

**Tanks for transport of dangerous goods - Service  
equipment for tanks - Adaptor for bottom loading  
and unloading**

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 13083:2008 sisaldab Euroopa standardi EN 13083:2008 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 15.12.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 12.11.2008.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 13083:2008 consists of the English text of the European standard EN 13083:2008.

This standard is ratified with the order of Estonian Centre for Standardisation dated 15.12.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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**Võtmesõnad:** containers, management, per, petroleum products, pipelines, piping system, ratings, road tankers, specification (approval), specifications, tank installations, tank trucks, tanks, tanks (containers), testing, tightness, transport, transport of dangerous goods

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Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega:  
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English Version

## Tanks for transport of dangerous goods - Service equipment for tanks - Adaptor for bottom loading and unloading

Citernes de transport de matières dangereuses -  
Équipement de service pour citernes - Adaptateur pour le  
chargement et le déchargement par le bas

Tanks für die Beförderung gefährlicher Güter -  
Bedienungsausrüstung von Tanks - VK-Kupplung für  
Untenbefüllung und -entladung

This European Standard was approved by CEN on 13 September 2008.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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## Foreword

This document (EN 13083:2008) has been prepared by Technical Committee CEN/TC 296 "Tanks for transport of dangerous goods", the secretariat of which is held by AFNOR.

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 2009, and conflicting national standards shall be withdrawn at the latest by May 2009.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 13083:2001.

This European Standard forms part of a coherent standards programme comprising the following standards, under the general title "Tanks for transport of dangerous goods - Service equipment for tanks":

EN 13081, *Vapour collection adaptor and coupler*

EN 13082, *Vapour transfer valve*

EN 13083, *Adaptor for bottom loading and unloading*

EN 13308, *Non-pressure balanced footvalve*

EN 13314, *Fill hole cover*

EN 13315, *Gravity discharge coupler*

EN 13316, *Pressure balanced footvalve*

EN 13317, *Manhole cover assembly*

EN 13922, *Overfill prevention systems for liquid fuels*

EN 14595, *Pressure and Vacuum Breather Vent*

EN 14596, *Emergency pressure relief valve*

EN 15208, *Sealed parcel delivery systems – Working principles and interface specifications*

The standards programme also includes the following Technical Report:

CEN/TR 15120, *Guidance and recommendations for loading, transport and unloading.*

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

## **Introduction**

The adaptor for bottom loading and unloading, subject of this European Standard, allows the transfer of product through a mating loading coupler to a transport tank and from the tank to a service station tank by a mating gravity discharge coupler. It is required to comply with the European Directive 94/63/EC on Volatile Organic Compounds (VOC) [1].

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## 1 Scope

This European Standard covers externally actuated and self actuated adaptors for bottom loading and unloading.

This European Standard specifies the performance requirements and the critical dimensions of the adaptor for bottom loading and unloading. It also specifies the tests necessary to verify the compliance of the equipment with this European Standard. The equipment specified by this standard is suitable for use with liquid petroleum products and other dangerous substances of Class 3 of ADR [2] which have a vapour pressure not exceeding 110 kPa at 50 °C and petrol, and which have no subclassification as toxic or corrosive.

## 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.

EN 12266-1:2003, *Industrial valves — Testing of valves — Part 1: Pressure tests, test procedures and acceptance criteria — Mandatory requirements*

EN 12266-2:2002, *Industrial valves — Testing of valves — Part 2: Tests, test procedures and acceptance criteria — Supplementary requirements*

EN ISO 1302, *Geometrical Product Specifications (GPS) — Indication of surface texture in technical product documentation (ISO 1302:2002)*

EN ISO 4287, *Geometrical Product Specifications (GPS) — Surface texture: Profile method — Terms, definitions and surface texture parameters (ISO 4287:1997)*

ISO 2859-1, *Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*

## 3 Terms and definitions

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

### 3.1

#### **Maximum Working Pressure (MWP) (gauge pressure)**

maximum pressure to which the equipment is designed to operate, being the highest of the following three pressures:

- a) highest effective pressure allowed in the tank during filling (maximum filling pressure allowed)
- b) highest effective pressure allowed in the tank during discharge (maximum discharge pressure allowed)
- c) effective gauge pressure to which the tank is subjected by its contents (including such extraneous gases as it may contain) at the maximum working temperature

### 3.2

#### **product sensor**

device which detects the presence of liquid petroleum and whose output signal can be used to display whether liquid is present