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LÄBIVOOLUSÜSTEEMIGA ÜHENDATUD
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TÄHISTAMINE

Respiratory protective devices - Continuous flow
compressed air line breathing devices - Requirements,
testing and marking

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 14594:2018 sisaldab Euroopa standardi EN 14594:2018 ingliskeelset teksti.	This Estonian standard EVS-EN 14594:2018 consists of the English text of the European standard EN 14594:2018.
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English Version

**Respiratory protective devices - Continuous flow
compressed air line breathing devices - Requirements,
testing and marking**

Appareils de protection respiratoire - Appareils de
protection respiratoire isolants à adduction d'air
comprimé à débit continu - Exigences, essais et
marquage

Atemschutzgeräte - Druckluft-Schlauchgeräte mit
kontinuierlichem Luftstrom - Anforderungen, Prüfung
und Kennzeichnung

This European Standard was approved by CEN on 16 March 2018.

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European foreword

This document (EN 14594:2018) has been prepared by Technical Committee CEN/TC 79 “Respiratory protective devices”, the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by November 2018, and conflicting national standards shall be withdrawn at the latest by November 2018.

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

This document supersedes EN 14594:2005.

This document has been prepared under a standardization request given to CEN by the European Commission and the European Free Trade Association, and supports essential health and safety requirements of EU Regulation(s).

For relationship with EU Regulation(s) see informative Annex ZA, which is an integral part of this document.

The following main technical changes have been made compared to EN 14594:2005:

- a) requirements for cleaning and disinfection deleted;
- b) visual inspection changed to inspection and detailed list inserted;
- c) test for noise level adapted to the test procedure specified in ISO 16900-14;
- d) requirements and test method for protective clothes specified;
- e) test for leaktightness added;
- f) Annex A deleted;
- g) figures adapted to the changes made in the test procedures, where appropriate.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This document specifies minimum requirements for continuous flow compressed air line breathing devices for use with a full face mask, half mask, hood, helmet or suit, and devices used in abrasive blasting operations, as a Respiratory Protective Device (RPD).

Escape RPD and diving apparatus are not covered by this document.

Laboratory and practical performance tests are included for the assessment of conformance to the requirements.

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.

EN 132:1998, *Respiratory protective devices — Definitions of terms and pictograms*

EN 134:1998, *Respiratory protective devices — Nomenclature of components*

EN 136:1998, *Respiratory protective devices — Full face masks — Requirements, testing, marking*

EN 140:1998, *Respiratory protective devices — Half masks and quarter masks — Requirements, testing, marking*

EN 148-1, *Respiratory protective devices — Threads for facepieces — Part 1: Standard thread connection*

EN 148-2, *Respiratory protective devices — Threads for facepieces — Part 2: Centre thread connection*

EN 148-3, *Respiratory protective devices — Threads for facepieces — Part 3: Tread connection M 45 x 3*

EN 166:2001, *Personal eye-protection — Specifications*

EN 169, *Personal eye-protection — Filters for welding and related techniques — Transmittance requirements and recommended use*

EN 170, *Personal eye-protection — Ultraviolet filters — Transmittance requirements and recommended use*

EN 171, *Personal eye-protection — Infrared filters — Transmittance requirements and recommended use*

EN 175, *Personal protection — Equipment for eye and face protection during welding and allied processes*

EN 379, *Personal eye-protection — Automatic welding filters*

EN 397:2012+A1:2012, *Industrial safety helmets*

EN 12021, *Respiratory equipment — Compressed gases for breathing apparatus*

EN 12941:1998, *Respiratory protective devices — Powered filtering devices incorporating a helmet or a hood — Requirements, testing, marking*

EN 13274-1:2001, *Respiratory protective devices — Methods of test — Part 1: Determination of inward leakage and total inward leakage*

EN 13274-2:2001, *Respiratory protective devices — Methods of test — Part 2: Practical performance tests*

EN 13274-3:2001, *Respiratory protective devices — Methods of test — Part 3: Determination of breathing resistance*

EN 13274-4:2001, *Respiratory protective devices — Methods of test — Part 4: Flame tests*

EN 13274-6, *Respiratory protective devices — Methods of test — Part 6: Determination of carbon dioxide content of the inhalation air*

EN ISO 4674 (all parts), *Rubber- or plastics-coated fabrics — Determination of tear resistance*

EN ISO 7854:1997, *Rubber- or plastics-coated fabrics — Determination of resistance to damage by flexing (ISO 7854:1995)*

EN ISO 8031, *Rubber and plastics hoses and hose assemblies — Determination of electrical resistance and conductivity (ISO 8031)*

EN ISO 13688:2013, *Protective clothing — General requirements (ISO 13688:2013)*

EN ISO 13934-2, *Textiles - Tensile properties of fabrics — Part 2: Determination of maximum force using the grab method (ISO 13934-2)*

EN ISO 14877:2002, *Protective clothing for abrasive blasting operations using granular abrasives (ISO 14877:2002)*

ISO 16900-14, *Respiratory protective devices — Methods of test and test equipment — Part 14: Measurement of sound level*

3 Terms, description and symbols

For the purposes of this document, the terms, definitions and symbols given in EN 132:1998, EN 134:1998 and the following apply.

3.1 Terms

3.1.1

as received

not pre-conditioned or modified to carry out a test

3.1.2

mobile compressed air supply system

supply system that can include a compressor, filters, compressed air pressure vessels, for use as a mobile source of breathing air

3.1.3

minimum flow condition

those factors appropriate to the design specified by the manufacturer which give rise to the lowest flow rate

Note 1 to entry: These factors can include the maximum length of compressed air supply tube, maximum number of couplings in the compressed air supply tube, tube internal diameter and supply pressure.