

## Painelaitestandardien tilannekatsaus

Luettelossa esitetään eurooppalaisen standardointijärjestön CENin teknisten komiteoiden

- CEN/TC 54 Unfired pressure vessels
- CEN/TC 74 Flanges and their joints
- CEN/TC 235 Gas pressure regulators and associated safety devices for use in gas transmission and distribution
- CEN/TC 267 Industrial piping and pipelines
- CEN/TC 268 Cryogenic vessels and specific hydrogen technologies applications
- CEN/TC 269 Shell and water-tube boilers
- CEN/TC 342 Metal hoses, hose assemblies, bellows and expansion joints

laatimat eurooppalaiset standardit ja valmisteilla olevat standardiehdotukset.

Edellä mainittujen teknisten komiteoiden ja niiden alaisten työryhmien toimintaa seurataan METSTAn kansallisessa standardointiryhmässä [SR 267 "Painelaitteet"](#). Standardointiryhmä SR 267 vastaa aihealueen standardiehdotuksiin liittyvistä päätöksistä, lähetettävistä Suomen kannanotoista ja kommenteista sekä osallistuu suomenkielisten käännösten valmisteluun. Ryhmän jäsenillä on pääsy ajantasaiseen standardien valmisteluaineistoon, jolloin oman toiminnan suunnittelussa on mahdollista ottaa huomioon tulevat standardit. Halutessaan on mahdollista osallistua myös standardien valmistelutyöhön eurooppalaisissa ja kansainvälisissä työryhmissä. Katso lisätietoa standardointiin osallistumisesta: <https://metsta.fi/osallistu/>.

Standardien laadinta etenee seuraavien vaiheiden kautta julkaisuun: työryhmävaihe – lausuntovaihe – äänestysvaihe. Joskus ehdotuksia valmistellaan ennen virallisen työn aloittamista alustavina työkohteina (Preliminary Work Item, PWI), myös nämä työkohteet esitetään luettelossa. Standardiehdotukset (prEN, prEN ISO ja ISO/DIS) ovat lausuntovaiheen aikana julkisesti kommentoitavana SFS:n lausuntopyyntöpalvelussa (<https://lausunto.sfs.fi/>).

Kaikki EN- ja EN ISO-standardit vahvistetaan Suomessa SFS-EN- ja SFS-EN ISO -standardeiksi. Julkaistut standardit (SFS-EN ja SFS-EN ISO) voi hankkia SFS:n verkkokaupasta (<https://sales.sfs.fi/>). Jos standardin otsikko esitetään luettelossa suomeksi, se on saatavissa myös suomenkielisenä käännöksenä.

Luetteloon on **keltaisella värillä** merkitty ne standardit ja standardiehdotukset, joiden tilanne on muuttunut edellisen tilannekatsauksen (17.5.2024) jälkeen.

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<p style="text-align: center;"><b>VALMIIT JULKAISUT</b> <b>CEN/TC 54 Unfired pressure vessels</b></p>		
TUNNUS	OTSIKKO	HUOM.
EN 286-1:1998 + A1:2002 + A2:2005 + AC:2005	Simple unfired pressure vessels designed to contain air or nitrogen - Part 1: Pressure vessels for general purposes	
EN 286-2:1992 + AC:1992	Simple unfired pressure vessels designed to contain air or nitrogen - Part 2: Pressure vessels for air braking and auxiliary systems for motor vehicles and their trailers	
EN 286-3:1994	Simple unfired pressure vessels designed to contain air or nitrogen - Part 3: Steel pressure vessels designed for air braking equipment and auxiliary pneumatic equipment for railway rolling stock	
EN 286-4:1994	Simple unfired pressure vessels designed to contain air or nitrogen - Part 4: Aluminium alloy pressure vessels designed for air braking equipment and auxiliary pneumatic equipment for railway rolling stock	
EN 764-1:2015+A1:2016	Painelaitteet. Osa 1: Sanasto	
EN 764-2:2012	Painelaitteet. Osa 2: Suureet, tunnuksset ja yksiköt	
EN 764-4:2014	Painelaitteet. Osa 4: Metallisten materiaalien teknisten toimitusehtojen laatiminen	
EN 764-5:2014	Painelaitteet. Osa 5: Metallisten materiaalien vaatimustenmukaisuuden osoittaminen ja ainestodistukset	
CEN/TR 764-6:2012	Painelaitteet. Osa 6: Käyttöohjeiden rakenne ja sisältö	
EN 764-7:2002 + AC:2006	Painelaitteet. Osa 7: Lämmittämättömien painelaitteiden turvajärjestelmät	
CEN/TS 764-8:2016	Pressure equipment and assemblies - Part 8: Proof test	
EN 13445-1:2021	Lämmittämättömät painesäiliöt. Osa 1: Yleistä	
EN 13445-2:2021 + A1:2023	Lämmittämättömät painesäiliöt. Osa 2: Materiaalit	(A1: Velvoittavat viittaukset, taulukko 4.1-1 ja liite A)
EN 13445-3:2021	Lämmittämättömät painesäiliöt. Osa 3: Suunnittelu	
EN 13445-4:2021 + A1:2023	Lämmittämättömät painesäiliöt. Osa 4: Valmistus	(A1: Hitsin kuumavetokoe)

<p style="text-align: center;"><b>VALMIIT JULKAISUT</b> <b>CEN/TC 54 Unfired pressure vessels</b></p>		
TUNNUS	OTSIKKO	HUOM.
EN 13445-5:2021 + A1:2024	Lämmittämättömät painesäiliöt. Osa 5: Tarkastus ja testaus	(A1: taulukko 6.6.2-1, testausryhmät, liite C). Käännös julkaistaan 12/2024
EN 13445-6:2021	Unfired pressure vessels - Part 6: Requirements for the design and fabrication of pressure vessels and pressure parts constructed from spheroidal graphite cast iron	
EN 13445-8:2021	Unfired pressure vessels - Part 8: Additional requirements for pressure vessels of aluminium and aluminium alloys	
CEN/TR 13445-9:2011	Unfired pressure vessels - Part 9: Conformance of the EN 13445 series to ISO 16528	
EN 13445-10:2021	Unfired pressure vessels - Part 10: Additional requirements for pressure vessels of nickel and nickel alloys	
EN 13445-11:2024	Unfired pressure vessels - Part 11: Additional requirements for pressure vessels of titanium and titanium alloys	
CEN/TR 13445-101:2015	Unfired pressure vessels - Example of application	
CEN/TR 13445-102:2015	Unfired pressure vessels - Part 102: Example of application of vertical vessel with bracket supports	
CEN/TS 13445-501:2018	Unfired pressure vessels - Acoustic emission for pressure vessels	
EN 13831:2007	Closed expansion vessels with built in diaphragm for installation in water	
EN 14359:2017	Gas-loaded accumulators for fluid power applications	
EN 15776:2022	Unfired pressure vessels - Requirements for the design and fabrication of pressure vessels and pressure vessel parts constructed from cast iron with an elongation after fracture equal or less than 15 %	

<p><b>VALMISTEILLA OLEVAT TYÖKOHTEET</b>  <b>CEN/TC 54 Unfired pressure vessels</b></p>		
TUNNUS	OTSIKKO	VAIHE
FprEN 286-1 rev	Simple unfired pressure vessels designed to contain air or nitrogen - Part 1: Pressure vessels for general purposes	tulossa 2. loppuäänestykseen
FprEN 286-2 rev	Simple unfired pressure vessels designed to contain air or nitrogen - Part 2: Pressure vessels for air braking and auxiliary systems for motor vehicles and their trailers	tulossa 2. loppuäänestykseen
FprEN 286-3 rev	Simple unfired pressure vessels designed to contain air or nitrogen - Part 3: Steel pressure vessels designed for air braking equipment and auxiliary pneumatic equipment for railway rolling stock	tulossa 2. loppuäänestykseen
FprEN 286-4 rev	Simple unfired pressure vessels designed to contain air or nitrogen - Part 4: Aluminium alloy pressure vessels designed for air braking equipment and auxiliary pneumatic equipment for railway rolling stock	tulossa 2. loppuäänestykseen
FprEN 764-7 rev	Pressure equipment - Part 7: Safety systems for unfired pressure equipment	tulossa loppuäänestykseen
EN 13445-3:2021/prA1	Unfired pressure vessels - Part 3: Design (lukuisia muutoksia, laajuus yli 200 sivua)	tulossa loppuäänestykseen
EN 13445-8:2021/prA1	Unfired pressure vessels - Part 8: Additional requirements for pressure vessels of aluminium and aluminium alloys (fatigue > 500 cycles)	lausuntokierros päättynyt 1/2019
prEN 13445-12	Unfired pressure vessels - Part 12: Additional requirements for pressure vessels constructed from copper and copper alloys	lausuntokierros päättynyt 8/2019
prEN 13445-14	Unfired pressure vessels - Part 14: Additional requirements for pressure equipment and pressure components fabricated with additive manufacturing methods	lausuntokierros 12.12.2024-6.3.2025
EN 13445-4:2021+A1:2023/prA2	Unfired pressure vessels - Part 4: Fabrication (clauses 5, 7.3, 9.2, 10.9, C.5.5, new Annex D)	työryhmä
prEN 14359 rev	Gas-loaded accumulators for fluid power applications	työryhmä
prCEN/TR xxxx	Unfired pressure vessels - New approaches to determine negligible creep of steels for EN 13445	työryhmä, tekninen raportti
prEN 13445-15	Unfired pressure vessels - Part 15: Specific requirements for hydrogen applications	alustava työkohde

VALMIIT JULKAISUT		
CEN/TC 74 Flanges and their joints		
TUNNUS	OTSIKKO	HUOM.
EN 1092-1:2018	Laipat ja laippaliitokset. Pyöreät laipat putkille, venttiileille, yhteille ja varusteille, PN-mitoitetut. Osa 1: Teräslaipat	
EN 1092-2:2023	Flanges and their joints - Circular flanges for pipes, valves, fittings and accessories, PN designated - Part 2: Cast iron flanges	
EN 1092-3:2003	Flanges and their joints - Circular flanges for pipes, valves, fittings and accessories, PN designated - Part 3: Copper alloy flanges	
EN 1092-3:2003/AC:2007	Flanges and their joints - Circular flanges for pipes, valves, fittings and accessories, PN designated - Part 3: Copper alloy flanges	
EN 1092-4:2002	Flanges and their joints - Circular flanges for pipes, valves, fittings and accessories, PN designated - Part 4: Aluminium alloy flanges	
EN 1333:2006	Laipat ja laippaliitokset. Putkiston osat. PN:n määritelmä ja valinta	
EN 1514-1:2024	Flanges and their joints - Dimensions of gaskets for PN-designated flanges - Part 1: Non-metallic flat gaskets with or without inserts	
EN 1514-2:2014 + A1:2021	Flanges and their joints - Gaskets for PN-designated flanges - Part 2: Spiral wound gaskets for use with steel flanges	
EN 1514-3:1997	Flanges and their joints - Dimensions of gaskets for PN-designated flanges - Part 3: Non-metallic PTFE envelope gaskets	
EN 1514-4:1997	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	
EN 1514-6:2003	Flanges and their joints - Dimensions of gaskets for PN-designated flanges - Part 6: Covered serrated metal gaskets for use with steel flanges	
EN 1514-7:2004	Flanges and their joints - Gaskets for PN-designated flanges - Part 7: Covered metal jacketed gaskets for use with steel flanges	
EN 1514-8:2004	Flanges and their joints - Dimensions of gaskets for PN-designated flanges - Part 8: Polymeric O-Ring gaskets for grooved flanges	
EN 1515-1:1999	Flanges and their joints - Bolting - Part 1: Selection of bolting	
EN 1515-2:2001	Flanges and their joints - Bolting - Part 2: Classification of bolt materials for steel flanges, PN designated	

VALMIIT JULKAISUT		
CEN/TC 74 Flanges and their joints		
TUNNUS	OTSIKKO	HUOM.
EN 1515-3:2005	Flanges and their joints - Bolting - Part 3: Classification of bolt materials for steel flanges, class designated	
EN 1515-4:2021	Flanges and their joints - Bolting - Part 4: Selection of bolting for equipment subject to the Pressure Equipment Directive 2014/68/EU	
EN 1515-4:2021/AC:2022	Flanges and their joints - Bolting - Part 4: Selection of bolting for equipment subject to the Pressure Equipment Directive 2014/68/EU	
EN 1591-1:2024	Flanges and their joints - Design rules for gasketed circular flange connections - Part 1: Calculation	
CEN/TR 1591-2:2020	Flanges and their joints - Design rules for gasketed circular flange connections - Part 2: Gasket parameters	
CEN/TR 1591-5:2012	Flanges and their joints - Design rules for gasketed circular flange connections - Part 5: Calculation method for full face gasketed joints	
CEN/TS 1591-3:2007	Flanges and their joints - Design rules for gasketed circular flange connections - Part 3: Calculation method for metal to metal contact type flanged joint	
EN 1591-4:2013	Flanges and their joints - Part 4: Qualification of personnel competency in the assembly of the bolted connections of critical service pressurized systems	
EN 1759-1:2004	Flanges and their joint - Circular flanges for pipes, valves, fittings and accessories, Class designated - Part 1: Steel flanges, NPS 1/2 to 24	
EN 1759-3:2003	Flanges and their joints - Circular flanges for pipes, valves, fittings and accessories, Class designated - Part 3: Copper alloy flanges	
EN 1759-1:2004	Flanges and their joint - Circular flanges for pipes, valves, fittings and accessories, Class designated - Part 1: Steel flanges, NPS 1/2 to 24	
EN 1759-3:2003	Flanges and their joints - Circular flanges for pipes, valves, fittings and accessories, Class designated - Part 3: Copper alloy flanges	
EN 1759-3:2003/AC:2004	Flanges and their joints - Circular flanges for pipes, valves, fittings and accessories, Class designated - Part 3: Copper alloy flanges	
EN 1759-4:2003	Flanges and their joint - Circular flanges for pipes, valves, fittings and accessories, class designated - Part 4: Aluminium alloy flanges	
EN 12560-1:2024	Flanges and their joints - Gaskets for Class-designated flanges - Part 1: Non-metallic flat gaskets with or without inserts	

<p style="text-align: center;"><b>VALMIIT JULKAISUT</b> <b>CEN/TC 74 Flanges and their joints</b></p>		
TUNNUS	OTSIKKO	HUOM.
EN 12560-2:2013	Flanges and their joints - Dimensions of gaskets for Class-designated flanges - Part 2: Spiral wound gaskets for use with steel flanges	
EN 12560-3:2001	Flanges and their joints - Gaskets for Class-designated flanges - Part 3: Non-metallic PTFE envelope gaskets	
EN 12560-4:2001	Flanges and their joints - Gaskets for Class-designated flanges - Part 4: Corrugated, flat or grooved metallic and filled metallic gaskets for use with steel flanges	
EN 12560-5:2001	Flanges and their joints - Gaskets for Class-designated flanges - Part 5: Metallic ring joint gaskets for use with steel flanges	
EN 12560-6:2003	Flanges and their joints - Gaskets for Class-designated flanges - Part 6: Covered serrated metal gaskets for use with steel flanges	
EN 12560-7:2004	Flanges and their joints - Gaskets for Class-designated flanges - Part 7: Covered metal jacketed gaskets for use with steel flanges	
EN 13555:2021	Flanges and their joints - Gasket parameters and test procedures relevant to the design rules for gasketed circular flange connections	
CR 13642:1999	Flanges and their joints - Design rules for gasketed circular flange connections - Background information	
EN 14772:2021	Flanges and their joints - Quality assurance inspection and testing of gaskets in accordance with the series of standards EN 1514 and EN 12560	
EN ISO 6708:1995	Pipework components - Definition and selection of DN (nominal size) (ISO 6708:1995)	

<b>VALMISTEILLA OLEVAT TYÖKOHTEET</b> <b>CEN/TC 74 Flanges and their joints</b>		
TUNNUS	OTSIKKO	VAIHE
FprCEN/TR 1591-6	Flanges and their joints - Design rules for gasketed circular flange connections - Background information	teknisen raportin äänestys päättynyt 11/2024, tulossa julkaisuun
EN 1092-1:2018/prA1	Flanges and their joints - Circular flanges for pipes, valves, fittings and accessories, PN designated - Part 1: Steel flanges	lausuntokierros päättynyt 2/2023
prEN 1092-3 rev	Flanges and their joints - Circular flanges for pipes, valves, fittings and accessories, PN designated - Part 3: Copper alloy flanges	lausuntokierros päättynyt 3/2022
prEN 1759-3 rev	Flanges and their joints - Circular flanges for pipes, valves, fittings and accessories, Class designated - Part 3: Copper alloy flanges	lausuntokierros päättynyt 12/2021
prEN 1759-4 rev	Flanges and their joint - Circular flanges for pipes, valves, fittings and accessories, class designated - Part 4: Aluminium alloy flanges	lausuntokierros päättynyt 3/2022
prEN 1514-6 rev	Flanges and their joints - Dimensions of gaskets for PN-designated flanges - Part 6: Covered serrated metal gaskets for use with steel flanges	alustava työkohde
prEN 12560-6 rev	Flanges and their joints - Gaskets for Class-designated flanges - Part 6: Covered serrated metal gaskets for use with steel flanges	alustava työkohde
prEN 1514-9	Flanges and their joints - Dimensions of gaskets for PN-designated flanges - Part 9: Metallic lens shaped gaskets for use with steel flanges	alustava työkohde, perustuu standardiin DIN 2696
prEN 1514-10	Flanges and their joints - Dimensions of gaskets for PN-designated flanges - Part 10: Diaphragm-weld packings and weld ring seals for use with steel flanges	alustava työkohde, perustuu standardiin DIN 2695



VALMIIT JULKAISUT		
CEN/TC 235 Gas pressure regulators and associated safety devices for use in gas transmission and distribution		
TUNNUS	OTSIKKO	HUOM.
EN 334:2019 + A1:2024	Gas pressure regulators for inlet pressure up to 10 MPa (100 bar)	
EN 14382:2019 + A1:2024	Gas safety shut-off devices for inlet pressure up to 10 MPa (100 bar)	

VALMISTEILLA OLEVAT TYÖKOHTEET		
CEN/TC 235 Gas pressure regulators and associated safety devices for use in gas transmission and distribution		
TUNNUS	OTSIKKO	VAIHE
prEN xxxx	Hydrogen Readiness of Gas Infrastructures - Requirements and Lab Test Procedure for Material Qualification of equipment	työryhmä

VALMIIT JULKAISUT		
CEN/TC 267 Industrial piping and pipelines		
TUNNUS	OTSIKKO	HUOM.
EN 13480-1:2024	Metalliset teollisuusputkistot. Osa 1: Yleistä	
EN 13480-2:2024	Metalliset teollisuusputkistot. Osa 2: Materiaalit	
EN 13480-3:2024	Metalliset teollisuusputkistot. Osa 3: Suunnittelu ja laskenta	Käännös julkaistaan 12/2024
EN 13480-4:2024	Metalliset teollisuusputkistot. Osa 4: Valmistus ja asennus	
EN 13480-5:2024	Metalliset teollisuusputkistot. Osa 5: Tarkastus ja testaus	
EN 13480-6:2024	Metallic industrial piping - Part 6: Additional requirements for buried piping	
CEN/TR 13480-7:2017	Metallic industrial piping - Part 7: Guidance on the use of conformity assessment procedures	
EN 13480-8:2024	Metallic industrial piping - Part 8: Additional requirements for aluminium and aluminium alloy piping	

VALMISTEILLA OLEVAT TYÖKOHTEET		
CEN/TC 267 Industrial piping and pipelines		
TUNNUS	OTSIKKO	VAIHE
prEN 13480-9	Metallic industrial piping - Part 9: Additional requirements for piping of nickel and nickel alloys	lausuntokierros päättynyt 12/2018
EN 13480-3:2024/prA1	Metallic industrial piping - Part 3: Design and calculation (Design for cyclic loading, Annex Q "Simplified pipe stress analysis" jne.)	työryhmä
EN 13480-4:2024/prA1	Metallic industrial piping - Part 4: Fabrication and installation (introduction of brazing and pressfitting)	alustava työkohde
EN 13480-5:2024/prA1	Metallic industrial piping - Part 5: Inspection and testing (introduction of brazing and pressfitting)	alustava työkohde
EN 13480-8:2024/prA1	Metallic industrial piping - Part 8: Additional requirements for aluminium and aluminium alloy piping	alustava työkohde
prEN 13480-10	Metallic industrial piping - Part 10: Additional requirements for piping of titanium and titanium alloys	alustava työkohde
prEN 13480-11	Metallic industrial piping - Part 11: Additional requirements for hydrogen application piping	alustava työkohde

VALMIIT JULKAISUT		
CEN/TC 268 Cryogenic vessels and specific hydrogen technologies applications		
TUNNUS	OTSIKKO	HUOM.
EN 1251-1:2000	Cryogenic vessels - Transportable vacuum insulated vessels of not more than 1000 litres volume - Part 1: Fundamental requirements	
EN 1251-2:2000 + AC:2006	Cryogenic vessels - Transportable vacuum insulated vessels of not more than 1000 litres volume - Part 2: Design, fabrication, inspection and testing	
EN 1626:2008	Cryogenic vessels - Valves for cryogenic service	
EN 1797:2001	Cryogenic vessels - Gas/material compatibility	
EN 12213:1998	Cryogenic vessels - Methods for performance evaluation of thermal insulation	
EN 13371:2001	Cryogenic vessels - Couplings for cryogenic service	
EN 13458-1:2002	Cryogenic vessels - Static vacuum insulated vessels - Part 1: Fundamental requirements	
EN 13458-2:2002 + AC:2006	Cryogenic vessels - Static vacuum insulated vessels - Part 2: Design, fabrication, inspection and testing	
EN 13530-1:2002	Cryogenic vessels - Large transportable vacuum insulated vessels - Part 1: Fundamental requirements	
EN 13530-2:2002 + A1:2004	Cryogenic vessels - Large transportable vacuum insulated vessels - Part 2: Design, fabrication, inspection and testing	
EN 13648-1:2008	Cryogenic vessels - Safety devices for protection against excessive pressure - Part 1: Safety valves for cryogenic service	
EN 13648-2:2002	Cryogenic vessels - Safety devices for protection against excessive pressure - Part 2: Bursting disc safety devices for cryogenic service	
EN 14197-1:2003	Cryogenic vessels - Static non-vacuum insulated vessels - Part 1: Fundamental requirements	
EN 14197-2:2003 + A1:2006 + AC:2006	Cryogenic vessels - Static non-vacuum insulated vessels - Part 2: Design, fabrication, inspection and testing	
EN 14197-3:2004 + A1:2005 + AC:2004	Cryogenic vessels - Static non vacuum insulated vessels - Part 3: Operational requirements	
EN 14398-1:2003	Cryogenic vessels - Large transportable non-vacuum insulated vessels - Part 1: Fundamental requirements	
EN 14398-2:2003 + A2:2008	Cryogenic vessels - Large transportable non-vacuum insulated vessels - Part 2: Design, fabrication, inspection and testing	

VALMIIT JULKAISUT		
CEN/TC 268 Cryogenic vessels and specific hydrogen technologies applications		
TUNNUS	OTSIKKO	HUOM.
EN 14398-3:2003 + A1:2005	Cryogenic vessels - Large transportable non vacuum insulated vessels - Part 3: Operational requirements	
EN 17124:2022	Hydrogen fuel - Product specification and quality assurance for hydrogen refuelling points dispensing gaseous hydrogen - Proton exchange membrane (PEM) fuel cell applications for vehicles	
EN 17127:2024	Outdoor hydrogen refuelling points dispensing gaseous hydrogen and incorporating filling protocols	
EN 17527:2021	Helium cryostats - Protection against excessive pressure	
EN ISO 17268:2020	Gaseous hydrogen land vehicle refuelling connection devices (ISO 17268:2020)	
EN ISO 20421-2:2017	Cryogenic vessels - Large transportable vacuum-insulated vessels - Part 2: Operational requirements (ISO 20421-2:2017)	
EN ISO 21009-2:2024	Cryogenic vessels - Static vacuum-insulated vessels - Part 2: Operational requirements (ISO 21009-2:2024)	
EN ISO 21012:2024	Cryogenic vessels – Hoses (ISO 21012:2024)	
EN ISO 21013-3:2016	Cryogenic vessels - Pressure-relief accessories for cryogenic service - Part 3: Sizing and capacity determination (ISO 21013-3:2016)	
EN ISO 21028-1:2016	Cryogenic vessels - Toughness requirements for materials at cryogenic temperature - Part 1: Temperatures below -80 degrees C (ISO 21028-1:2016)	
EN ISO 21028-2:2018	Cryogenic vessels - Toughness requirements for materials at cryogenic temperature - Part 2: Temperatures between -80 degrees C and -20 degrees C (ISO 21028-2:2018)	
EN ISO 21029-2:2015	Cryogenic vessels - Transportable vacuum insulated vessels of not more than 1 000 litres volume - Part 2: Operational requirements (ISO 21029-2:2015)	
EN ISO 23208:2019 + A1:2020	Cryogenic vessels - Cleanliness for cryogenic service (ISO 23208:2017)	
EN ISO 24490:2016	Cryogenic vessels - Pumps for cryogenic service (ISO 24490:2016)	

<p style="text-align: center;"><b>VALMISTEILLA OLEVAT TYÖKOHTEET</b></p> <p style="text-align: center;"><b>CEN/TC 268 Cryogenic vessels and specific hydrogen technologies applications</b></p>		
TUNNUS	OTSIKKO	VAIHE
prEN ISO 17268-1 rev	Gaseous hydrogen land vehicle refuelling connection devices - Part 1: Flow capacities up to and including 120 g/s	loppuäänestys 19.2. – 16.4.2025
prEN ISO 21028-1 rev	Cryogenic vessels - Toughness requirements for materials at cryogenic temperature - Part 1: Temperatures below -80 degrees C	lausuntokierros päättynyt 6/2024
prEN ISO 21009-1	Cryogenic vessels - Static vacuum-insulated vessels - Part 1: Design, fabrication, inspection and tests	lausuntokierros päättynyt 8/2024, korvaa standardin EN 13458-1
prEN ISO 24490 rev	Cryogenic vessels - Pumps for cryogenic service	lausuntokierros päättynyt 8/2024
prEN ISO 21013-3 rev	Cryogenic vessels - Pressure-relief accessories for cryogenic service - Part 3: Sizing and capacity determination	työryhmä
prEN ISO 20421-1	Cryogenic vessels - Large transportable vacuum-insulated vessels - Part 1: Design, fabrication, inspection and testing	työryhmä, korvaa standardit EN 13530-1 ja -2
prEN ISO 21010	Cryogenic vessels - Gas/material compatibility	työryhmä, korvaa standardin EN 1797
prEN ISO 21029-1	Cryogenic vessels — Transportable vacuum insulated vessels of not more than 1 000 litres volume — Part 1: Design, fabrication, inspection and tests	työryhmä, korvaa standardit EN 1251-1 ja -2
prEN ISO 17268-2	Gaseous hydrogen land vehicle refuelling connection devices — Part 2: Flow capacities greater than 120 g/s (ISO 17268-2)	työryhmä

VALMIIT JULKAISUT		
CEN/TC 269 Shell and water-tube boilers		
TUNNUS	OTSIKKO	HUOM.
EN 12952-1:2015	Vesiputkikattilat ja niihin liittyvät laitteistot. Osa 1: Yleistä	
EN 12952-2:2021	Vesiputkikattilat ja niihin liittyvät laitteistot. Osa 2: Kattiloiden ja niiden varusteiden paineenalasiin osiin tarkoitetut materiaalit	
EN 12952-3:2022	Vesiputkikattilat ja niihin liittyvät laitteistot. Osa 3: Paineenalaisten osien suunnittelu ja laskenta	
EN 12952-4:2011	Water-tube boilers and auxiliary installations - Part 4: In-service boiler life expectancy calculations	
EN 12952-5:2021	Vesiputkikattilat ja niihin liittyvät laitteistot. Osa 5: Paineenalaisten osien valmistus	
EN 12952-6:2021	Vesiputkikattilat ja niihin liittyvät laitteistot. Osa 6: Kattilan paineenalaisten osien valmistuksen aikainen tarkastus, dokumentointi ja merkintä	
EN 12952-7:2012	Vesiputkikattilat ja niihin liittyvät laitteistot. Osa 7: Vaatimukset kattilan varusteille	
EN 12952-8:2022	Water-tube boilers and auxiliary installations - Part 8: Requirements for firing systems for liquid and gaseous fuels for the boiler	
EN 12952-9:2022	Water-tube boilers and auxiliary installations - Part 9: Requirements for firing systems for pulverized solid fuels for the boiler	
EN 12952-10:2021	Vesiputkikattilat ja niihin liittyvät laitteistot. Osa 10: Vaatimukset sallitun paineen ylitykseltä suojaaville järjestelmille	
EN 12952-11:2007	Vesiputkikattilat ja niihin liittyvät laitteistot. Osa 11: Vaatimukset rajoitinlaitteille ja turvajärjestelmille	
EN 12952-12:2003	Vesiputkikattilat ja niihin liittyvät laitteistot. Osa 12: Laatuvaatimukset syöttö- ja kattilavedelle	
EN 12952-13:2003 + A1:2003	Water-tube boilers and auxiliary installations - Part 13: Requirements for flue gas cleaning systems	
EN 12952-14:2004	Water-tube boilers and auxiliary installations - Part 14: Requirements for flue gas DENOX-systems using liquefied pressurized ammonia and ammonia water solution	
EN 12952-15:2003	Water-tube boilers and auxiliary installations - Part 15: Acceptance tests	
EN 12952-16:2022	Vesiputkikattilat ja niihin liittyvät laitteistot. Osa 16: Vaatimukset kiinteän polttoaineen polttolaitteistoille arina- ja leijupoltossa	
CEN/TR 12952-17:2024	Water-tube boilers and auxiliary installations - Part 17: Guideline for the involvement of an inspection body independent of the manufacturer	Tekninen raportti
EN 12952-18:2012	Vesiputkikattilat ja niihin liittyvät laitteistot. Osa 18: Käyttöohjeet	
EN 12953-1:2012	Tulitorvikattilat. Osa 1: Yleistä	

VALMIIT JULKAISUT		
CEN/TC 269 Shell and water-tube boilers		
TUNNUS	OTSIKKO	HUOM.
EN 12953-2:2012	Tulitorvikattilat. Osa 2: Kattiloiden ja niiden varusteiden paineenalaisiin osiin tarkoitetut materiaalit	
EN 12953-3:2016 + AC:2024	Tulitorvikattilat. Osa 3: Paineenalaisten osien suunnittelu ja laskenta	Korjaus kohtaan 12.1
EN 12953-4:2018	Tulitorvikattilat. Osa 4: Kattilan paineenalaisten osien valmistus	
EN 12953-5:2020	Tulitorvikattilat. Osa 5: Tarkastukset valmistuksen aikana, dokumentaatio ja paineenalaisten osien tunnusmerkintä	
EN 12953-6:2011	Tulitorvikattilat. Osa 6: Vaatimukset kattilan varusteille	
EN 12953-7:2002	Shell boilers - Part 7: Requirements for firing systems for liquid and gaseous fuels for the boilers	
EN 12953-8:2001 + AC:2002	Tulitorvikattilat. Osa 8: Vaatimukset sallitun paineen ylitykseltä suojaaville järjestelmille	
EN 12953-9:2007	Tulitorvikattilat. Osa 9: Vaatimukset rajoitinlaitteille ja turvajärjestelmille	
EN 12953-10:2003	Shell boilers - Part 10: Requirements for feedwater and boiler water quality	
EN 12953-11:2003	Shell boilers - Part 11: Acceptance tests	
EN 12953-12:2003	Shell boilers - Part 12: Requirements for grate firing systems for solid fuels for the boiler	
EN 12953-13:2012	Tulitorvikattilat. Osa 13: Käyttöohjeet	
CR 12953-14:2002	Shell boilers - Part 14: Guideline for involvement of an inspection body independent of the manufacturer	Komitearaportti



<b>VALMISTEILLA OLEVAT TYÖKOHTEET</b> <b>CEN/TC 269 Shell and water-tube boilers</b>		
TUNNUS	OTSIKKO	VAIHE
EN 12953-6:2024	Shell boilers - Part 6: Requirements for equipment for the boiler	julkaistaan 12/2024
EN 12953-9:2024	Shell boilers - Part 9: Requirements for limiting devices of the boiler and accessories	julkaistaan 12/2024
prEN 12953-2 rev	Shell boilers - Part 2: Materials for pressure parts of boilers and accessories	tulossa loppuäänestykseen
prEN 12953-1 rev	Shell boilers - Part 1: General	tulossa loppuäänestykseen
prEN 12952-1 rev	Water-tube boilers and auxiliary installations - Part 1: General	lausuntokierros päättynyt 8/2024
prEN 12952-7 rev	Water-tube boilers and auxiliary installations - Part 7: Requirements for equipment for the boiler	alustava työkohde
prEN 12952-13 rev	Water-tube boilers and auxiliary installations - Part 13: Requirements for flue gas cleaning systems	alustava työkohde
prEN 12952-14 rev	Water-tube boilers and auxiliary installations - Part 14: Requirements for flue gas DENOX-systems using liquefied pressurized ammonia and ammonia water solution	alustava työkohde
prEN 12952-15 rev	Water-tube boilers and auxiliary installations - Part 15: Acceptance tests	alustava työkohde
prEN 12952-18 rev	Water-tube boilers and auxiliary installations - Part 18: Operating instructions	alustava työkohde
prEN 12953-3 rev	Shell boilers - Part 3: Design and calculation for pressure parts	alustava työkohde
prEN 12953-7 rev	Shell boilers - Part 7: Requirements for firing systems for liquid and gaseous fuels for the boilers	alustava työkohde
prEN 12953-8 rev	Shell boilers - Part 8: Requirements for safeguards against excessive pressure	alustava työkohde
prEN 12953-10 rev	Shell boilers - Part 10: Requirements for feedwater and boiler water quality	alustava työkohde
prEN 12953-11 rev	Shell boilers - Part 11: Acceptance tests	alustava työkohde
prEN 12953-12 rev	Shell boilers - Part 12: Requirements for grate firing systems for solid fuels for the boiler	alustava työkohde
prEN 12953-13 rev	Shell boilers - Part 13: Operating instructions	alustava työkohde
prCEN/TR 12953-14 rev	Shell boilers - Part 14: Guideline for involvement of an inspection body independent of the manufacturer	alustava työkohde

VALMIIT JULKAISUT		
CEN/TC 342 Metal hoses, hose assemblies, bellows and expansion joints		
TUNNUS	OTSIKKO	HUOM.
EN 14585:2024	Corrugated metal hose assemblies for pressure applications	
EN 14800:2007	Corrugated safety metal hose assemblies for the connection of domestic appliances using gaseous fuels	
EN 14917:2021	Metal bellows expansion joints for pressure applications	
EN 15266:2007	Stainless steel pliable corrugated tubing kits in buildings for gas with an operating pressure up to 0,5 bar	
EN 16617:2015	Pipework - Corrugated metal hose assemblies for combustible gas - Performance requirements, testing and marking	
EN ISO 7369:2020	Pipework - Metal hoses and hose assemblies - Vocabulary (ISO 7369:2020)	
EN ISO 10380:2012	Pipework - Corrugated metal hoses and hose assemblies (ISO 10380:2012)	
EN ISO 10806:2003	Pipework - Fittings for corrugated metal hoses (ISO 10806:2003)	
EN ISO 10807:1996	Pipework - Corrugated flexible metallic hose assemblies for the protection of electrical cables in explosive atmosphere (ISO 10807:1994)	
EN ISO 15465:2004	Pipework - Stripwound metal hoses and hose assemblies (ISO 15465:2004)	

VALMISTEILLA OLEVAT TYÖKOHTEET		
CEN/TC 342 Metal hoses, hose assemblies, bellows and expansion joints		
TUNNUS	OTSIKKO	VAIHE
EN 15266:2024	Stainless steel pliable corrugated tubing kits for gas installation pipework with an operating pressure up to 0,2 MPa (2 bar)	julkaistaan 12/2024
EN 14917:2021/prA1	Metal bellows expansion joints for pressure applications	lausuntokierros 26.9.-19.12.2024