

**Tuukriülikonnad. Osa 3: Aktiivjahutuse  
või soojendusega ülikonnad  
(süsteemid). Nõuded ja katsemeetodid**

Diving suits - Part 3: Actively heated or cooled suit  
(Systems) - Requirements and test methods

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 14225-3:2005 sisaldab Euroopa standardi EN 14225-3:2005 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 30.05.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 14225-3:2005 consists of the English text of the European standard EN 14225-3:2005.</p> <p>This document is endorsed on 30.05.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b> This standard specifies the requirements for the construction, performance, safety and test methods for actively heated or cooled diving suits. Laboratory and practical performance tests are included for the assessment of compliance with the requirements of this standard. This part is applicable to the requirements of actively heated or cooled suits.</p>	<p><b>Scope:</b> This standard specifies the requirements for the construction, performance, safety and test methods for actively heated or cooled diving suits. Laboratory and practical performance tests are included for the assessment of compliance with the requirements of this standard. This part is applicable to the requirements of actively heated or cooled suits.</p>
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**Võtmesõnad:** heaters, oc, protective clothing, puncture tests, recreational equipment, resistance, safety, safety engineering, safety requirements, specification (approval), specifications, sports equipment, sportswear, tear propagation, tear resistance, test benches, testing

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English version

## Diving suits - Part 3: Actively heated or cooled suits (systems) - Requirements and test methods

Vêtements de plongée - Partie 3: Vêtements avec système  
de chauffage ou de refroidissement actif (ensembles) -  
Prescriptions et méthodes d'essai

Tauchanzüge - Teil 3: Aktiv beheizte oder gekühlte Anzüge  
(Systeme) - Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 14 February 2005.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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## Foreword

This document (EN 14225-3:2005) has been prepared by Technical Committee CEN/TC 162 "Protective clothing including hand and arm protection and lifejackets", 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 September 2005, and conflicting national standards shall be withdrawn at the latest by September 2005.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 89/686/EEC.

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

This standard for actively heated suits or actively cooled diving suits (Systems) is Part 3 of 4. The other parts are:

- Diving Suits – Part 1: Wet suits – Requirements and test methods.
- Diving Suits – Part 2: Dry suits – Requirements and test methods.
- Diving Suits – Part 4: One atmosphere suits (ADS) – Human factors requirements and test methods.

This document includes a Bibliography.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

## Introduction

This document for actively heated or cooled diving suits (systems) has been prepared to meet the needs of persons engaged in underwater activities where the user is breathing underwater, and where the water temperature and exposure duration are such that the person's thermal status only can be maintained at a safe level by means of active heating or cooling.

Actively heated suits and actively cooled suits are designed to reduce the risk of the diver suffering hypothermia and hyperthermia, respectively.

The performance of the suit can be altered by a number of factors including any additional equipment carried by the diver.

A suit may be comprised of one or more pieces.

## 1 Scope

This document specifies the construction and performance of actively heated suits and actively cooled suits for wear by divers for underwater activities where the user is breathing underwater. Marking, labelling, information to be provided at the point of sale, and instructions for use are also specified.

The document applies to the actively heated or cooled suits (systems) of the two types, dry and wet. It is only required that the suit should fulfil this Part 3, not the Parts 1 or 2 unless specified.

Laboratory and practical performance tests are specified.

## 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.

EN 250:2000, *Respiratory equipment — Open circuit self-contained compressed air diving apparatus — Requirements, testing marking*

EN 340:2003, *Protective clothing — General requirements*

EN 1809:1997, *Diving accessories — Buoyancy compensators — Functional and safety requirements, test methods*

EN 14126:2003, *Protective clothing — Performance requirements and test methods for protective clothing against infective agents*

EN 14225-2:2005, *Diving suits — Part 2: Dry suits — Requirements and test methods*

EN 23758:1993, *Textiles — Care labelling code using symbols (ISO 3758:1991)*

EN ISO 105-E02:1996, *Textiles — Tests for colour fastness — Part E02: Colour fastness to sea water (ISO 105-E02:1994)*

EN ISO 105-X12:2002, *Textiles — Tests for colour fastness — Part X12: Color fastness to rubbing (ISO 105-X12:2001)*

EN ISO 4674-2:1998, *Rubber- or plastic-coated fabrics — Determination of tear resistance — Part 2: Ballistic pendulum method (ISO 4674-2:1998)*

EN ISO 6529:2001, *Protective clothing — Protection against chemicals — Determination of resistance of protective clothing materials to permeation by liquids and gases (ISO 6529:2001)*

EN ISO 13935-2:1999, *Textiles — Seam tensile properties of fabrics and made-up textile articles — Part 2: Determination of maximum force to seam rupture using the grab method (ISO 13935-2:1999)*

EN ISO 15027-3:2002, *Immersion suits — Part 3: Test methods (ISO 15027-3:2002)*

ISO 105-A02:1993, *Textiles — Tests for colour fastness — Part A02: Grey scale for assessing change in colour*

AODC:1985, *Code of practice for safe use of electricity under water*  
(<http://www.imca-int.com/publications/IMCA-Publications.pdf> )

SOLAS:1974, as amended, *Chapter III as amended by IMO Resolution MSC 47(66) and LSA Code. Recommendation on retroreflective tapes on life-saving appliances adopted by Res. A.658(16), Annex 2*