



Institut luxembourgeois de la normalisation
de l'accréditation, de la sécurité et qualité
des produits et services

ILNAS-EN 12542:2020

LPG equipment and accessories - Static welded steel cylindrical pressure vessels, serially produced for the storage of Liquefied Petroleum Gas

Équipements pour gaz de pétrole liquéfié
et leurs accessoires - Réservoirs
cylindriques fixes, aériens, en acier
soudé, fabriqués en série pour le

Flüssiggas-Geräte und Ausrüstungsteile -
Ortsfeste, geschweißte zylindrische
Behälter aus Stahl, die serienmäßig für
die Lagerung von Flüssiggas (LPG)

08/2020



National Foreword

This European Standard EN 12542:2020 was adopted as Luxembourgish Standard ILNAS-EN 12542:2020.

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- Participate in the design of standards
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- Participate in technical committee meetings

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EUROPEAN STANDARD ^{ILNAS-EN 12542:2020} **EN 12542**
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English Version

**LPG equipment and accessories - Static welded steel
cylindrical pressure vessels, serially produced for the
storage of Liquefied Petroleum Gas (LPG) having a volume
not greater than 13 m³ - Design and manufacture**

Équipements pour gaz de pétrole liquéfié et leurs
accessoires - Réservoirs cylindriques fixes, aériens, en
acier soudé, fabriqués en série pour le stockage de gaz
de pétrole liquéfié (GPL) ayant un volume inférieur ou
égal à 13 m³ - Conception et fabrication

Flüssiggas-Geräte und Ausrüstungsteile - Ortsfeste,
geschweißte zylindrische Behälter aus Stahl, die
serienmäßig für die Lagerung von Flüssiggas (LPG)
hergestellt werden, mit einem Fassungsvermögen bis
13 m³ - Gestaltung und Herstellung

This European Standard was approved by CEN on 15 June 2020.

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

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

Contents

Page

European foreword.....	6
Introduction	7
1 Scope	8
2 Normative references	8
3 Terms and definitions	10
3.1 General terms	10
3.2 Terms for coatings	12
4 Materials.....	12
4.1 Environmental.....	12
4.2 Shells and ends.....	12
4.3 Pressure parts other than shell or ends	14
4.4 Parts welded to the pressure vessel.....	14
4.5 Welding consumables.....	14
4.6 Inspection documents for materials	14
4.7 Non-metallic materials (gaskets)	14
5 Design	14
5.1 General.....	14
5.2 Temperature.....	15
5.3 Pressure.....	15
5.4 Vacuum conditions	15
5.5 Support loadings	16
5.6 Lifting lugs loadings	16
6 Openings.....	16
6.1 General.....	16
6.2 Reinforcement.....	16
6.3 Position of welds and openings.....	16
7 Workmanship and manufacture.....	16
7.1 General.....	16
7.2 Environment.....	17
7.3 Control and traceability of materials.....	17
7.4 Manufacturing tolerances	17
7.5 Acceptable weld details	17
7.6 Formed pressure parts.....	18
7.7 Welding.....	20
7.8 Post weld heat treatment.....	21
7.9 Repairs	22
8 Non-pressure attachments	22
8.1 Attachments	22
8.2 Position	22
8.3 Vent hole.....	22
9 Inspection and testing	23
9.1 Visual examination of welds	23
9.2 Non-destructive testing (NDT)	23

9.3	Non-destructive testing techniques.....	24
9.4	Marking for non-destructive testing.....	25
9.5	Qualification of personnel.....	25
9.6	Acceptance criteria.....	25
9.7	Production test plates (coupon plates)	26
9.8	Final assessment.....	27
10	Surface treatment and finishing.....	28
10.1	Environmental considerations	28
10.2	Above ground pressure vessels.....	28
10.3	Underground pressure vessels.....	29
10.4	Finishing operations.....	29
11	Marking and certification	29
12	Records and documentation.....	30
12.1	Records to be obtained by the manufacturer.....	30
12.2	Documents to be prepared by the manufacturer.....	30
	Annex A (informative) Design pressure and filling conditions.....	31
A.1	Above ground pressure vessels.....	31
A.1.1	Design pressure (p).....	31
A.1.2	Filling conditions	31
A.1.3	Calculation of maximum fill	32
A.2	Underground pressure vessels — Design pressure	32
	Annex B (normative) Tolerances on pressure vessels	33
B.1	Mean external diameter	33
B.2	Out of roundness.....	33
B.3	Deviation from the straight line	33
B.4	Irregularities in circular profile.....	33
B.5	Thickness tolerance.....	34
B.6	Profile.....	34
B.7	Surface alignment.....	35
B.8	Attachments, nozzles and fittings.....	35
	Annex C (normative) Hydraulic pressure test.....	36
C.1	Temporary fittings	36
C.2	Pressure gauges	36
C.3	Pressurizing agent.....	36
C.4	Avoidance of shocks.....	36
C.5	Test procedure	36
	Annex D (normative) Imperfections.....	37
	Annex E (normative) Design formulae for pressure vessels.....	39
E.1	Allowable stresses.....	39
E.2	Design formulae	39

E.2.1	General.....	39
E.2.2	Cylindrical shell calculation.....	39
E.2.3	Torispherical end calculation.....	39
E.2.4	Ellipsoidal end calculation.....	40
E.2.5	Hemispherical ends.....	42
E.2.6	Equations for calculating β	42
E.3	Nozzle reinforcement.....	43
E.3.1	General.....	43
E.3.2	Size of openings.....	43
E.3.3	Distance between openings or branches.....	43
E.3.4	Openings and branches.....	44
E.3.5	Cylindrical shells and ends with openings.....	44
E.3.6	Shell reinforcement.....	44
E.3.7	Extent of reinforcement.....	44
E.3.8	Elliptical openings.....	44
E.3.9	Welded branches.....	45
E.3.10	Compensating plates.....	45
E.3.11	Reinforcement – General.....	45
E.3.12	Reinforcement by pads.....	45
E.3.13	Reinforcement by branches.....	46
E.3.14	Branch connections normal to the pressure vessel wall.....	46
Annex F (informative)	Measurement of shell peaking.....	50
F.1	Profile gauge.....	50
F.2	Peaking survey.....	50
Annex G (informative)	Examples of joints.....	53
Annex H (informative)	Method of determining reflectivity indices (above ground pressure vessels).....	57
Annex I (normative)	External protection of underground pressure vessels.....	58
I.1	General.....	58
I.2	Unmonitored protection systems.....	58
I.3	Monitored protection systems.....	58
I.3.1	Systems incorporating cathodic protection.....	58
I.3.2	Systems incorporating a protective envelope.....	59
I.3.3	Other systems.....	59
Annex J (informative)	Exterior corrosion protective coating with special performance against chemical and mechanical attacks.....	60
J.1	General.....	60

J.2	Requirements.....	60
J.2.1	General requirements.....	60
J.2.2	Requirements for the coating material	60
J.2.3	Requirements for the coating.....	61
J.2.4	Requirements for the coating process	62
J.3	Testing.....	62
J.3.1	Testing for the coating material.....	62
J.3.2	Testing for the coating	63
J.3.3	Documentation of the coating procedure	64
J.3.4	Test reports and certificates.....	65
J.4	Supervision during production	65
	Annex ZA (informative) Relationship between this European Standard and the essential requirements of EU Directive 2014/68/EU	66
	Bibliography	68

European foreword

This document (EN 12542:2020) 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 February 2021, and conflicting national standards shall be withdrawn at the latest by February 2021.

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 has been prepared under a standardization request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

This document supersedes EN 12542:2010.

The following main changes have been introduced during the revision of EN 12542:2010:

- a reference to “CEN/TS 16765 LPG equipment and accessories - Environmental considerations for CEN/TC 286 standards” has been added and the existing wording has been amended (including the deletion of environmental references throughout this document);
- Annex J Environmental checklist has been deleted;
- inclusion of the use of compensation calculations from EN 13445-3:2014, in order to reduce the distance between openings or branches;
- a new informative Annex J Exterior corrosion protective coating with special performance against chemical and mechanical attacks has been added.

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

Introduction

This document calls for the use of substances and procedures that may be injurious to health and/or the environment if adequate precautions are not taken. It refers only to technical suitability and does not absolve the user from legal obligations 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, *LPG equipment and accessories — Environmental considerations for CEN/TC 286 standards*, and this Technical Specification should be read in conjunction with this document. This Technical Specification provides guidance on the environmental aspects to be considered regarding equipment and accessories produced for the LPG industry and the following is addressed:

- a) design;
- b) manufacture;
- c) packaging;
- d) use and operation;
- e) disposal.

Provisions should be restricted to a general guidance. Limit values are specified in national laws.

It is recommended that manufacturers develop an environmental management policy. For guidance see the ISO 14000 series.

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

All pressures are gauge pressures unless otherwise stated.

NOTE This document requires measurement of material properties, dimensions and pressures. All such measurements are subject to a degree of uncertainty due to tolerances in measuring equipment, etc. It may be beneficial to refer to the leaflet "Measurement Uncertainty Leaflet (SP INFO 2000 27 uncertainty.pdf)".