

# norm

# NEN-EN-ISO 9785 (en)

Scheepsbouw en maritieme techniek -  
Ventilatie van laadruimen waar voertuigen  
met verbrandingsmotor zijn toegelaten -  
Berekening van de theoretisch totaal  
benodigde luchtstroom  
(ISO 9785:2002,IDT)

Ships and marine technology - Ventilation of cargo spaces where  
vehicles with internal combustion engines are driven - Calculation of  
theoretical total airflow required (ISO 9785:2002,IDT)

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Ontw.

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- EN ISO 9785:2002,IDT  
- ISO 9785:2002,IDT

Normcommissie 345 040 "Schepen en maritieme techniek"

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English version

**Ships and marine technology - Ventilation of cargo spaces  
where vehicles with internal combustion engines are driven -  
Calculation of theoretical total airflow required (ISO 9785:2002)**

Navires et technologie maritime - Ventilation des espaces  
cargaison des navires dans lesquels des véhicules à  
moteur à combustion interne sont utilisés - Calcul du débit  
d'air total théorique exigé (ISO 9785:2002)

Schiffe und Meerestechnik - Lüftung von Laderäumen, in  
denen Kraftfahrzeuge mit Verbrennungsmotoren betrieben  
werden dürfen - Berechnung des theoretisch benötigten  
Gesamt-Luftvolumenstroms (ISO 9785:2002)

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## Foreword

This document (EN ISO 9785:2002) has been prepared by Technical Committee ISO/TC 8 "Ships and marine technology" in collaboration with Technical Committee CEN/TC 300 "Sea-going vessels and marine technology", 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of an identical text or by endorsement, at the latest by January 2003, and conflicting national standards shall be withdrawn at the latest by January 2003.

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**NOTE FROM CMC** The foreword is susceptible to be amended on reception of the German language version. The confirmed or amended foreword, and when appropriate, the normative annex ZA for the references to international publications with their relevant European publications will be circulated with the German version.

### Endorsement notice

The text of the International Standard ISO 9785:2002 has been approved by CEN as a European Standard without any modifications.

# INTERNATIONAL STANDARD

**ISO  
9785**

Second edition  
2002-07-15

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## **Ships and marine technology — Ventilation of cargo spaces where vehicles with internal combustion engines are driven — Calculation of theoretical total airflow required**

*Navires et technologie maritime — Ventilation des espaces cargaison des navires dans lesquels des véhicules à moteur à combustion interne sont utilisés — Calcul du débit d'air total théorique exigé*

Preview



Reference number  
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## Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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 International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 9785 was prepared by Technical Committee ISO/TC 8, *Ships and marine technology*, Subcommittee SC 3, *Piping and machinery*.

This second edition cancels and replaces the first edition (ISO 9785:1990), which was revised for continued consistency with International Marine Organization provisions for calculating required ventilation in cargo spaces where vehicles with internal combustion engines may be driven.

Annex A forms a normative part of this International Standard. Annex B is for information only.



## Introduction

The purpose of this International Standard is to ensure that exposure to substances hazardous to health should be kept as low as is reasonably practicable in work areas in cargo spaces in ships. This can, as a rule, be achieved by limiting exhaust gas emissions as far as possible (by controlling the traffic) and by providing a high flow of air in the cargo spaces. For further information and guidance regarding good practice, please refer to recent guidelines developed by the International Maritime Organization which are contained in the IMO Maritime Safety Committee Circular 729 (MSC Circ. 729), *Guidelines and Operational Recommendations for Ventilation Systems in RO-RO Cargo Spaces*.

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