

Nederlandse voornorm

NVN-ISO/TS 16975-1

(en)

Ademhalingsbeschermingsmiddelen - Keuze, gebruik en onderhoud - Deel 1: Vastlegging en implementatie van een ademhalingsbeschermingsprogramma (ISO/TS 16975-1:2016, IDT)

Respiratory protective devices - Selection, use and maintenance - Part 1: Establishing and implementing a respiratory protective device programme (ISO/TS 16975-1:2016, IDT)

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**Respiratory protective devices —
Selection, use and maintenance —**

**Part 1:
Establishing and implementing
a respiratory protective device
programme**

*Appareils de protection respiratoire — Choix, utilisation et
entretien —*

*Partie 1: Élaboration et mise en oeuvre d'un programme pour les
appareils de protection respiratoire*



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Preview



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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).

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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 World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is ISO/TC 94, *Personal safety — Protective clothing and equipment*, Subcommittee SC 15, *Respiratory protective devices*.

ISO 16975 consists of the following parts, under the general title *Respiratory protective devices — Selection, use and maintenance*.

- *Part 1: Establishing and implementing a respiratory protective device programme* [Technical Specification]
- *Part 2: Condensed guide to establishing and implementing a respiratory protective device programme* [Technical Specification]
- *Part 3: Fit testing procedures*

Introduction

This part of ISO 16975 contains the essential requirements for establishing and implementing a complete respiratory protective device (RPD) programme for respiratory protective devices that meet the requirements of the performance standards. It contains information on risk assessment, selection procedure, training, use and maintenance.

Informative Annexes provide additional guidance on how to implement such a programme.

Prohibited
Preview

Respiratory protective devices — Selection, use and maintenance —

Part 1: Establishing and implementing a respiratory protective device programme

1 Scope

This part of ISO 16975 specifies detailed information to assist persons responsible for establishing and implementing a programme for respiratory protective devices (RPD) that meet the performance requirements of the performance standards.

This part of ISO 16975 does not apply to RPD programmes for RPD used exclusively under water, for use in aircraft, and medical life support respirators and resuscitators.

NOTE The information contained in this part of ISO 16975 can be used to assist in the preparation of national or local regulations; however, this part of ISO 16975 does not supersede national or local regulations.

WARNING — Failure to select, use and maintain RPD correctly can result in injury, illness or death.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 16900-1, *Respiratory protective devices — Methods of test and test equipment — Part 1: Determination of inward leakage*

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

ISO/TS 16975-2, *Respiratory protective devices — Selection, use and maintenance — Part 2: Condensed guide to establishing and implementing a respiratory protective device programme*

ISO 16975-3¹⁾, *Respiratory protective devices — Selection, use and maintenance — Part 3: Fit testing procedures*

ISO 17420-3, *Respiratory protective devices — Performance requirements — Part 3: Thread connection*

3 Terms and definitions

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

3.1

adequate RPD

RPD (3.8) capable of reducing the inhalation exposure to an acceptable level

1) To be published.

ISO/TS 16975-1:2016(E)**3.2
assigned protection factor****APF**

anticipated level of respiratory protection that would be provided by a properly functioning *RPD* (3.8) or class of *RPD* within an effective *RPD programme* (3.10)

**3.3
competent person**

person with suitable and sufficient experience and with practical and theoretical knowledge of the elements of an *RPD programme* (3.10) for which (s)he is responsible

**3.4
hazardous substance**

substance that presents a potential to cause injury or ill health if it is inhaled, ingested or comes into contact with, or absorbed through, the skin.

Note 1 to entry: A hazardous substance may be a pure substance or generated as by-products during work activities; for example, wood dust and stone dust welding fume.

Note 2 to entry: Hazardous substances can be present in the atmosphere in a number of physical states as

- a) gases, such as ammonia and chlorine,
- b) vapours, such as from solvents, and
- c) particles, such as dust, mist, smoke, fumes, fibres, fog and bioaerosols.

**3.5
hazardous atmospheres**

atmosphere that is oxygen deficient and/or the level of substances in the atmosphere is at a concentration deemed to be hazardous

**3.6
protection class**

PC
numerical designation from PC1 to PC6 allocated to individual *RPD* (3.8) based upon laboratory testing indicating its relative protection

**3.7
protection level**

degree of respiratory protection allocated to an *RPD* (3.8) for the purposes of selection and use that is expected to be provided to wearers when used within an effective *RPD programme* (3.10)

**3.8
respiratory protective device**

RPD
personal protective equipment designed to protect the wearer's respiratory tract against inhalation of *hazardous atmospheres* (3.5)

**3.9
risk assessment**

process of hazard, adequacy and suitability assessments relating to the selection of *RPD* (3.8)

**3.10
RPD programme**

process of selecting, using and maintaining *RPD* (3.8) to ensure adequate protection to the wearer

**3.11
suitable RPD**

RPD (3.8) that is adequate and is matched to the requirements of the wearer, the task and the working environment

3.12**work rate class**

numerical designation from W1 to W4 allocated to individual *RPD* (3.8) based upon laboratory testing indicating its relative ability to meet the wearer's demand for breathable gas at different activity levels

Note 1 to entry: Further information on work rate is given in 7.3.3.4.

3.13**immediately dangerous to life or health****IDLH**

atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere

4 Abbreviated terms

AB	Abrasive Blasting (Special Application Class)
ADE ASM	Adequacy Assessment
APF	Assigned Protection Factor
CBRN	Chemical, Biological, Radiological, and Nuclear (Special Application Class)
ES	Escape (Special Application Class)
FF	Fire Fighting (Special Application Class)
HAZ-ASM	Hazard Assessment
HHG	Health Hazard Group
HR	Hazard Ratio
IDLH	Immediately Dangerous to Life or Health
MA	Marine (Special Application Class)
MN	Mining (Special Application Class)
NPF	Nominal Protection Factor
OEL	Occupational Exposure Level
OEL-TWA	Occupational Exposure Level-Time Weighted Average
PC	Protection Class
PL	Protection Level
PPE	Personal Protective Equipment
QLFT	Qualitative Fit Test
QNFF	Quantitative fit factor
QNFT	Quantitative Fit Test
RFF	Required Fit Factor
RI	Respiratory interface

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RPD	Respiratory Protective Devices
S	Breathable gas capacity
SU ASM	Suitability Assessment
SY	Breathable gas capacity Class of airline supplied RPD
W	Work rate Class
WE	Welding (Special Application Class)

5 Situations for using RPD

RPD is considered to be at the bottom of the hierarchy of control measures and should only be used after an acceptable case for its use has been established by way of an appropriate risk assessment. RPDs are used to further reduce inhalation exposures to hazardous atmospheres:

- when sufficient engineering and administrative controls are lacking;
- when these controls are not reasonably practical (maintenance, escape or rescue work);
- prior to implementing or improving a control measure.

6 RPD programme**6.1 General**

The RPD programme includes processes for selecting, using and maintaining RPD to ensure adequate protection to the wearer.

Prior to using RPD, it is essential to establish a written RPD programme. The RPD programme needs to be understood by all persons within the organization, as appropriate.

6.2 RPD programme elements

The RPD programme consists of the following elements:

- a) roles and responsibilities (see [6.3](#));
- b) RPD programme implementation (see [6.4](#));
- c) risk assessment (see [Clause 7](#));
- d) selection procedures (see [Clause 7](#));
- e) medical assessment (see [7.3.3.2](#));
- f) fit testing (see [7.4](#));
- g) training (see [7.5](#));
- h) use (see [7.6](#));
- i) maintenance procedures (see [7.7](#));
- j) storage (see [7.8](#));
- k) programme review (see [7.9](#));
- l) records and record keeping (see [7.10](#)).

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