Irish Standard
I.S. EN 12561-3:2011&AC:2014

Railway applications - Tank wagons - Part 3: Bottom filling and emptying devices for gases liquefied under pressure

I.S. EN 12561-3:2011&AC:2014

Incorporating amendments/corrigenda/National Annexes issued since publication:

EN 12561-3:2011/AC:2014

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on:	*Published:*
EN 12561-3:2011	2011-06-29

This document was published under the authority of the NSAI and comes into effect on:	ICS number:
2014-12-07	13.300 45.060.20
	NOTE: If blank see CEN/CENELEC cover page

NSAI	T +353 1 807 3800	Sales:
1 Swift Square,	F +353 1 807 3838	T +353 1 857 6730
Northwood, Santry	E standards@nsai.ie	F +353 1 857 6729
Dublin 9	W NSAI.ie	W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 12561-3:2011/AC

November 2014
Novembre 2014
November 2014

ICS 13.300; 45.060.20

English version
Version Française
Deutsche Fassung

Railway applications - Tank wagons - Part 3: Bottom filling and emptying devices for gases liquefied under pressure

Applications ferroviaires - Wagons citernes - Partie 3: Dispositifs de remplissage et de vidange par le bas pour gaz liquéfiés sous pression

Bahnanwendungen - Kesselwagen - Teil 3: Untenliegende Füll- und Entleereinrichtungen für unter Druck verflüssigte Gase

This corrigendum becomes effective on 19 November 2014 for incorporation in the three official language versions of the EN.

Ce corrigendum prendra effet le 19 novembre 2014 pour incorporation dans les trois versions linguistiques officielles de la EN.

Die Berichtigung tritt am 19. November 2014 zur Einarbeitung in die drei offiziellen Sprachfassungen der EN in Kraft.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No.:EN 12561-3:2011/AC:2014 D/E/F

1 Deletion of Clause 8, Dry disconnect couplings

Delete the whole Clause 8.

2 Modification to the Table of Contents

Re-update the Table of Contents so that Clause 8 does not appear in it anymore.

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 12561-3

June 2011

ICS 13.300; 45.060.20

Supersedes EN 12561-3:2002

English Version

Railway applications - Tank wagons - Part 3: Bottom filling and emptying devices for gases liquefied under pressure

Applications ferroviaires - Wagons citernes - Partie 3: Dispositifs de remplissage et de vidange par le bas pour gaz liquéfiés sous pression

Bahnanwendungen - Kesselwagen - Teil 3: Untenliegende Füll- und Entleereinrichtungen für unter Druck verflüssigte Gase

This European Standard was approved by CEN on 3 June 2011.

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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 12561-3:2011: E

Contents

Page

Figures

Tables

Foreword

This document (EN 12561-3:2011) has been prepared by Technical Committee CEN/TC 256 Railway applications, 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 December 2011, and conflicting national standards shall be withdrawn at the latest by December 2011.

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 12561-3:2002.

This European Standard *Railway applications* — Tank wagons consists of the following parts:

— *Part 1: Identification plates for tank wagons for the carriage of dangerous goods;*

— *Part 2: Bottom emptying devices for liquid products including vapour return;*

— *Part 3: Bottom filling and emptying devices for gases liquefied under pressure;*

— *Part 4: Devices for top filling and emptying of liquid products;*

— *Part 5: Devices for vapour return while filling or emptying of liquid products;*

— *Part 6: Manholes;*

— *Part 7: Platforms and ladders;*

— *Part 8: Heating connections.*

The changes made during this revision are editorial because of the change of the title of part 1 and the necessary updates of references.

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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom

1 Scope

This European Standard specifies requirements on and characteristics of bottom filling and emptying devices on tank wagons used for the carriage of gases liquefied under pressure having a test pressure up to 2,9 MPa. This European Standard specifies the important dimensions and arrangements for the filling and emptying connections. Safety functions of these devices are subject to RID requirements and not described in this document.

This European Standard applies to new tank wagons built after the 1st January 2010.

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 14564,*Tanks for transport of dangerous goods – Terminology*

EN ISO 286-1, *Geometrical product specifications (GPS) — ISO code system for tolerances on linear sizes — Part 1: Basis of tolerances, deviations and fits (ISO 286-1)*

ISO 3419, *Non-alloy and alloy steel butt-welding fittings*

ISO 4200:1991, *Plain end steel tubes, welded and seamless — General tables of dimensions and masses per unit length*

ISO 7005-1:1992, *Metallic flanges — Part 1: Steel flanges*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 14564 and the following apply.

3.1
stop valve
part of the internal bottom valve comprising the disc, the gasket, the spring and the seat

4 Requirements

4.1 General

The liquid and vapour phase system shall consist of DN 80 pipes and valves.

The external connection interface shall be:

— DN 80 diameter for the liquid phase, and

— DN 50 diameter for the vapour phase.

4.2 Constituent parts

Both phases shall be equipped with: