



# SLOVENSKI STANDARD SIST EN ISO 24804:2022

01-december-2022

---

**Storitve rekreativnega potapljanja - Zahteve za usposabljanje potapljačev za potapljanje z zaprtim dihalnim krogom - Potapljanje brez dekompresije (ISO 24804:2022)**

Recreational diving services - Requirements for rebreather diver training - No-decompression diving (ISO 24804:2022)

Dienstleistungen des Freizeittauchens - Anforderungen an die Ausbildung von Kreislaufgerätetauchern - Nullzeittauchen (ISO 24804:2022)

Services relatifs à la plongée de loisirs - Exigences concernant la formation des plongeurs à l'utilisation des recycleurs - Plongée sans décompression (ISO 24804:2022)

**Ta slovenski standard je istoveten z: EN ISO 24804:2022**

---

**ICS:**

03.080.30	Storitve za potrošnike	Services for consumers
03.200.99	Drugi standardi v zvezi s prostim časom in turizmom	Other standards relating to leisure and tourism

**SIST EN ISO 24804:2022**

**en,fr,de**



EUROPEAN STANDARD

EN ISO 24804

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2022

ICS 03.080.30; 03.200.99

English Version

## Recreational diving services - Requirements for rebreather diver training - No-decompression diving (ISO 24804:2022)

Services relatifs à la plongée de loisirs - Exigences concernant la formation des plongeurs à l'utilisation des recycleurs - Plongée sans décompression (ISO 24804:2022)

Dienstleistungen des Freizeittauchens - Anforderungen an die Ausbildung von Kreislaufgerätetauchern - Nullzeittauchen (ISO 24804:2022)

This European Standard was approved by CEN on 15 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

Contents	Page
European foreword.....	3

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN ISO 24804:2022

<https://standards.iteh.ai/catalog/standards/sist/58170ee7-8e4e-4acb-bf75-174aa4863517/sist-en-iso-24804-2022>

## European foreword

This document (EN ISO 24804:2022) 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 24804:2022 has been approved by CEN as EN ISO 24804:2022 without any modification.

<https://standards.iteh.ai/catalog/standards/sist/58170ee7-8e4e-4acb-bf75-174aa4863517/sist-en-iso-24804-2022>



INTERNATIONAL  
STANDARD

ISO  
24804

First edition  
2022-08

---

---

**Recreational diving services —  
Requirements for rebreather diver  
training — No-decompression diving**

*Services relatifs à la plongée de loisirs — Exigences concernant la  
formation des plongeurs à l'utilisation des recycleurs — Plongée sans  
décompression*

iTeh STANDARD PREVIEW  
(standards.iteh.ai)

SIST EN ISO 24804:2022

<https://standards.iteh.ai/catalog/standards/sist/58170ee7-8e4e-4acb-bf75-174aa4863517/sist-en-iso-24804-2022>



Reference number  
ISO 24804:2022(E)

© ISO 2022

# iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 24804:2022

<https://standards.iteh.ai/catalog/standards/sist/58170ee7-8e4e-4acb-bf75-174aa4863517/sist-en-iso-24804-2022>



## **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](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

Published in Switzerland



# Contents

	Page
<b>Foreword</b> .....	<b>v</b>
<b>Introduction</b> .....	<b>vi</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Competencies</b> .....	<b>3</b>
<b>5 Prerequisites for training</b> .....	<b>4</b>
5.1 General.....	4
5.2 Minimum age.....	4
5.3 Diving experience.....	4
5.4 Health requirements.....	4
<b>6 Introductory information</b> .....	<b>4</b>
<b>7 Theoretical knowledge</b> .....	<b>4</b>
7.1 Rebreather basics.....	4
7.2 Function of rebreather components.....	5
7.3 Breathing performance using a rebreather.....	5
7.4 Rebreather assembly and checks.....	6
7.5 Gas supply duration.....	6
7.6 CO <sub>2</sub> absorbent duration.....	7
7.7 Rebreather pre-water entry checks.....	7
7.8 Dive conduct.....	7
7.9 No-decompression dives.....	8
7.10 Identifying and reacting to potential issues.....	8
7.10.1 General issues.....	8
7.10.2 CO <sub>2</sub> -related issues.....	9
7.10.3 Actions to be taken.....	9
7.11 Hypercapnia, hypoxia, hyperoxia.....	9
7.12 Buddy system.....	9
7.13 Rebreather maintenance.....	9
7.14 Maintaining knowledge and skills.....	10
<b>8 Practical skills</b> .....	<b>10</b>
8.1 General.....	10
8.2 Pre-dive procedures.....	10
8.3 Dive conduct.....	11
8.4 Emergency situations.....	12
8.5 Post-dive procedures.....	12
<b>9 Instructors</b> .....	<b>12</b>
<b>10 Training equipment and training materials</b> .....	<b>12</b>
10.1 Training equipment.....	12
10.2 Training materials.....	13
<b>11 Practical training parameters</b> .....	<b>13</b>
11.1 Training dives or in-water sessions.....	13
11.2 Instructor responsibilities.....	13
11.3 Rebreather dive leaders.....	14
11.4 Breathing gas limits.....	14
11.5 Closed-circuit rebreather and variants.....	14
11.6 Semiclosed-circuit rebreather and variants.....	14
<b>12 Evaluation</b> .....	<b>14</b>
12.1 Knowledge.....	14

**ISO 24804:2022(E)**

12.2	Skill evaluation — Closed-circuit rebreather .....	14
12.3	Skill evaluation — Semiclosed-circuit rebreather .....	15
12.4	Proof of qualification .....	15
<b>Bibliography</b>	.....	<b>16</b>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 24804:2022](https://standards.iteh.ai/catalog/standards/sist/58170ee7-8e4e-4acb-bf75-174aa4863517/sist-en-iso-24804-2022)

<https://standards.iteh.ai/catalog/standards/sist/58170ee7-8e4e-4acb-bf75-174aa4863517/sist-en-iso-24804-2022>

## 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](http://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](http://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](http://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](http://www.iso.org/members.html).