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Diving suits - Part 2: Dry suits - Requirements and test methods

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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Diving suits - Part 2: Dry suits - Requirements and test methods

Vêtements de plongée - Partie 2 : Combinaisons étanches - Exigences et méthodes d'essai

Tauchanzüge - Teil 2: Trockentauchanzüge - Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 7 June 2017.

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EN 14225-2:2017 (E)**European foreword**

This document (EN 14225-2:2017) 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of an identical text or by endorsement, at the latest by June 2018, and conflicting national standards shall be withdrawn at the latest by June 2018.

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

This document supersedes EN 14225-2:2005.

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 Regulation (EU) 2016/425.

For relationship with Regulation (EU) 2016/425, see informative Annexes ZA and ZB, which are an integral part of this document.

Annex C provides details of significant technical changes between this European Standard and the previous edition.

EN 14225 consists of the following parts under the general title *Diving suits*:

- *Part 1: Wet suits — Requirements and test methods;*
- *Part 2: Dry suits — Requirements and test methods;*
- *Part 3: Actively heated or cooled suit systems and components — Requirements and test methods.*

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.

Introduction

This document for dry diving suits has been prepared to meet the needs of persons engaged in underwater activities where the user is breathing underwater, and where thermal comfort and required thermal protection is higher than that provided by a wet suit. A dry suit is also designed to enable the wearers to adjust the gas volume in the suit according to their requirements.

A dry suit may be comprised of one or more pieces. Dry suits may be used in conjunction with a range of accessories including passive and active undergarments, gloves, a hood and other head protection equipment.

The conformity of a dry suit to this document does not imply that it is suitable for all circumstances, nor does the standard make detailed provisions for all the special uses for which dry suits may be utilized.

A dry suit manufactured for special purposes may also:

- a) provide or enable thermal insulation;
- b) provide special protection.

The level of protection and performance offered by a dry suit may be altered by a number of factors, including the water temperature, the depth of the dive, the diver's work rate and behaviour, and the manner in which the suit has been maintained. The adequacy of the protection provided by a dry suit also depends upon the individual diver's level of cold tolerance. The degree of thermal protection offered by a dry suit is especially problematic. Appropriate material and manikin tests are being developed and refined, but at best they will only be able to provide broad indications of the likely protection provided by a particular suit to an individual diver.

EN 14225-2:2017 (E)**1 Scope**

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

Laboratory and practical performance tests are specified.

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.

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

EN 530:2010, *Abrasion resistance of protective clothing material — Test methods*

EN 1809:2014+A1:2016, *Diving equipment — Buoyancy compensators — Functional and safety requirements, test methods*

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

EN 14225-1:2017, *Diving suits — Part 1: Wet suits — Requirements and test methods*

EN 16523-1, *Determination of material resistance to permeation by chemicals — Part 1: Permeation by liquid chemical under conditions of continuous contact*

EN 20811, *Textiles — Determination of resistance to water penetration — Hydrostatic pressure test (ISO 811:1981)*

EN ISO 3758, *Textiles — Care labelling code using symbols (ISO 3758)*

EN ISO 13935-2, *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)*

EN ISO 13995, *Protective clothing — Mechanical properties — Test method for the determination of the resistance to puncture and dynamic tearing of materials (ISO 13995)*

EN ISO 15027-3:2012, *Immersion suits — Part 3: Test methods (ISO 15027-3:2012)*

ISO 1817, *Rubber, vulcanized or thermoplastic — Determination of the effect of liquids*

ISO 4046-3:2016, *Paper, board, pulps and related terms — Vocabulary — Part 3: Paper-making terminology*

SOLAS:1974, *as amended, Chapter III as amended by IMO Resolution MSC 47(66) and LSA Code. Use and fitting of retro-reflective materials on life-saving appliances, adopted by Res. A.658(16), Annex 2, issued by the International Maritime Organisation (IMO)*

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