

# SVENSK STANDARD

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**Fritidsdykning – Krav på utbildningsprogram för dykning med syreberikad luft (nitrox) (ISO 11107:2009, IDT)**

**Recreational diving services – Requirements for training programmes on enriched air nitrox (EAN) diving (ISO 11107:2009, IDT)**

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Den internationella standarden ISO 11107:2009 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av ISO 11107:2009.

The International Standard ISO 11107:2009 has the status of a Swedish Standard. This document contains the official English version of ISO 11107:2009.

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## 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 11107 was prepared by Technical Committee ISO/TC 228, *Tourism and related services*.

## Introduction

This International Standard specifies minimum requirements; it does not preclude the provision of additional training or the assessment by a service provider of additional competences. This International Standard represents a tool by which to compare existing (or future) qualifications of scuba divers who wish to dive with enriched air nitrox (EAN).

# Recreational diving services — Requirements for training programmes on enriched air nitrox (EAN) diving

## 1 Scope

This International Standard specifies the level of competence required of a scuba diver in order to be awarded an enriched air nitrox (EAN) diver certification by a training organization.

This International Standard also specifies the conditions under which training is to be provided, which supplement the general requirements for recreational diving services specified in ISO 24803.

## 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.

ISO 24801-2, *Recreational diving services — Safety related minimum requirements for the training of recreational scuba divers — Part 2: Level 2 — Autonomous diver*

ISO 24802-1, *Recreational diving services — Safety related minimum requirements for the training of scuba instructors — Part 1: Level 1*

ISO 24802-2, *Recreational diving services — Safety related minimum requirements for the training of scuba instructors — Part 2: Level 2*

## 3 Terms and definitions

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

### 3.1

#### **training organization**

entity providing recreational scuba diving training systems and certification, and which is responsible for the implementation and quality management of scuba diver training

NOTE The entity can include scuba diving federations and scuba diver training agencies.

### 3.2

#### **certification**

confirmation that a student has completed scuba diver training that fulfils all requirements in accordance with this International Standard, as issued by training organizations

### 3.3

#### **scuba instructor**

individual qualified in accordance with ISO 24802-1 or ISO 24802-2, as appropriate

### 3.4

#### open water

body of water significantly larger than a swimming pool, which offers conditions typical of a natural body of water

### 3.5

#### enriched air nitrox

##### EAN

breathable mixture of nitrogen and oxygen with more than 21 % oxygen content, which may contain trace gases at levels no higher than those found in normal air

## 4 Competences of a certified enriched air nitrox diver

The training programme shall ensure that, when assessed in accordance with Clause 10, scuba divers are qualified to

- plan, conduct and log EAN open-water, no-decompression dives, when accompanied by another scuba diver of at least level 2 — “Autonomous diver”, in accordance with ISO 24801-2;
- procure EAN mixes, EAN equipment and other services to engage in recreational EAN diving without supervision.

The training programme does not qualify divers to make dives which require mandatory in-water decompression stops or dives using more than one breathing gas and/or rebreathers. Such dives are beyond the scope of this International Standard and require additional training.

## 5 Prerequisites for training

### 5.1 Minors

Documented parental or legal guardian consent shall be obtained when the applicant is a minor.

### 5.2 Health requirements

If training dives are to be conducted as part of the training programme, documented evidence shall be obtained that the student has been medically screened as suitable for recreational diving, by means of an appropriate questionnaire or medical examination. In case of doubt, or at the scuba instructor's discretion, students shall be referred to proper medical resources. If the student is not examined by a physician, the student shall be obliged to confirm by signature that he or she has understood written information given by the scuba instructor on diseases and physical conditions which may pose risks in relation to diving.

Students shall be advised of the importance of appropriate regular medical examinations.

## 6 Required theoretical knowledge

### 6.1 Equipment

The training programme shall ensure that students have appropriate knowledge of the physical characteristics, operating principles, maintenance requirements and use of EAN diving equipment. This shall include at least the following:

- how EAN use impact diving equipment (e.g. increased oxidation and wear);
- the suitability of scuba equipment for use with EAN, including national and/or regional regulations;