

This is a preview of "ISO 230-5:2000". [Click here to purchase the full version from the ANSI store.](#)

First edition
2000-08-01

Test code for machine tools —

Part 5:

Determination of the noise emission

Code d'essai des machines-outils —

Partie 5: Détermination de l'émission sonore



Reference number
ISO 230-5:2000(E)

© ISO 2000

This is a preview of "ISO 230-5:2000". [Click here to purchase the full version from the ANSI store.](#)

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.

© ISO 2000

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.ch
Web www.iso.ch

Printed in Switzerland

This is a preview of "ISO 230-5:2000". [Click here to purchase the full version from the ANSI store.](#)

Contents

Page

Foreword.....	iv
1 Scope	1
2 Normative references	2
3 Terms and definitions	3
4 Measuring equipment.....	7
5 Installation and operation of the machine under test.....	7
6 Measurement procedure	9
7 Measurement uncertainty	9
8 Information to be recorded.....	10
9 Information to be reported in the test report	11
10 Declaration and verification of noise-emission values.....	12
11 Determination of the emission sound pressure levels at the work station(s) and at other specified positions	13
12 Method for the determination of sound power levels emitted by a machine tool	16
Annex A (normative) Microphone array on the measurement surface	20
Annex B (normative) Determination of the equivalent sound absorption area A	25
Annex C (informative) Guidelines for the detection of impulsive noise.....	27
Annex D (informative) Example of information to be recorded (see clause 8)	28
Annex E (informative) Example of noise-emission declarations for machine tools and equipment	30
Bibliography	31

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this part of ISO 230 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 230-5 was prepared by Technical Committee ISO/TC 39, *Machine tools*, Subcommittee SC 6, *Noise of machine tools*.

ISO 230 consists of the following parts, under the general title *Test code for machine tools*:

- *Part 1: Geometric accuracy of machines operating under no-load or finishing conditions*
- *Part 2: Determination of accuracy and repeatability of positioning numerically controlled axes*
- *Part 3: Determination of thermal effects*
- *Part 4: Circular tests for numerically controlled machine tools*
- *Part 5: Determination of the noise emission*
- *Part 6: Diagonal displacement test*

Annexes A and B form a normative part of ISO 230. Annexes C, D and E are for information only.