Gas supply systems - Pipelines for maximim operating pressure up to and including 16 bar - Part 3: Specific functional recommendations for steel

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EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 12007-3:2000 sisaldab Euroopa standardi EN 12007-3:2000 ingliskeelset teksti. Käesolev dokument on jõustatud 17.07.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 12007-3:2000 consists of the English text of the European standard EN 12007-3:2000. This document is endorsed on 17.07.2000 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: This European Standard describes the specific functional recommendations for steel pipelines in addition to the general functional recommendations of prEN 12007-1 for maximum operating pressures up to and including 16 bar. This European Standard specifies common basic principles for gas supply systems.	**Scope:** This European Standard describes the specific functional recommendations for steel pipelines in addition to the general functional recommendations of prEN 12007-1 for maximum operating pressures up to and including 16 bar. This European Standard specifies common basic principles for gas supply systems.

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English version

Gas supply systems – Pipelines for maximum operating pressure up to and including 16 bar

Part 3: Specific functional recommendations for steel

Systèmes d'alimentation en gaz – Canalisations pour pression maximale de service inférieure ou égale à 16 bar – Partie 3: Recommandations fonctionnelles spécifiques pour l'acier

Gasversorgungssysteme – Rohrleitungen mit einem maximal zulässigen Betriebsdruck bis einschließlich 16 bar – Teil 3: Besondere funktionale Empfehlungen für Stahl

This European Standard was approved by CEN on 1999-04-09.

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

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Contents

Foreword

This European Standard has been prepared by Technical Committee CEN/TC 234 "Gas supply", 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 July 2000, and conflicting national standards shall be withdrawn at the latest by July 2000.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

There is a complete suite of functional standards prepared by CEN/TC 234 "Gas Supply" to cover all parts of the gas supply system from the input of gas to the transmission system up to the inlet connection of the gas appliances, whether for domestic, commercial or industrial purposes.

In preparing this standard a basic understanding of gas supply by the user has been assumed.

Gas supply systems are complex and the importance on safety of their construction and use has led to the development of very detailed codes of practice and operating manuals in the member countries. These detailed statements embrace recognised standards of gas engineering and the specific requirements imposed by the legal structures of the member countries.

1 Scope

This European Standard describes the specific functional recommendations for steel pipelines in addition to the general functional recommendations of EN 12007-1 for maximum operating pressures up to and including 16 bar.

This European Standard specifies common basic principles for gas supply systems. Users of this European Standard should be aware that more detailed national standards and/or codes of practice can exist in the CEN member countries.

This European Standard is intended to be applied in association with these national standards and/or codes of practice setting out the above mentioned principles.

2 Normative references

This European Standard incorporates by dated or undated references, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

prEN 1092-1	Flanges and their joints - Circular flanges for pipes, valves, fittings and accessories, PN designated - Part 1: Steel flanges
EN 1514-1	Flanges and their joints - Dimensions of gaskets for PN-designated flanges - Part 1: Non-metallic flat gaskets with or without inserts
EN 1514-2	Flanges and their joints - Dimensions of gaskets for PN-designated flanges - Part 2: Spiral wound gaskets for use with steel flanges
EN 1514-3	Flanges and their joints - Dimensions of gaskets for PN-designated flanges - Part 3: Non-metallic PTFE envelope gaskets
EN 1514-4	Flanges and their joints - Dimensions of gaskets for PN-designated flanges - Part 4: Corrugated flat or grooved metallic and filled metallic gaskets for use with steel flanges
prEN 1515-1	Flanges and their joints - Bolting - Part 1: Selection of bolting
prEN 1515-2	Flanges and their joints - Bolting - Part 2: Combination of flange and bolting materials for steel flanges - PN designated
prEN 1591	Flanges and their joints - Design rules for gasketed circular flange connections - Calculation method
prEN 1594	Gas supply systems - Pipelines - Maximum operating pressure over 16 bar - Functional requirements
EN 10204	Metallic products - Types of inspection documents

EN 10208-1	Steel pipes for pipelines for combustible fluids - Technical delivery conditions - Part 1: Pipes of requirement class A
EN 10208-2	Steel pipes for pipelines for combustible fluids - Technical delivery conditions - Part 2: Pipes of requirement class B
ENV 10220	Seamless and welded steel tubes - Dimensions and masses per unit length
prEN 10226-1	Pipe threads where pressure tight joints are made on the threads - Part 1: Designation, dimensions and tolerances
prEN 10285	Steel tubes and fittings for on and offshore pipelines - External three layer extruded polyethylene based coatings
prEN 10286	Steel tubes and fittings for on and offshore pipelines - External three layer extruded polypropylene based coatings
prEN 10287	Steel tubes and fittings for on and offshore pipelines - External fused polyethylene based coatings
prEN 10288	Steel tubes and fittings for on and offshore pipelines - External two layer extruded polyethylene based coatings
prEN 10289	Steel tubes and fittings for on and offshore pipelines - External liquid applied epoxy and epoxy-modified coatings
prEN 10290	Steel tubes and fittings for on and offshore pipelines - External liquid applied polyurethane and polyurethane-modified coatings
EN 12007-1	Gas supply systems - Pipelines for maximum operating pressure up to and including 16 bar - Part 1: General functional recommendations
EN 12068	Cathodic protection - External organic coatings for the corrosion protection of buried or immersed steel pipelines used in conjunction with cathodic protection - Tapes and shrinkable materials
prEN 12560-1	Flanges and their joints - Dimensions of gaskets for Class-designated flanges - Part 1: Non-metallic flat gaskets with or without inserts
prEN 12560-2	Flanges and their joints - Dimensions of gaskets for Class-designated flanges - Part 2: Spiral wound gaskets for use with steel flanges
prEN 12560-3	Flanges and their joints - Dimensions of gaskets for Class-designated flanges - Part 3: Non-metallic PTFE envelope gaskets
prEN 12560-4	Flanges and their joints - Dimensions of gaskets for Class-designated flanges - Part 4: Corrugated, flat or grooved metallic and filled metallic gaskets for use with steel flanges
prEN 12560-5	Flanges and their joints - Dimensions of gaskets for Class-designated flanges - Part 5: Metallic ring-joint gaskets for use with steel flanges
prEN 12732	Gas supply systems - Welding steel pipework - Functional requirements

3 Definitions

For the purposes of this standard, the following definitions apply:

3.1 compression joint: A type of joint in which gas tightness is achieved by compression within a socket with or without a seal.

3.2. threaded joint: A type of joint in which gas tightness is achieved by metal to metal contact within threads with the assistance of a sealant.

3.3 flanged joint: A type of joint in which gas tightness is achieved by compression of a gasket between the faces of two flanges.

3.4 insulating joint: A fitting installed to insulate electrically one section of pipeline from another.

3.5 inspection: The process of measuring, examining, testing, gauging or otherwise determining the status of items of the pipeline system or installation and comparing it with the applicable requirements.

3.6 pipeline: A system of pipework with all associated equipment and stations up to the point of delivery. This pipework is mainly below ground but includes also above ground parts.

3.7 pipeline components: The elements from which the pipeline is constructed. The following are distinct pipeline elements: