



SLOVENSKI STANDARD SIST EN ISO 13350:2016

01-februar-2016

Nadomešča:
SIST EN ISO 13350:2009

Ventilatorji - Preskus lastnosti indukcijskih ventilatorjev (ISO 13350:2015)

Fans - Performance testing of jet fans (ISO 13350:2015)

Ventilatoren - Leistungsmessung von Strahlventilatoren (ISO 13350:2015)

Ventilateurs - Essai de performance des ventilateurs accélérateurs (ISO 13350:2015)

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Ta slovenski standard je istoveten z: EN ISO 13350:2015

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ICS:

23.120	Zračniki. Vetrniki. Klimatske naprave	Ventilators. Fans. Air-conditioners
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en

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EUROPEAN STANDARD

EN ISO 13350

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2015

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Supersedes EN ISO 13350:2008

English Version

Fans - Performance testing of jet fans (ISO 13350:2015)

Ventilateurs - Essai de performance des ventilateurs
accélérateurs (ISO 13350:2015)

Ventilatoren - Leistungsmessung von
Strahlventilatoren (ISO 13350:2015)

This European Standard was approved by CEN on 21 February 2015.

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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 CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN ISO 13350:2015) has been prepared by Technical Committee ISO/TC 117 "Fans" in collaboration with Technical Committee CEN/TC 156 "Ventilation for buildings" the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by April 2016, and conflicting national standards shall be withdrawn at the latest by April 2016.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 13350:2008.

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

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Endorsement notice

The text of ISO 13350:2015 has been approved by CEN as EN ISO 13350:2015 without any modification.

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INTERNATIONAL
STANDARD

ISO
13350

Second edition
2015-10-01

Fans — Performance testing of jet fans

Ventilateurs — Essai de performance des ventilateurs accélérateurs

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Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document can be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 117, Fans.

This second edition cancels and replaces the first edition (ISO 13350:1999) which has been technically revised. The main changes are the following:

- General (dated references on standards updated, e.g. ISO 5801:2007);
- [Clause 2](#) “Normative references” (references supplemented and updated);
- [Clause 3](#) “Terms and definitions” (addition of [3.2.1](#) “gross fan outlet area”, [3.5.1](#) “motor input power”, [3.5.2](#) “impeller power”, [3.8.2](#) “thrust/motor input power ratio”);
- [Figure 1](#) “Gross and effective fan outlet areas” (modified by marking of “gross fan outlet area A_2 ”);
- [Clause 4](#) “Symbols and abbreviated terms” (supplemented and updated);
- [6.4](#) “Input power” (correction for density);
- [7.1](#) “Determination of thrust” (correction for density);
- [7.4](#) “Test procedures” (change of recommended calibration intervals);
- [Figure 7](#) “Thrust measuring enclosure” (modified by reducing the minimum distance between fan casing and floor/ceiling/wall);
- [8.1](#) “Determination of sound level” (Introduction of possibility to use other International Standards e.g. ISO 13347);
- [8.3](#) “Enclosure suitability” (requirement on running speed of the reference sound source deleted);
- [9.2](#) “Test arrangement” for determination of vibration velocity (Figure 9 “Vibration measuring position for jet fans” and requirement to use this configuration deleted);
- [9.3](#) “Test procedure” (general reference to ISO 14695);

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- [10.2](#) “Upstream chamber method” (“venturi nozzle” replaced by “bellmouth”);
- [10.4](#) “Directly connected flowrate-measuring” (“venturi nozzle” replaced by “bellmouth”);
- [11.2](#) “Product performance” (reference to density 1,2 kg/m³ added);
- [Annex C](#) (informative) (change of title: “Conversion rules” replaced by “Non-dimensional coefficients”);
- [Annex C](#) (informative) (several character changed);
- [Annex C](#) (informative) (subclause on “Non-dimensional thrust/power ratio” added);
- [Annex D](#) (normative) (new normative Annex on “Efficiency based on thrust measurements”).

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Introduction

The need for a new edition of ISO 13350 has been evident for some time. The use of the so-called jet fan to assist in the control of quality of air in vehicle and train tunnels has become increasingly popular. Longitudinal methods of ventilation can show advantages in both capital cost and running cost compared to alternative systems. Smoke and pollution control in emergency conditions can be readily provided. Jet fans can also be used for ventilation and smoke control in enclosed car parks.

This International Standard deals with the determination of those performance criteria essential to the correct application of jet fans. In describing the test and rating procedures, numerous references are made to ISO 5801 as well as to other relevant International Standards.

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