

INTERNATIONAL
STANDARD

ISO
10816-4

Second edition
2009-10-01

**Mechanical vibration — Evaluation of
machine vibration by measurements on
non-rotating parts —**

**Part 4:
Gas turbine sets with fluid-film bearings**

*Vibrations mécaniques — Évaluation des vibrations des machines par
mesurages sur les parties non tournantes —*

Partie 4: Turbines à gaz à paliers à film fluide



Reference number
ISO 10816-4:2009 (E)

© ISO 2009

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2009

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	2
3 Measurement procedures	2
4 Evaluation criteria	4
4.1 General	4
4.2 Criterion I: Vibration magnitude	5
4.3 Criterion II: Change in vibration magnitude under steady-state conditions at normal operating speed	10
4.4 Supplementary procedures/criteria	10
4.5 Evaluation based on vibration vector information	10
Annex A (normative) Evaluation zone boundaries	12
Annex B (informative) Example of setting ALARM and TRIP values	13
Annex C (informative) Cautionary notes about the use of vibration velocity criteria at low rotational speeds	14
Bibliography	16