# **INTERNATIONAL STANDARD**

**ISO** 16900-7

> Second edition 2020-05

# Respiratory protective devices — Methods of test and test equipment —

Part 7:

Practical performance test methods

Fissai de perfi. Appareils de protection respiratoire — Méthodes d'essai et équipement d'essai —

Partie 7: Essai de performance pratique



Reference number ISO 16900-7:2020(E)



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Published in Switzerland

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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 <a href="www.iso.org/directives">www.iso.org/directives</a>).

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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 voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

This document was prepared by Technical Committee ISO/TC 94, *Personal safety — Protective clothing and equipment*, Subcommittee SC 15, *Respiratory protective devices*.

This second edition cancels and replaces the first edition (ISO 16900-7:2015), which has been technically revised.

The main changes compared to the previous edition are as follows:

- Eliminated the annex, "Application of uncertainty of measurement Determination of compliance" because there are no measurements in this standard to which the deleted method would apply.
- Modified activity 8 in <u>Annex A</u> regarding maximum noise output when the activity is conducted.
- Eliminate walking requirement when adjusting the RPD during activities in Annex B.

A list of all parts in the ISO 16900 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

### Introduction

is street. given in t. This document is intended as a supplement to the respiratory protective devices (RPD) performance standards. Test methods are specified for complete devices or parts of devices. If deviations from the test method given in this document are necessary, these deviations will be specified in the performance standards.

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# Respiratory protective devices — Methods of test and test equipment —

### Part 7:

## **Practical performance test methods**

#### 1 Scope

This document specifies practical performance tests for respiratory protective devices. The purpose of these tests is to subjectively assess certain properties, characteristics and functions of the RPD, when worn by test subjects in simulated practical use, which cannot be assessed by tests described in other standards.

#### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 16972, Respiratory protective devices — Terms, definitions, graphical symbols and units of measurement

ISO/TS 16976-2:2015, Respiratory protective devices — Human factors — Part 2: Anthropometrics

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 16972 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at <a href="http://www.electropedia.org/">http://www.electropedia.org/</a>

#### 4 Prerequisites

The performance standards shall indicate the conditions of the test. This includes the following:

- any exclusions to the activities in <u>Table A.1</u>;
- any activities from Annex B in addition to those specified in Table A.1;
- any pre-conditioning;
- temperature and humidity for the test;
- number of test subjects;
- number of samples to be tested.