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

*Appareils de protection respiratoire — Termes, définitions, symboles  
graphiques et unités de mesure*



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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.

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 16972 was prepared by Technical Committee ISO/TC 94, *Personal safety — Protective clothing and equipment*, Subcommittee SC 15, *Respiratory protective devices*.

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

## 1 Scope

This International Standard is applicable to respiratory protective devices. It defines commonly used terms and specifies units of measurement to achieve a uniform interpretation and to prevent ambiguous use. It indicates graphical symbols that may be required to be placed on respiratory protective devices (RPD) or parts of RPD or instruction manuals, in order to instruct the person(s) using the RPD about its operation.

## 2 Normative references

The following referenced documents are indispensable for the application 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 7000:2004, *Graphical symbols for use on equipment — Index and synopsis*

IEC 80416-1<sup>1)</sup>, *Basic principles for graphical symbols for use on equipment — Part 1: Creation of graphical symbols for registration*

ISO 80416-2<sup>2)</sup>, *Basic principles for graphical symbols for use on equipment — Part 2: Form and use of arrows*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

**NOTE** The terms are listed in alphabetical order. Terms which refer to current RPD are not listed in these definitions because they are design related and are described in Annex A. Bold type used within a definition identifies terms defined elsewhere in this list of preferred terms.

### 3.1

#### **abrasion resistance**

ability of an **RPD** and/or its components to withstand degradation from abrasive effects (e.g. scratch, scrape, scuff)

### 3.2

#### **abrasive blasting respiratory protective device**

device designed to protect the wearer from inhalation of, impact of, and abrasion by materials used or generated in abrasive blasting

### 3.3

#### **accessory**

item, or items, that are attached to the **RPD** that are not necessary for the RPD to meet the requirements of the ISO RPD performance standard and do not compromise its protection

### 3.4

#### **adequacy assessment**

selection method identifying **RPD** able to reduce the wearer's hazard exposure to acceptable levels

### 3.5

#### **aerodynamic diameter**

diameter of a unit density sphere having the same settling velocity as the particle in question

### 3.6

#### **aerosol**

suspension of solid, liquid or solid and liquid particles in a gaseous medium

### 3.7

#### **aerosol penetration**

ability of particles to pass through a particle filtering material

### 3.8

#### **air flow resistance**

pressure difference between upstream and downstream locations caused by the flow of air through parts and components of RPD such as, an exhalation valve, inhalation valve, filter(s), and tube, etc.

1) Cancels and replaces ISO 3461-1:1988.

2) Cancels and replaces ISO 4196:1984.