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**Akustika - Postopek merjenja hrupa kompresorjev in vakuumskih črpalk - Inženirska metoda (2. stopnja) (ISO 2151:2004)**

Acoustics - Noise test code for compressors and vacuum pumps Engineering method (grade 2) (ISO 2151:2004)

Kompressoren und Vakuumpumpen - Bestimmung der Geräuschemission - Verfahren der Genauigkeitsklasse 2 (ISO 2151:2004)

Acoustique - Code d'essai acoustique pour les compresseurs et les pompes a vide - Méthode d'expertise (classe de précision 2) (ISO 2151:2004)

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**Ta slovenski standard je istoveten z: EN ISO 2151:2004**

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**ICS:**

17.140.20	Emisija hrupa naprav in opreme	Noise emitted by machines and equipment
23.140	Kompresorji in pnevmatični stroji	Compressors and pneumatic machines
23.160	Vakumska tehnologija	Vacuum technology

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN ISO 2151**

February 2004

ICS 17.140.20; 23.140

English version

**Acoustics - Noise test code for compressors and vacuum pumps  
Engineering method (grade 2) (ISO 2151:2004)**

Acoustique - Code d'essai acoustique pour les  
compresseurs et les pompes à vide - Méthode d'expertise  
(classe de précision 2) (ISO 2151:2004)

Akustik - Geräuschnorm für Kompressoren und  
Vakuumpumpen - Verfahren der Genauigkeitsklasse 2  
(ISO 2151:2004)

This European Standard was approved by CEN on 16 January 2004.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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Management Centre: rue de Stassart, 36 B-1050 Brussels

## EN ISO 2151:2004 (E)

<b>CORRECTED 2004-03-17</b>
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**Foreword**

This document (EN ISO 2151:2004) has been prepared by Technical Committee ISO/TC 118 "Compressors, pneumatic tools and pneumatic machines" in collaboration with Technical Committee CEN/TC 232 "Compressors - Safety", the secretariat of which is held by SIS.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2004, and conflicting national standards shall be withdrawn at the latest by August 2004.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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The text of ISO 2151:2004 has been approved by CEN as EN ISO 2151:2004 without any modifications.

## ANNEX ZA (informative)

### Relationship between this European Standard and the Essential Requirements of EU Directive 98/37 EEC

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the New Approach Directive 98/37 EEC.

Once this standard is cited in the Official Journal of the European Communities under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding Essential Requirements of that Directive and associated EFTA regulations.

**WARNING:** Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

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# INTERNATIONAL STANDARD

**ISO  
2151**

Second edition  
2004-02-01

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## **Acoustics — Noise test code for compressors and vacuum pumps — Engineering method (Grade 2)**

*Acoustique — Code d'essai acoustique pour les compresseurs et les  
pompes à vide — Méthode d'expertise (classe de précision 2)*

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**ISO 2151:2004(E)****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 2.

The main task of technical committees is to prepare International Standards. 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 document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 2151 was prepared by Technical Committee ISO/TC 118, *Compressors, pneumatic tools and pneumatic machines*, Subcommittee SC 6, *Air compressors*.

This second edition cancels and replaces the first edition (ISO 2151:1972), which has been technically revised.

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## Introduction

The noise test code presented by this International Standard describes methods for determining and presenting the acoustical characteristics of compressors and vacuum pumps, i.e. the total noise level from the compressor or vacuum pump expressed as sound power level, or the emission sound pressure level at the work station or other specified positions.

Based on current industry practice, this noise test code requires the compressor or vacuum pump under test to be run under conditions representing the noisiest operation in typical usage — full-load for compressors and off-load for vacuum pumps.

It needs to be noted that operators' exposure to noise depends upon the characteristics of individual applications and environmental factors beyond the control of the manufacturers of compressors and vacuum pumps.

This International Standard does not give requirements for octave band analysis, however, where there is an interest this can be undertaken.

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