INTERNATIONAL STANDARD

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Industrial fans — Performance testing of jet fans

Ventilateurs industriels — Essai de performance des ventilateurs accélérateurs

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Contents

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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.

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.

International Standard ISO 13350 was prepared by Technical Committee ISO/TC 117, *Industrial fans*.

Annexes A, B, C and D of this International Standard are for information only.

Introduction

The need for this new standard has been evident for some time. The use of the so-called jet fan to assist in controlling the quality of air in vehicle and train tunnels has become increasingly popular. The longitudinal method of ventilation can show advantages in initial cost and running cost compared to alternative systems, and smoke control in emergency conditions can be readily provided. At present, there is no published national or international standard for the performance testing of jet fans.

This International Standard, which forms part of the ISO/TC 117 series of fan standards, 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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1 Scope

This International Standard deals with the determination of those technical characteristics needed to describe all aspects of the performance of jet fans as defined in ISO 13349. It does not cover those fans designed for ducted applications, nor those designed solely for air circulation, e.g. ceiling fans and table fans.

The test procedures described in this International Standard relate to laboratory conditions. The measurement of performance under on-site conditions is not included.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Member of IEC and ISO maintain registers for currently valid International Standards.

ISO 1940-1:1986, *Mechanical vibration — Balance quality requirements of rigid rotors — Part 1: Determination of permissible residual unbalance*.

ISO 5801:1997, *Industrial fans — Performance testing using standardized airways*.

ISO 13347:—[1)], *Industrial fans — Determination of fan sound power level under standardized laboratory conditions.*

ISO 13349:—[1)], *Industrial fans — Vocabulary and definitions of categories.*

ISO 14695:—[1)], *Industrial fans — Vibration measurement method.*

IEC 60034-2:1972, *Rotating electrical machines — Part 2: Methods for determining losses and efficiency of rotating electrical machinery from tests (excluding machines for traction vehicules).*

IEC 60034-14:1996, *Rotating electrical machines — Part 14: Mechanical vibration of certain machines with shaft heights 56 mm and higher — Measurement, evaluation and limits of the vibration severity*

1) To be published.