



**SLOVENSKI STANDARD**  
**oSIST prEN ISO 24808:2023**  
**01-oktober-2023**

---

**Storitve rekreativnega potapljanja - Zahteve za usposabljanje inštruktorjev za potapljanje z zaprtim dihalnim krogom (ISO/DIS 24808:2023)**

Recreational diving services - Requirements for rebreather instructor training (ISO/DIS 24808:2023)

Dienstleistungen des Freizeittauchens - Anforderungen an die Ausbildung von Tauchlehrern für Kreislauftauchgeräte (ISO/DIS 24808:2023)

Services relatifs à la plongée de loisirs - Exigences concernant la formation des moniteurs recycleur (ISO/DIS 24808:2023)

**Ta slovenski standard je istoveten z: prEN ISO 24808**

---

**ICS:**

03.080.99	Druge storitve	Other services
03.100.30	Vodenje ljudi	Management of human resources
03.200.99	Drugi standardi v zvezi s prostim časom in turizmom	Other standards relating to leisure and tourism

**oSIST prEN ISO 24808:2023**

**en,fr,de**



# DRAFT INTERNATIONAL STANDARD

## ISO/DIS 24808

ISO/TC 228

Secretariat: UNE

Voting begins on:  
2023-08-04

Voting terminates on:  
2023-10-27

---

---

## Recreational diving services — Requirements for rebreather instructor training

ICS: 03.100.30; 03.200.99; 03.080.30

iTeh STANDARD PREVIEW  
(standards.iteh.ai)

[oSIST prEN ISO 24808:2023](https://standards.iteh.ai/catalog/standards/sist/ce71ef16-4d29-4d2d-8dd3-c50510ec773d/osist-pren-iso-24808-2023)

<https://standards.iteh.ai/catalog/standards/sist/ce71ef16-4d29-4d2d-8dd3-c50510ec773d/osist-pren-iso-24808-2023>

This document is circulated as received from the committee secretariat.

THIS DOCUMENT IS A DRAFT CIRCULATED FOR COMMENT AND APPROVAL. IT IS THEREFORE SUBJECT TO CHANGE AND MAY NOT BE REFERRED TO AS AN INTERNATIONAL STANDARD UNTIL PUBLISHED AS SUCH.

IN ADDITION TO THEIR EVALUATION AS BEING ACCEPTABLE FOR INDUSTRIAL, TECHNOLOGICAL, COMMERCIAL AND USER PURPOSES, DRAFT INTERNATIONAL STANDARDS MAY ON OCCASION HAVE TO BE CONSIDERED IN THE LIGHT OF THEIR POTENTIAL TO BECOME STANDARDS TO WHICH REFERENCE MAY BE MADE IN NATIONAL REGULATIONS.

RECIPIENTS OF THIS DRAFT ARE INVITED TO SUBMIT, WITH THEIR COMMENTS, NOTIFICATION OF ANY RELEVANT PATENT RIGHTS OF WHICH THEY ARE AWARE AND TO PROVIDE SUPPORTING DOCUMENTATION.

**ISO/CEN PARALLEL PROCESSING**



Reference number  
ISO/DIS 24808:2023(E)

© ISO 2023

# iTeh STANDARD PREVIEW (standards.iteh.ai)

[oSIST prEN ISO 24808:2023](https://standards.iteh.ai/catalog/standards/sist/ce71ef16-4d29-4d2d-8dd3-c50510ec773d/osist-pren-iso-24808-2023)

<https://standards.iteh.ai/catalog/standards/sist/ce71ef16-4d29-4d2d-8dd3-c50510ec773d/osist-pren-iso-24808-2023>



## **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2023

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

Foreword.....	iv
Introduction.....	v
<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 Common prerequisites.....	4
5.3 Minimum age.....	4
5.4 Health requirements.....	4
5.5 Preassessment.....	4
5.6 Rebreather instructor level 1.....	5
5.7 Rebreather instructor level 2.....	5
5.8 Rebreather instructor level 3.....	5
5.9 Rebreather instructor level 4.....	5
<b>6 Introductory information.....</b>	<b>5</b>
<b>7 Theoretical knowledge.....</b>	<b>6</b>
<b>8 Practical skills.....</b>	<b>6</b>
8.1 General skills.....	6
8.2 Rescue skills.....	6
<b>9 Training equipment and training materials.....</b>	<b>7</b>
<b>10 Practical training parameters.....</b>	<b>7</b>
10.1 Training dives/in-water sessions.....	7
10.2 Instructor trainer responsibilities.....	7
10.3 Breathing gas limits.....	7
<b>11 Qualification.....</b>	<b>8</b>
11.1 Knowledge.....	8
11.2 Skill evaluation.....	8
11.3 Course assistance.....	8
11.4 In water sessions.....	8
11.5 Cross over requirements.....	8
11.5.1 General.....	8
11.5.2 Prerequisites.....	9
11.5.3 Performance requirements.....	9
<b>12 Instructor trainers.....</b>	<b>9</b>
<b>Bibliography.....</b>	<b>10</b>

## ISO/DIS 24808:2023(E)

### 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).

## 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. 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)

[oSIST prEN ISO 24808:2023](https://standards.iteh.ai/catalog/standards/sist/ce71ef16-4d29-4d2d-8dd3-c50510ec773d/osist-pren-iso-24808-2023)

<https://standards.iteh.ai/catalog/standards/sist/ce71ef16-4d29-4d2d-8dd3-c50510ec773d/osist-pren-iso-24808-2023>





# Recreational diving services — Requirements for rebreather instructor training

## 1 Scope

This document specifies requirements for rebreather instructor training programmes which provide the competencies required to be able to train rebreather divers.

This document specifies evaluation criteria for these competencies and specifies the requirements for four levels of rebreather instructor.

This document specifies the requirements under which training is provided, in addition to the general requirements for recreational diving service provision in accordance with ISO 24803.

## 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.

ISO 11107, *Recreational diving services — Requirements for training programmes on enriched air nitrox (EAN) diving*

ISO 24802-2, *Recreational diving services — Requirements for the training of scuba instructors — Part 2: Level 2*

ISO 24803, *Recreational diving services — Requirements for recreational diving providers*

ISO 24804, *Recreational diving services — Requirements for rebreather diver training — No-decompression diving*

ISO 24805, *Recreational diving services — Requirements for rebreather diver training — Decompression diving to 45 m*

ISO/FDIS 24806, *Recreational diving services — Requirements for rebreather diver training — Decompression diving to 60 m*

ISO/FDIS 24807, *Recreational diving services — Requirements for rebreather diver training — Decompression diving to 100 m*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

## ISO/DIS 24808:2023(E)

**3.1 rebreather**  
 apparatus that has a supply of gas carried by the diver, allowing the diver to breathe under water which enables the diver to inspire gas from a facepiece connected to a counterlung and to pass exhaled gas through a carbon dioxide absorption material before it is re-breathed from the counterlung and inspired partial pressure of the gases within the apparatus remain within acceptable physiological limits so that gas is thus recirculated within the apparatus

Note 1 to entry: A rebreather can also be called a self-contained rebreathing diving apparatus.

Note 2 to entry: A facepiece can be a mouthpiece assembly, a half mask, a full-face mask or a helmet.

[SOURCE: EN 14143:2013, 3.1, modified — Note 1 to entry modified and Note 2 to entry added. This content has been reproduced with the permission of CEN. Copyright remains with CEN.]

**3.2 rebreather type**  
 primary rebreather design

EXAMPLE Closed-circuit rebreather (CCR), manually controlled closed-circuit rebreather (mCCR), electronically controlled closed-circuit rebreather (eCCR), semiclosed-circuit rebreather (SCR), manually controlled SCR (mSCR), electronically controlled SCR (eSCR), hybrid closed-circuit rebreather (hCCR).

**3.3 rebreather unit**  
 type of *rebreather* (3.1) having consistent controls, displays and configuration over several *rebreather models* (3.4) where the operation is essentially the same from rebreather model to rebreather model

**3.4 rebreather model**  
 specific individual design of *rebreather* (3.1) made by a manufacturer

**3.5 breathing gas**  
 gas present in the *breathing loop* (3.7) inspired by the diver

**3.6 trimix**  
 gas comprising a specified mixture of oxygen, helium and nitrogen, capable of supporting human life under appropriate diving or hyperbaric conditions

Note 1 to entry: This includes manufactured gas mixtures made up from combinations of pure oxygen, pure helium and pure nitrogen, with or without compressed air.

[SOURCE: EN 14143:2013, 3.20. This content has been reproduced with the permission of CEN. Copyright remains with CEN.]

**3.7 breathing loop**  
 portion of a rebreather (3.1) through which gas circulates, usually consisting of a mouthpiece, breathing hose(s), counterlung(s), non-return valves and a CO<sub>2</sub> absorbent canister

**3.8 confined water**  
 swimming pool with a depth appropriate to the activity or body of water offering similar conditions with regard to visibility, depth, water movement and access

[SOURCE: ISO 24801-2:2014, 3.5]