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Sestavni deli sistemov za oskrbo uporabnikov s tekočimi gorivi

Components for supply systems for consuming units with liquid fuels

Komponenten für Versorgungsanlagen für Verbrauchsstellen mit flüssigen Brennstoffen

Ta slovenski standard je istoveten z: **prEN 12514**

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27.060.10	Gorilniki na tekoče in trdo gorivo	Liquid and solid fuel burners

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English Version

Components for supply systems for consuming units with liquid fuels

Komponenten für Versorgungsanlagen für Verbrauchsstellen mit flüssigen Brennstoffen

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 47.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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Contents

Page

European foreword

This document (prEN 12514:2018) has been prepared by Technical Committee CEN/TC 47 "Atomizing oil burners and their components - Function - Safety - Testing", the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

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 Directives.

For relationship with EU Directives, see informative Annex ZA, ZB and ZC, which is an integral part of this document.

Attention is drawn that national regulations of some countries may exist on the installation of the components described in this standard. It is the obligation of the user to make sure these regulations are being followed.

According to editions 2000 the following fundamental changes are given:

— standards new structured;

— new components for supply systems included;

— technical requirements revised;

— updating of the terms and definitions;

— merging of components to series;

— fuels categorized and new fuels added;

— nominal life time defined;

— requirements for flood proof components included;

— selections of materials;

— marking, packing and instructions revised;

— harmonization of the standard to the Regulation (EU) 305/2011 (Construction Product Regulation — CPR), Measuring Instruments Directive (MID) 2014/32/EU and Machinery Directive (MD) 2006/42/EC.

This document has been prepared under mandate M/131 "Pipes, tanks and ancillaries not in contact with water intended for human consumption" given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EC Directives.

For relationship with the Regulation (EU) 305/2011 (Construction Product Regulation — CPR), see informative Annex ZA, which is an integral part of this document.

For relationship with other EC Directives, see informative Annex ZB and ZC, which is an integral part of this document.

Introduction

Pressure values given in this standard are given as gauge pressure (pressure exceeding atmospheric pressure) unless noted otherwise. Vacuum is therefore designated by a negative value.

1 Scope

This document specifies the safety and performance requirements and tests methods for the components for supply systems. Their intended use is the supply with liquid fuel for one or more consuming units from one or more tanks.

NOTE For examples of supply systems see Annex D.

This document applies to pressurized, negative pressurized, unpressurised, underground, above ground, inside and/or outside systems to supply liquid fuels.

The components for supply systems covered by this document are piping kits/systems and their components.

Not covered by this document are items belonging to the consuming unit (e.g.: heating/cooling appliances in buildings) and items used for the mounting and support of components.

Not covered by this document are items with the intended use of gas for building heating/cooling systems and any items of heating networks.

Not covered are items used for drainage (including highways) and disposal of other liquids and gaseous waste, supply of gases, pressure and vacuum systems, communications, sanitary and cleaning fixtures and storage fixtures.

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.

prEN 267:2014, *Forced draught burners for liquid fuels*

EN 472:1994, *Pressure gauges - Vocabulary*

EN 590, *Automotive fuels — Diesel — Requirements and test methods*

EN 682, *Elastomeric Seals - Materials requirements for seals used in pipes and fittings carrying gas and hydrocarbon fluids*

EN 837-1, *Pressure gauges - Part 1: Bourdon tube pressure gauges - Dimensions, metrology, requirements and testing*

EN 837-3, *Pressure gauges - Part 3: Diaphragm and capsule pressure gauges - Dimensions, metrology, requirements and testing*

EN 1127-1, *Explosive atmospheres - Explosion prevention and protection - Part 1: Basic concepts and methodology*

EN 1503-1, *Valves — Materials for bodies, bonnets and covers — Part 1: Steels specified in European standards*

EN 1503-2, *Valves — Materials for bodies, bonnets and covers — Part 2: Steels other than those specified in European standards*

EN 1503-3, *Valves — Materials for bodies, bonnets and covers — Part 3: Cast irons specified in European standards*

EN 1503-4, *Valves — Materials for bodies, bonnets and covers — Part 4: Copper alloys specified in European Standards*

EN 10151, *Stainless steel strip for springs - Technical delivery conditions*

EN 10204, *Metallic products - Types of inspection documents*

EN 10270-3, *Steel wire for mechanical springs - Part 3: Stainless spring steel wire*

EN 12170, *Heating systems in buildings - Procedure for the preparation of documents for operation, maintenance and use - Heating systems requiring a trained operator*

EN 12171, *Heating systems in buildings - Procedure for the preparation of documents for operation, maintenance and use - Heating systems not requiring a trained operator*

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 13160-1:2016, *Leak detection systems — Part 1: General principles*

EN 13341, *Static thermoplastic tanks for above ground storage of domestic heating oils, kerosene and diesel fuels — Blow moulded and rotationally moulded polyethylene tanks and rotationally moulded tanks made of anionically polymerized polyamide 6 — Requirements and test methods*

EN 13906-1, *Cylindrical helical springs made from round wire and bar - Calculation and design - Part 1 : Compression springs*

EN 13906-2, *Cylindrical helical springs made from round wire and bar - Calculation and design - Part 2: Extension springs*

EN 14125, *Thermoplastic and flexible metal pipework for underground installation at petrol filling stations*

EN 14214, *Automotive fuels — Fatty acid methyl esters (FAME) for diesel engines — Requirements and test methods*

EN 14291, *Foam producing solutions for leak detection on gas installations*

EN 14585-1, *Corrugated metal hose assemblies for pressure applications - Part 1: Requirements*

EN 60730-1:2016, *Automatic electrical controls - Part 1: General requirements (IEC 60730-1)*

EN ISO 2719, *Determination of flash point - Pensky-Martens closed cup method (ISO 2719)*

EN ISO 6806, *Rubber hoses and hose assemblies for use in oil burners - Specification (ISO 6806)*

EN ISO 9606-2, *Qualification test of welders - Fusion welding - Part 2: Aluminium and aluminium alloys (ISO 9606-2)*

EN ISO 9606-3, *Approval testing of welders - Fusion welding - Part 3: Copper and copper alloys (ISO 9606-3)*

EN ISO 9606-4, *Approval testing of welders - Fusion welding - Part 4: Nickel and nickel alloys (ISO 9606-4)*

EN ISO 9606-5, *Approval testing of welders - Fusion welding - Part 5: Titanium and titanium alloys, zirconium and zirconium alloys (ISO 9606-5)*

EN ISO 10497, *Testing of valves - Fire type-testing requirements (ISO 10497)*

EN ISO 15609-1, *Specification and qualification of welding procedures for metallic materials - Welding procedure specification - Part 1: Arc welding (ISO 15609-1)*

EN ISO 15609-2, *Specification and qualification of welding procedures for metallic materials - Welding procedure specification - Part 2: Gas welding (ISO 15609-2)*

EN ISO 15609-3, *Specification and qualification of welding procedures for metallic materials - Welding procedures specification - Part 3: Electron beam welding (ISO 15609-3)*

EN ISO 15609-4, *Specification and qualification of welding procedures for metallic materials - Welding procedure specification - Part 4: Laser beam welding (ISO 15609-4)*

EN ISO 15609-5, *Specification and qualification of welding procedures for metallic materials - Welding procedure specification - Part 5: Resistance welding (ISO 15609-5)*

EN ISO 15612, *Specification and qualification of welding procedures for metallic materials - Qualification by adoption of a standard welding procedure (ISO 15612)*

EN ISO 15614-7, *Specification and qualification of welding procedures for metallic materials - Welding procedure test - Part 7: Overlay welding (ISO 15614-7)*

EN ISO 15614-11, *Specification and qualification of welding procedures for metallic materials - Welding procedure test - Part 11: Electron and laser beam welding (ISO 15614-11)*

EN ISO 19879:2010, *Metallic tube connections for fluid power and general use - Test methods for hydraulic fluid power connections (ISO 19879:2010)*

EN ISO 23553-1:2014, *Safety and control devices for oil burners and oil-burning appliances - Particular requirements - Part 1: Automatic and semi-automatic valves (ISO 23553-1:2014)*

ISO 1817, *Rubber, vulcanized or thermoplastic — Determination of the effect of liquids*

ISO 3601-3, *Fluid power systems — O-rings — Part 3: Quality acceptance criteria (ISO 3601-3)*

ISO 6508-1, *Metallic materials — Rockwell hardness test — Part 1: Test method*

ISO/TR 7620, *Rubber materials — Chemical resistance*

CEN/TS 15223, *Plastics piping systems - Validated design parameters of buried thermoplastics piping systems*

PD CLC/TR 60079-32-1, *Explosive atmospheres — Electrostatic hazards, guidance*

OIML R 117-1:2007, *Dynamic measuring systems for liquids other than water*

OFS E104:2015, *Filters, Strainers and Water Separation for use with Oil Supply Systems*

EOTA/TR 021, *Reaction to fire requirements for small components*

3 Terms, definitions and symbols

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

NOTE The English, French and German terms are listed in a vocabulary, see Annex G.

3.1 Terms and definitions

3.1.1 General

3.1.1.1
piping kit
construction product of at least two separate components

3.1.1.2
component
construction product of a supply system

Note 1 to entry: A component may consist of several parts.

3.1.1.3
electrical component
construction product of a supply system driven by electrical power

3.1.1.4
component with shut-off function
component which shuts off the flow in pipelines

3.1.1.5
supply system
installation for the processing and supply of liquid fuels from the tank to the consuming unit

3.1.1.6
consuming unit
unit in which liquid fuels are converted into thermal and/or mechanical energy

Note 1 to entry: Consuming units, for instance, are specified by the following standards: EN 1, EN 267, EN 13842, EN 15034, EN 15035.

3.1.1.7
liquid fuel
fuel which is liquid at atmospheric pressure (see 4.16.1.1.)

3.1.1.8
tank
hollow body (container) for the storage of liquid fuels at atmospheric pressure including branches up to the first pipeline connection

[SOURCE: EN 13121-3:2008+A1:2010, 3.7, modified]