

SLOVENSKI STANDARD SIST EN ISO 24805:2022

01-december-2022

Storitve rekreativnega potapljanja - Zahteve za usposabljanje potapljačev za potapljanje z zaprtim dihalnim krogom - Dekompresijsko potapljanje do 45 m (ISO 24805:2022)

Recreational diving services - Requirements for rebreather diver training - Decompression diving to 45 m (ISO 24805:2022)

Dienstleistungen des Freizeittauchens - Anforderungen an die Ausbildung von Kreislaufgerätetauchern - Dekompressionstauchen bis 45 m (ISO 24805:2022)

Services relatifs à la plongée de loisirs - Exigences concernant la formation des plongeurs à l'utilisation des recycleurs - Plongée avec décompression jusqu'à 45 m (ISO 24805:2022)

Ta slovenski standard je istoveten z: EN ISO 24805:2022

ICS:

03.080.30 Storitve za potrošnike Services for consumers 03.200.99 Drugi standardi v zvezi s Other standards relating to

prostim časom in turizmom leisure and tourism

SIST EN ISO 24805:2022 en,fr,de

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN ISO 24805:2022</u>

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN ISO 24805

September 2022

ICS 03.080.30; 03.200.99

English Version

Recreational diving services - Requirements for rebreather diver training - Decompression diving to 45 m (ISO 24805:2022)

Services relatifs à la plongée de loisirs - Exigences concernant la formation des plongeurs à l'utilisation des recycleurs - Plongée avec décompression jusqu'à 45 m (ISO 24805:2022)

Dienstleistungen des Freizeittauchens - Anforderungen an die Ausbildung von Kreislaufgerätetauchern -Dekompressionstauchen bis 45 m (ISO 24805:2022)

This European Standard was approved by CEN on 18 August 2022.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN ISO 24805:2022 (E)

Contents	Page
T	2
European foreword	

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 24805:2022

EN ISO 24805:2022 (E)

European foreword

This document (EN ISO 24805:2022) has been prepared by Technical Committee ISO/TC 228 "Tourism and related services" in collaboration with Technical Committee CEN/TC 329 "Tourism services" 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 March 2023, and conflicting national standards shall be withdrawn at the latest by March 2023.

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.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Endorsement notice

The text of ISO 24805:2022 has been approved by CEN as EN ISO 24805:2022 without any modification.

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN ISO 24805:2022</u>

INTERNATIONAL STANDARD

ISO 24805

First edition 2022-08

Recreational diving services — Requirements for rebreather diver training — Decompression diving to 45 m

Services relatifs à la plongée de loisirs — Exigences concernant la formation des plongeurs à l'utilisation des recycleurs — Plongée avec décompression jusqu'à 45 m

(standards.iteh.ai)

SIST EN ISO 24805:2022

https://standards.iteh.ai/catalog/standards/sist/5223c4a0-2e24-44ab-ba05-fffe1b8f9a7d/sist en-iso-24805-2022



Reference number ISO 24805:2022(E)

ISO 24805:2022(E)

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 24805:2022 https://standards.iteh.ai/catalog/standards/sist/5223c4a0-2e24-44ab-ba05-fffe1b8f9a7d/sist



COPYRIGHT PROTECTED DOCUMENT

© ISO 2022

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

Con	tent	5	Page		
Forew	ord		v		
Intro	ductio	n	vi		
1	Scope	B	1		
2	_	native references			
3	Terms and definitions				
4		petencies			
	-				
5	5.1	equisites for training			
	5.2	Minimum age			
	5.3	Diving experience			
	5.4	Health requirements			
6	Intro	ductory information	5		
7	Theoretical knowledge				
	7.1	Rebreather basics			
	7.2	Function of rebreather components			
	7.3	Breathing performance using a rebreather	6		
	7.4	Rebreather assembly and checks	6		
	7.5 7.6	Rebreather assembly and checks Gas supply duration CO ₂ absorbent duration	/ 7		
	7.0 7.7	Rebreather pre-water entry checks	/ 8		
	7.8	Dive conduct			
	7.9	Decompression dives			
		7.9.1 General			
	Uatan	7.9.2 Techniques 5181 EN 180 24805:2022	9		
	7.10	Identifying and reacting to potential issues	9		
		7.10.1 General issues <u>en-iso-24805-2022</u> 7.10.2 CO ₂ -related issues			
		7.10.3 Actions to be taken where the diver is able to breathe from the breathing	10		
		loop	10		
		7.10.4 Actions to be taken where the diver is not able to breathe from the			
	5 44	breathing loop			
	7.11 7.12	Hypercapnia, hypoxia and hyperoxiaBuddy system			
	7.12	Rebreather maintenance			
	7.14	Maintaining knowledge and skills			
8	Pract	tical skills	11		
U	8.1	General			
	8.2	Pre-dive procedures			
	8.3	Dive conduct	12		
	8.4	Emergency situations			
	8.5 8.6	Response to rebreather malfunctions Post-dive procedures			
•		•			
9		uctors			
10		ning equipment and materials			
	10.1 10.2	Training equipmentTraining materials			
11		<u> </u>			
11	Pract 11.1	tical training parameters			
	11.1	Instructor responsibilities			
	11.3	Rebreather dive leaders			

ISO 24805:2022(E)

	11.4	Breathing gas limits	16
		11.4.1 Closed-circuit rebreather	16
		11.4.2 Semiclosed-circuit rebreather	16
12	Evalu	nation	16
	12.1	Knowledge Skill evaluation – Nitrox	16
	12.2	Skill evaluation - Nitrox	16
	12.3	Skill evaluation - Trimix	16
	12.4	Proof of qualification	17
Annex	A (inf	formative) Gas density and gas mixtures	18
Biblio	graph	V	19

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 24805:2022

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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 228, *Tourism and related services*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 329, *Tourism services*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

ISO 24805:2022(E)

Introduction

Rebreathers (i.e. breathing devices that recirculate some or all of the diver's exhaled breath and replenish any consumed oxygen to maintain a breathable mixture) are becoming much more widely available and popular among divers. The market for rebreather diving has been constantly growing in recent years and is now considered to be large enough that the need for standards on minimum training requirements for training organizations is evident. Rebreathers allow divers to dive for longer and to greater depths. Such depths can go beyond 30 m and therefore require mandatory decompression stops. If rebreathers are used improperly they can be hazardous; divers have had fatal accidents due to incorrect use of these devices. It is therefore important to specify training for diving with such devices.

Training organizations offering training that conforms with this document may exceed any of the requirements in terms of the volume or complexity of training but should at least ensure the students master all the skills and knowledge defined in this document.

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 24805:2022 https://standards.iteh.ai/catalog/standards/sist/5223c4a0-2e24-44ab-ba05-fffe1b8f9a7d/sist en-iso-24805-2022