

STN	Prenosné systémy na kvapalný kyslík na použitie v zdravotníctve Časť 2: Osobitné požiadavky na prenosné jednotky (ISO 18777-2: 2025)	STN EN ISO 18777-2 85 2754
------------	---	--

Transportable liquid oxygen systems for medical use - Part 2: Particular requirements for portable units (ISO 18777-2:2025)

Táto norma obsahuje anglickú verziu európskej normy.

This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 01/26

Obsahuje: EN ISO 18777-2:2025, ISO 18777-2:2025

Oznámením tejto normy sa ruší

STN EN ISO 18777 (85 2754) z júna 2009

141965

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2026

Slovenská technická norma a technická normalizačná informácia je chránená zákonom č. 60/2018 Z. z. o technickej normalizácii v znení neskorších predpisov.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 18777-2

November 2025

ICS 11.040.10

Supersedes EN ISO 18777:2009

English Version

**Transportable liquid oxygen systems for medical use - Part
2: Particular requirements for portable units (ISO 18777-
2:2025)**

Systèmes transportables d'oxygène liquide à usage
médical - Partie 2: Exigences particulières s'appliquant
aux unités portables (ISO 18777-2:2025)

Flüssigsauerstoffsysteme für medizinische
Anwendungen - Teil 2: Besondere Anforderungen für
tragbare Einheiten (ISO 18777-2:2025)

This European Standard was approved by CEN on 22 November 2025.

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

European foreword

This document (EN ISO 18777-2:2025) has been prepared by Technical Committee ISO/TC 121 "Anaesthetic and respiratory equipment" in collaboration with Technical Committee CEN/TC 215 "Respiratory and anaesthetic equipment" the secretariat of which is held by BSI.

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 May 2026, and conflicting national standards shall be withdrawn at the latest by May 2026.

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 ISO 18777:2009.

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 18777-2:2025 has been approved by CEN as EN ISO 18777-2:2025 without any modification.



International Standard

ISO 18777-2

Transportable liquid oxygen systems for medical use —

Part 2: Particular requirements for portable units

Systèmes transportables d'oxygène liquide à usage médical —

*Partie 2: Exigences particulières s'appliquant aux unités
portables*

First edition 2025-11

ISO 18777-2:2025(en)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2025

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

ISO 18777-2:2025(en)

Contents		Page
Foreword.....		iv
Introduction.....		v
1	Scope.....	1
2	Normative references.....	1
3	Terms and definitions.....	1
4	General requirements.....	1
5	Design requirements.....	1
5.1	General.....	1
5.2	Filling port connector.....	2
5.3	Maximum mass.....	3
5.4	Conserving devices.....	3
5.5	Mechanical strength.....	3
5.6	Position of use.....	3
5.7	Evaporation rate.....	4
6	Constructional requirements.....	4
7	Information supplied by the manufacturer.....	4
7.1	General.....	4
7.2	Marking.....	4
7.3	Instructions for use.....	4
Annex A (normative) Test methods.....		5

ISO 18777-2:2025(en)

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 document 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).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

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 121, *Anaesthetic and respiratory equipment*, Subcommittee SC 6, *Medical gas supply systems*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 215, *Respiratory and anaesthetic equipment*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This first edition of ISO 18777-2 together with ISO 18777-1 cancels and replaces ISO 18777:2005, which has been technically revised.

The main changes are as follows:

- requirements that are common with *base units* refer to the applicable clauses ISO 18777-1;
- requirements for the filling port connector have been included.

A list of all parts in the ISO 18777 series can be found on the ISO website.

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 18777-2:2025(en)

Introduction

Transportable liquid oxygen systems comprise a *base unit* and a *portable unit* primarily for use in home-care applications. This document specifies requirements unique to *portable units*, which provide a controlled flow of oxygen for inhalation by the patient and are refilled from the *base unit* by the patient. ISO 18777-1 specifies the common requirements and particular requirements for the *base unit*.

The *portable unit* is a lightweight device that can be carried by the patient so that they have access to oxygen around the home and when they leave the home.

NOTE Terms defined in ISO 18777-1 are delineated throughout this document in *italic font*.

In this document, the following verbal forms are used:

- “shall” indicates a requirement;
- “should” indicates a recommendation;
- “may” indicates a permission;
- “can” is used to describe a possibility or capability.

Transportable liquid oxygen systems for medical use —

Part 2: Particular requirements for portable units

1 Scope

This document specifies particular requirements for *portable units* which are part of a transportable liquid oxygen system and used to provide a controlled flow of oxygen for inhalation by the patient in the home-care environment.

Portable units are intended to be used without professional supervision, carried by patients while moving around and during their off-site activities and refilled from a *base unit* via a *transfilling device* through the *portable unit's* filling port connector.

NOTE Requirements that are common to both *portable units* and *base units* are specified in ISO 18777-1.

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 18777-1:2026, *Transportable liquid oxygen systems for medical use: Part 1 — Common requirements and particular requirements for base units*

ISO 80601-2-67, *Medical electrical equipment — Part 2-67: Particular requirements for basic safety and essential performance of oxygen-conserving equipment*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN