

**Tanks for the transport of dangerous goods - Tank
equipment for the transport of liquid chemicals and
liquefied gases - Foot valves**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 14433:2014 sisaldab Euroopa standardi EN 14433:2014 inglisekeelset teksti.	This Estonian standard EVS-EN 14433:2014 consists of the English text of the European standard EN 14433:2014.
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English Version

Tanks for the transport of dangerous goods - Tank equipment for the transport of liquid chemicals and liquefied gases - Foot valves

Citernes de transport de matières dangereuses -
Équipements de la citerne pour le transport de produits
chimiques liquides et de gaz liquéfiés - Clapets de fond

Tanks für die Beförderung gefährlicher Güter - Ausrüstung
für Tanks für die Beförderung von flüssigen
Chemieprodukten und Flüssiggasen - Bodenventile

This European Standard was approved by CEN on 30 August 2014.

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Foreword

This document (EN 14433:2014) 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of an identical text or by endorsement, at the latest by April 2015 and conflicting national standards shall be withdrawn at the latest by April 2015.

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 14433:2006.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

This European Standard has been submitted for reference into:

- the RID [1], and
- the technical annexes of the ADR [2].

NOTE These regulations take precedence over any clause of this standard. It is emphasised that RID/ADR/ADN are being revised regularly at intervals of two years which may lead to temporary non-compliance with the clauses of this standard.

Compared to EN 14433:2006 the following changes have been made:

- a) the scope of the standard has been enlarged to include liquefied gases;
- b) the references to ADR/RID have been included in the respective clauses of the main part of the standard;
- c) the normative references have been updated;
- d) change of test conditions (test pressure, hold time).

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies the requirements for foot valves for use on transportable tanks with a minimum working pressure greater than 50 kPa for the transport of dangerous goods by road and rail.

It is applicable to metallic equipment for use on tanks with gravity and/or pressure bottom loading and discharge for liquid chemicals and liquefied gases. It includes carbon dioxide while excluding refrigerated liquefied gases.

NOTE The standard is also applicable to liquefied gases including LPG, however, for a dedicated LPG standard see EN 13175 [3].

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 12266-1:2012, *Industrial valves - Testing of metallic valves - Part 1: Pressure tests, test procedures and acceptance criteria - Mandatory requirements*

EN 12266-2:2012, *Industrial valves - Testing of metallic valves - Part 2: Tests, test procedures and acceptance criteria - Supplementary requirements*

EN 12516-1, *Industrial valves - Shell design strength - Part 1: Tabulation method for steel valve shells*

EN 12516-2, *Industrial valves - Shell design strength - Part 2: Calculation method for steel valve shells*

EN 12516-3:2002, *Valves - Shell design strength - Part 3: Experimental method*

EN 13445-1, *Unfired pressure vessels - Part 1: General*

EN ISO 11299-1:2013, *Plastics piping systems for renovation of underground gas supply networks - Part 1: General (ISO 11299-1:2011)*

3 Terms and definitions

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

3.1

maximum working pressure

MWP

maximum pressure up to which the valve can be operated, not more than the test pressure divided by 1,3

[SOURCE: ADR/RID chapter 6.8]

3.2

maximum allowable working pressure

MAWP

maximum pressure up to which the valve can be operated, not more than the test pressure divided by 1,3 (liquefied gases) respectively 1,5 (liquids)

[SOURCE: ADR/RID chapter 6.7]