

LPG equipment and accessories - Inspection and  
requalification of LPG pressure vessels greater than 13  
m<sup>3</sup>

## EESTI STANDARDI EESSÕNA

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ICS 23.020.35

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EUROPEAN STANDARD

**EN 12819**

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2019

ICS 23.020.35

Supersedes EN 12819:2009

English Version

## LPG equipment and accessories - Inspection and requalification of LPG pressure vessels greater than 13 m<sup>3</sup>

Équipements et accessoires GPL - Inspection et  
requalification des réservoirs de capacité supérieure à  
13 m<sup>3</sup> pour gaz de pétrole liquéfiés (GPL)

Flüssiggas-Geräte und Ausrüstungsteile - Inspektion  
und wiederkehrende Prüfung von Druckbehältern für  
Flüssiggas (LPG) mit einem Fassungsraum größer als  
13 m<sup>3</sup>

This European Standard was approved by CEN on 9 December 2018.

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.

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**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

# Contents

Page

European foreword.....	5
Introduction .....	6
1 Scope.....	7
2 Normative references.....	7
3 Terms and definitions.....	7
4 Safety .....	8
4.1 Safety precautions .....	8
4.2 Unsafe conditions.....	8
4.3 Leak.....	8
5 Written scheme.....	9
6 Pressure vessel inspection, requalification and recommissioning .....	10
6.1 Routine inspection.....	10
6.2 Periodic inspection.....	10
6.3 Requalification .....	10
6.3.1 Requalification of aboveground pressure vessels .....	10
6.3.2 Requalification of underground pressure vessels .....	10
6.3.3 Recommissioning.....	11
7 Inspection of pressure vessel and pressure vessel fittings.....	11
7.1 Pressure vessel .....	11
7.2 Pressure vessel fittings and immediate pipework.....	11
7.3 Valve cover .....	11
7.4 Bonding.....	11
7.5 Pressure relief valve .....	12
7.6 Pressure gauge.....	12
7.7 Contents gauges .....	12
7.8 Shut-off valves .....	12
7.9 Studs, bolts, nuts, and washers .....	12
7.10 Emergency valves.....	12
7.11 Gaskets.....	13
7.12 Pressure switch.....	13
7.13 Temperature gauge .....	13
7.14 Remotely operated valves.....	13
7.15 Corrosion protection system .....	13
7.16 Piers and foundations for aboveground pressure vessels.....	13
8 Competence.....	13
8.1 General.....	13
8.2 Routine inspection competence.....	13
8.3 Periodic inspection competence.....	13
8.4 Requalification competence.....	14
9 Records .....	14
9.1 Pressure vessel data.....	14

<b>9.2</b>	<b>Reports .....</b>	<b>14</b>
	<b>Annex A (informative) Visual inspection .....</b>	<b>15</b>
<b>A.1</b>	<b>Internal and external visual inspections .....</b>	<b>15</b>
<b>A.2</b>	<b>Inspection techniques.....</b>	<b>15</b>
<b>A.2.1</b>	<b>External visual inspection .....</b>	<b>15</b>
<b>A.2.2</b>	<b>Internal visual inspection.....</b>	<b>15</b>
<b>A.2.3</b>	<b>Records.....</b>	<b>15</b>
<b>A.3</b>	<b>Additional inspection.....</b>	<b>15</b>
	<b>Annex B (normative) Hydraulic pressure test .....</b>	<b>17</b>
	<b>Annex C (normative) Acoustic emission testing.....</b>	<b>18</b>
<b>C.1</b>	<b>Scope .....</b>	<b>18</b>
<b>C.2</b>	<b>Testing procedure .....</b>	<b>18</b>
<b>C.3</b>	<b>Instrumentation.....</b>	<b>18</b>
<b>C.3.1</b>	<b>Sensors .....</b>	<b>18</b>
<b>C.3.2</b>	<b>Acquisition and evaluation system .....</b>	<b>18</b>
<b>C.4</b>	<b>Testing.....</b>	<b>18</b>
<b>C.4.1</b>	<b>Test instruction .....</b>	<b>18</b>
<b>C.4.2</b>	<b>Safety precautions.....</b>	<b>18</b>
<b>C.5</b>	<b>Sensor location .....</b>	<b>19</b>
<b>C.5.1</b>	<b>Overground pressure vessels.....</b>	<b>19</b>
<b>C.5.2</b>	<b>Underground or mounded pressure vessels .....</b>	<b>19</b>
<b>C.5.3</b>	<b>Pressurization.....</b>	<b>21</b>
<b>C.6</b>	<b>Data evaluation and analysis.....</b>	<b>22</b>
<b>C.6.1</b>	<b>Evaluation criteria.....</b>	<b>22</b>
<b>C.6.1.1</b>	<b>General .....</b>	<b>22</b>
<b>C.6.1.2</b>	<b>Overground pressure vessels.....</b>	<b>22</b>
<b>C.6.1.3</b>	<b>Underground and mounded pressure vessels .....</b>	<b>22</b>
<b>C.6.2</b>	<b>Real time control and stop criteria .....</b>	<b>22</b>
<b>C.6.2.1</b>	<b>Overground pressure vessels.....</b>	<b>22</b>
<b>C.6.2.2</b>	<b>Underground and mounded pressure vessels .....</b>	<b>23</b>
<b>C.6.3</b>	<b>Post test analysis.....</b>	<b>23</b>
<b>C.6.4</b>	<b>Pressure vessel grading .....</b>	<b>23</b>
<b>C.7</b>	<b>Data storage and reporting.....</b>	<b>24</b>
	<b>Annex D (informative) Ultrasonic thickness test.....</b>	<b>25</b>
<b>D.1</b>	<b>General .....</b>	<b>25</b>
<b>D.2</b>	<b>Apparatus setting .....</b>	<b>25</b>

<b>D.3</b>	<b>Control measurement</b> .....	<b>25</b>
<b>D.4</b>	<b>Shell thickness measurements</b> .....	<b>25</b>
<b>D.5</b>	<b>End thickness measurements</b> .....	<b>25</b>
<b>D.6</b>	<b>Interpretation</b> .....	<b>25</b>
<b>D.7</b>	<b>Rejection criteria</b> .....	<b>25</b>
<b>Annex E (informative) Monitoring cathodic protection with sacrificial anodes for underground pressure vessels</b> .....		<b>26</b>
<b>E.1</b>	<b>General</b> .....	<b>26</b>
<b>E.2</b>	<b>Records</b> .....	<b>26</b>
<b>E.3</b>	<b>Procedure</b> .....	<b>26</b>
<b>E.4</b>	<b>Measurement of the galvanic current</b> .....	<b>26</b>
<b>E.5</b>	<b>Measurement of the potential difference of the pressure vessel to the reference electrode</b> .....	<b>26</b>
<b>E.6</b>	<b>Results</b> .....	<b>27</b>
<b>Annex F (informative) Evaluation of coating condition of underground pressure vessels (cathodic protection by impressed current)</b> .....		<b>28</b>
<b>F.1</b>	<b>General</b> .....	<b>28</b>
<b>F.2</b>	<b>Apparatus</b> .....	<b>28</b>
<b>F.3</b>	<b>Conditions</b> .....	<b>28</b>
<b>F.4</b>	<b>Isolation resistance of the coating</b> .....	<b>28</b>
<b>F.4.1</b>	<b>Procedure</b> .....	<b>28</b>
<b>F.4.2</b>	<b>Calculation</b> .....	<b>29</b>
<b>F.5</b>	<b>Results</b> .....	<b>29</b>
<b>F.6</b>	<b>Checking intervals</b> .....	<b>29</b>
<b>Annex G (informative) A-deviations</b> .....		<b>30</b>
<b>Bibliography</b> .....		<b>31</b>

## European foreword

This document (EN 12819:2019) has been prepared by Technical Committee CEN/TC 286 “Liquefied petroleum gas equipment and accessories”, the secretariat of which is held by NSAI.

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 September 2019, and conflicting national standards shall be withdrawn at the latest by September 2019.

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 12819:2009.

This document was thereby technically revised.

In using this document, prepared in the field of application of Article 153 of the treaty on the functioning of the European Union, users are aware that standards have no formal legal relationship with Directives that may have been made under Article 153 of the treaty on the functioning of the European Union. In addition, national legislation in the Member states may contain more stringent requirements than the minimum requirements of a Directive based on Article 153. Information on the relationship between the national legislation implementing Directives based on Article 153 and this EN may be given in a national foreword of the national standard implementing this EN.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## Introduction

Inspection and requalification regimes for pressure vessels greater than 13 m<sup>3</sup> have developed in various countries in different ways that range from defined to variable inspection periods with requalification regimes achieved by various methods. This European Standard for inspection and requalification is based on European countries' legislation and codes of practice and industries' codes of practice. In addition, use of LPG in different applications has encouraged the industry to approach the requirements for inspection and requalification in different ways for each application.

This document calls for the use of substances and procedures that can be injurious to health if adequate precautions are not taken. It refers only to technical suitability and does not absolve the user from legal obligations relating to health and safety at any stage.

Protection of the environment is a key political issue in Europe and elsewhere, for CEN/TC 286 this is covered in CEN/TS 16765 [1], and this document should be read in conjunction with this standard.

It has been assumed in the drafting of this document that execution of its provisions is entrusted to appropriately qualified and experienced people.

## 1 Scope

This document specifies requirements for:

- a) routine inspection, periodic inspection and requalification of fixed LPG pressure vessels of sizes greater than 13 m<sup>3</sup>, and associated fittings;
- b) marking pressure vessels and/or keeping records, as appropriate, as a result of routine inspection, periodic inspection and requalification.

This document excludes refrigerated storage.

## 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.

EN 1330-9, *Non-destructive testing - Terminology - Part 9: Terms used in acoustic emission testing*

EN 13477-1, *Non-destructive testing - Acoustic emission - Equipment characterisation - Part 1: Equipment description*

EN 13477-2, *Non-destructive testing - Acoustic emission - Equipment characterisation - Part 2: Verification of operating characteristic*

EN 13554, *Non-destructive testing - Acoustic emission testing - General principles*

EN 14129, *LPG Equipment and accessories - Pressure relief valves for LPG pressure vessels*

EN 14584, *Non-destructive testing - Acoustic emission testing - Examination of metallic pressure equipment during proof testing - Planar location of AE sources*

EN 16631, *LPG equipment and accessories - Pressure relief valves for LPG pressure vessels - Reconditioning requirements*

## 3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

### 3.1

#### **periodic inspection**

external inspection of the visible parts of a pressure vessel and its fittings at defined intervals

### 3.2

#### **routine inspection**

external inspection of the visible parts of a pressure vessel and its fittings, carried out more frequently than periodic inspections