations mécaniques — Mesurage et évaluation des vibrations de machines —

Partie 3: Machines industrielles avec une puissance nominale supérieure à 15 kW et une vitesse de fonctionnement comprise entre 120 r/min et 30 000 r/min



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Foreword

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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 first edition of ISO 20816-3 cancels and replaces ISO 7919-3:2009, ISO 7919-3:2009/Amd 1:2017, ISO 10816-3:2009 and ISO 10816-3:2009/Amd 1:2017, which have been merged and editorially revised. A list of all parts in the ISO 20816 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

This document provides specific guidance for assessing

- a) the severity of vibration measured on bearings, bearing pedestals, or housings of industrial machines when measurements are made in-situ, and
- b) the severity of radial shaft vibration on coupled industrial machines.

Evaluation criteria, based on previous experience, are given for use as guidelines for assessing the vibratory conditions of such machines. One criterion considers the magnitude of the observed broad-band vibration; the second considers the changes in the magnitude of the observed broad-band vibration. It should be recognized, however, that these criteria do not form the only basis for judging the severity of vibration.