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UUED STANDARDID JA STANDARDILAADSED DOKUMENDID

01 ÜLDKÜSIMUSED. TERMINOLOOGIA. STANDARDIMINE. DOKUMENTATSIOON

EVS-EN 61666:2010/A1:2021

Industrial systems, installations and equipment and industrial products - Identification of terminals within a system

Amendment to EN 61666:2010

Keel: en
Alusdokumendid: EN 61666:2010/A1:2021; IEC 61666:2010/A1:2021
Muudab dokumenti: EVS-EN 61666:2010

EVS-EN IEC 60757:2021

Code for designation of colours

This document specifies letter codes for designation of colours and provides rules for their combination to designate colour combinations. The letter codes are intended to be applied in the technical documentation of electrical installations, electrical equipment and products, and in markings of electrical equipment and products. This basic safety publication focusing on safety essential requirements is primarily intended for use by technical committees in the preparation of safety publications in accordance with the principles laid down in IEC Guide 104 and ISO/IEC Guide 51. It is not intended for use by manufacturers or certification bodies. One of the responsibilities of a technical committee is, wherever applicable, to make use of basic safety publications in the preparation of its publications. The requirements of this basic safety publication will not apply unless specifically referred to or included in the relevant publications. This document does not specify any requirements for the encoding of colour properties, nor for their visual representation. Such requirements are under the responsibility of the different technical committees.

Keel: en
Alusdokumendid: EN IEC 60757:2021; IEC 60757:2021
Asendab dokumenti: EVS-HD 457 S1:2003

03 TEENUSED. ETTEVÕTTE ORGANISEERIMINE, JUHTIMINE JA KVALITEET. HALDUS. TRANSPORT. SOTSIOLOOGIA

CEN/TR 17419-2:2021

Digital information interchange in the insurance industry - Transfer of electronic documents - Part 2: Implementation of EN 17419-1 in Open API 3.0 specification

This document specifies a concrete REST webservice API description of the processes and data (see EN 17419-1:2020 for more information) as an OpenAPI definition specified by the OpenAPI specification.

Keel: en
Alusdokumendid: CEN/TR 17419-2:2021

11 TERVISEHOOLDUS

EVS-EN 60601-1-10:2008+A1+A2:2021

Elektrilised meditsiiniseadmed. Osa 1-10: Üldnõuded esmasele ohutusele ja olulistele toimivusnäitajatele. Kollateraalstandard: Nõuded füsioloogiliste suletud ahelaga kontrollerite arendamisele

Medical electrical equipment - Part 1-10: General requirements for basic safety and essential performance - Collateral Standard: Requirements for the development of physiologic closed-loop controllers (IEC 60601-1-10:2007 + IEC 60601-1-10:2007/A1:2013 + IEC 60601-1-10:2007/A2:2020)

This International Standard applies to the BASIC SAFETY and ESSENTIAL PERFORMANCE of MEDICAL ELECTRICAL EQUIPMENT and MEDICAL ELECTRICAL SYSTEMS, hereafter referred to as ME EQUIPMENT and ME SYSTEMS. This collateral standard specifies requirements for the development (analysis, design, VERIFICATION and VALIDATION) of a PHYSIOLOGIC CLOSED-LOOP CONTROLLER (PCLC) as part of a PHYSIOLOGIC CLOSED-LOOP CONTROL SYSTEM (PCLCS) to control at least one PATIENT VARIABLE (i.e. a PHYSIOLOGIC VARIABLE) in ME EQUIPMENT and ME SYSTEMS. EXAMPLE A PATIENT VARIABLE can be a measure of body chemistry (e.g. electrolytes or blood glucose value), a physical property (e.g. body temperature, electrophysiologic characteristic, hemodynamic quantity), or a pharmaceutical concentration. This collateral standard applies to various types of PCLC, e.g. linear and non-linear, adaptive, fuzzy, neural networks. This collateral standard does not specify: − additional mechanical requirements; or − additional electrical requirements. This collateral standard applies to a closed-loop controller (see Figure 1) that sets the CONTROLLER OUTPUT VARIABLE in order to adjust (i.e., change or maintain) the measured PHYSIOLOGIC VARIABLE by relating it to the REFERENCE VARIABLE. A closed-loop controller that maintains a physical or chemical VARIABLE, using feedback that is not measured from a PATIENT, is outside the scope of this standard.

Keel: en

Alusdokumendid: IEC 60601-1-10:2007; EN 60601-1-10:2008; IEC 60601-1-10:2007/A1:2013; EN 60601-1-10:2008/A1:2015; IEC 60601-1-10:2007/A2:2020; EN 60601-1-10:2008/A2:2021
Konsolideerib dokumenti: EVS-EN 60601-1-10:2008
Konsolideerib dokumenti: EVS-EN 60601-1-10:2008/A1:2015
Konsolideerib dokumenti: EVS-EN 60601-1-10:2008/A2:2021

EVS-EN 60601-1-11:2015+A1:2021

Elektrilised meditsiiniseadmed. Osa 1-11: Üldised nõuded esmasele ohutusele ja olulistele toimimisnäitajatele. Kollateraalstandard: Nõuded koduses ravikeskkonnas kasutatavatele elektrilistele meditsiiniseadmetele ja -süsteemidele
Medical electrical equipment - Part 1-11: General requirements for basic safety and essential performance - Collateral Standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment (IEC 60601-1-11:2015 + IEC 60601-1-11:2015/A1:2020)

This International Standard applies to the BASIC SAFETY and ESSENTIAL PERFORMANCE of MEDICAL ELECTRICAL EQUIPMENT and MEDICAL ELECTRICAL SYSTEMS for use in the HOME HEALTHCARE ENVIRONMENT, as defined in 3.1, and specified by the MANUFACTURER in the instructions for use. This International Standard applies regardless of whether the ME EQUIPMENT or ME SYSTEM is intended for use by a LAY OPERATOR or by trained healthcare personnel . The HOME HEALTHCARE ENVIRONMENT includes: – the dwelling place in which a PATIENT lives; – other places where PATIENTS are present both indoors and outdoors, excluding professional healthcare facility environments where OPERATORS with medical training are continually available when PATIENTS are present. This International Standard does not apply to ME EQUIPMENT and ME SYSTEMS intended solely for use in the EMERGENCY MEDICAL SERVICES ENVIRONMENT, covered by IEC 60601-1-12 or solely for use in professional healthcare facilities covered by IEC 60601-1 without the additions of IEC 60601-1-12 or this collateral standard. Nonetheless, ME EQUIPMENT or ME SYSTEMS can be intended for multiple use environments, and as such, if also intended for use in the HOME HEALTHCARE ENVIRONMENT, are within the scope of this standard. EXAMPLE ME EQUIPMENT or ME SYSTEMS intended for both the HOME HEALTHCARE ENVIRONMENT and the professional healthcare facility environment. NOTE HOME HEALTHCARE ENVIRONMENT ME EQUIPMENT and ME SYSTEMS can frequently be used in locations with unreliable electrical sources and poor electrical grounding.

Keel: en
Alusdokumendid: IEC 60601-1-11:2015; EN 60601-1-11:2015; IEC 60601-1-11:2015/A1:2020; EN 60601-1-11:2015/A1:2021
Konsolideerib dokumenti: EVS-EN 60601-1-11:2015
Konsolideerib dokumenti: EVS-EN 60601-1-11:2015/A1:2021

EVS-EN 60601-1-6:2010+A1+A2:2021

Elektrilised meditsiiniseadmed. Osa 1-6: Üldnõuded esmasele ohutusele ja olulistele toimimisnäitajatele. Kollateraalstandard: Kasutussobivus
Medical electrical equipment - Part 1-6: General requirements for basic safety and essential performance - Collateral standard: Usability (IEC 60601-1-6:2010 + IEC 60601-1-6:2010/A1:2013 + IEC 60601-1-6:2010/A2:2020)

This International Standard specifies a PROCESS for a MANUFACTURER to analyse, specify, develop and evaluate the USABILITY, as it relates to BASIC SAFETY and ESSENTIAL PERFORMANCE of MEDICAL ELECTRICAL EQUIPMENT, hereafter referred to as ME EQUIPMENT. This USABILITY ENGINEERING PROCESS assesses and mitigates RISKS caused by USABILITY problems associated with CORRECT USE and USE ERRORS, i.e., NORMAL USE. It can be used to identify but does not assess or mitigate RISKS associated with ABNORMAL USE. If the USABILITY ENGINEERING PROCESS detailed in this collateral standard has been complied with, then the USABILITY of ME EQUIPMENT as it relates to BASIC SAFETY and ESSENTIAL PERFORMANCE is presumed to be acceptable, unless there is OBJECTIVE EVIDENCE to the contrary. NOTE Such OBJECTIVE EVIDENCE can subsequently originate from POST-PRODUCTION surveillance.

Keel: en
Alusdokumendid: IEC 60601-1-6:2010; EN 60601-1-6:2010; IEC 60601-1-6:2010/A1:2013; EN 60601-1-6:2010/A1:2015; IEC 60601-1-6:2010/A2:2020; EN 60601-1-6:2010/A2:2021
Konsolideerib dokumenti: EVS-EN 60601-1-6:2010
Konsolideerib dokumenti: EVS-EN 60601-1-6:2010/A1:2015
Konsolideerib dokumenti: EVS-EN 60601-1-6:2010/A2:2021
Konsolideerib dokumenti: EVS-EN 60601-1-6:2010+A1:2015

EVS-EN 60601-1-8:2007+A1+A11+A2:2021

Elektrilised meditsiiniseadmed. Osa 1-8: Üldised nõuded esmasele ohutusele ja olulistele toimimisnäitajatele. Kollateraalstandard: Elektrilistes meditsiiniseadmetes ja -süsteemides kasutatavatele alarmsüsteemidele esitatavad üldnõuded, katsetamine ja juhised
Medical electrical equipment - Part 1-8: General requirements for basic safety and essential performance - Collateral Standard: General requirements, tests and guidance for alarm systems in medical electrical equipment and medical electrical systems (IEC 60601-1-8:2006 + IEC 60601-1-8:2006/A1:2012 + IEC 60601-1-8:2006/A2:2020)

This International Standard applies to the BASIC SAFETY and ESSENTIAL PERFORMANCE of MEDICAL ELECTRICAL EQUIPMENT and MEDICAL ELECTRICAL SYSTEMS, hereafter referred to as ME EQUIPMENT and ME SYSTEMS. This collateral standard specifies requirements for ALARM SYSTEMS and ALARM SIGNALS in ME EQUIPMENT and ME SYSTEMS. It also provides guidance for the application of ALARM SYSTEMS.

Keel: en
Alusdokumendid: IEC 60601-1-8:2006; EN 60601-1-8:2007; EN 60601-1-8:2007/AC:2010; IEC 60601-1-8:2006/A1:2012; EN 60601-1-8:2007/A1:2013; EN 60601-1-8:2007/A1:2013/AC:2014; EN 60601-1-8:2007/A11:2017; IEC 60601-1-8:2006/A2:2020; EN 60601-1-8:2007/A2:2021
Konsolideerib dokumenti: EVS-EN 60601-1-8:2007
Konsolideerib dokumenti: EVS-EN 60601-1-8:2007/A1:2013
Konsolideerib dokumenti: EVS-EN 60601-1-8:2007/A1:2013/AC:2014
Konsolideerib dokumenti: EVS-EN 60601-1-8:2007/A11:2017
Konsolideerib dokumenti: EVS-EN 60601-1-8:2007/A2:2021
Konsolideerib dokumenti: EVS-EN 60601-1-8:2007/AC:2010
Konsolideerib dokumenti: EVS-EN 60601-1-8:2007+A1+A11:2017

EVS-EN ISO 10651-5:2021

Lung ventilators for medical use - Particular requirements for basic safety and essential performance - Part 5: Gas-powered emergency resuscitators (ISO 10651-5:2006)

This part of ISO 10651 specifies the basic safety and essential performance requirements for gas-powered emergency resuscitators (3.10) intended for use with humans by first responders. This equipment is intended for emergency field use and is intended to be continuously operator attended in normal use. This part of ISO 10651 also specifies the requirements for resuscitator sets (3.22). This part of ISO 10651 is not applicable to electrically-powered resuscitators. NOTE ISO 10651-3 covers emergency and transport ventilators.

Keel: en
Alusdokumendid: ISO 10651-5:2006; EN ISO 10651-5:2021

EVS-EN ISO 11138-8:2021

Sterilization of health care products - Biological indicators - Part 8: Method for validation of a reduced incubation time for a biological indicator (ISO 11138-8:2021)

1.1 This document specifies the requirements for a test method to be utilized to establish or confirm a reduced incubation time (RIT) that is shorter than the 7 day reference incubation time specified in 7.3.22 of ISO 11138-1:2017 for biological indicators used to monitor moist heat sterilization processes or ethylene oxide (EO) sterilization processes. 1.2 This document is applicable to manufacturers of biological indicators and to end users of biological indicators who intend to, if required by their quality system, establish, validate or confirm an RIT. 1.3 This document is not applicable to biological indicators used to monitor dry heat, low temperature steam formaldehyde (LTSF) or vaporized hydrogen peroxide (VH2O2) sterilization processes. NOTE 1 The method described in this document to establish an RIT for biological indicators used to monitor moist heat or EO sterilization processes has been used extensively for many years. However, there is limited experience in use of this method to establish an RIT for biological indicators used to monitor dry heat, low temperature steam formaldehyde or vaporized hydrogen peroxide sterilization processes. This document, therefore, does not include these sterilization processes. NOTE 2 For EO as a sterilizing agent, the stated RIT will be applicable for any EO cycle type, i.e. 100% EO, EO blends, etc.

Keel: en
Alusdokumendid: ISO 11138-8:2021; EN ISO 11138-8:2021

EVS-EN ISO 20166-4:2021

Molecular in vitro diagnostic examinations - Specifications for preexamination processes for formalin-fixed and paraffin-embedded (FFPE) tissue - Part 4: In situ detection techniques (ISO 20166-4:2021)

This document gives requirements for the collection, handling, documentation, transport, storage and processing during the pre-examination phase of formalin-fixed and paraffin-embedded (FFPE) tissue specimens intended for examinations of morphology and biomolecules, such as metabolites, proteins, DNA and/or RNA in situ on FFPE tissue sections by using different in situ detection techniques. This document is applicable to routine and molecular diagnostic examinations using in situ detection techniques including laboratory developed tests performed by routine pathology laboratories (histology laboratories) as well as molecular pathology laboratories and other medical laboratories. It is also intended to be used by laboratory customers, in vitro diagnostics developers and manufacturers, as well as institutions and commercial organizations performing biomedical research, biobanks, and regulatory authorities. This document is not applicable for the examination of isolated biomolecules such as proteins, DNA and RNA that cannot be mapped with a defined region of a FFPE section. NOTE International, national or regional regulations or requirements can also apply to specific topics covered in this document.

Keel: en
Alusdokumendid: ISO 20166-4:2021; EN ISO 20166-4:2021

EVS-EN ISO 21802:2021

Assistive products - Guidelines on cognitive accessibility - Daily time management (ISO 21802:2019)

This document specifies principles of cognitive accessibility within the area of daily time management. This document gives guidelines for design application for features and functions known to increase the accessibility of products and systems used to support daily time management for people with cognitive impairment regardless of age. This document does not provide test methods and specific instructions for measuring and reporting.

Keel: en
Alusdokumendid: ISO 21802:2019; EN ISO 21802:2021

13 KESKKONNA- JA TERVISEKAITSE. OHUTUS

CEN ISO/TS 29843-2:2021

Soil quality - Determination of soil microbial diversity - Part 2: Method by phospholipid fatty acid analysis (PLFA) using the simple PLFA extraction method (ISO/TS 29843-2:2021)

This document specifies a simple method for the extraction of only phospholipid fatty acids (PLFA) from soils.

Keel: en
Alusdokumendid: CEN ISO/TS 29843-2:2021; ISO/TS 29843-2:2021
Asendab dokumenti: CEN ISO/TS 29843-2:2014

CEN/TR 17674:2021

Bio-based products- Use of stable isotope ratios of Carbon, Hydrogen, Oxygen and Nitrogen as tools for verification of the origin of bio-based feedstock and characteristics of production processes - Overview of relevant existing applications

The stable isotope ratios of carbon, hydrogen, oxygen and nitrogen can be used to obtain information about the origin of bio-based feedstock and characteristics of production processes of bio-based products. However, no or limited attention for the use of the elements nitrogen and sulphur is given in this document due to the fact that these applications are not yet available. This Technical Report provides an overview of existing applications of isotope ratio analysis of carbon, hydrogen, oxygen and nitrogen that are relevant to the analysis of bio-based feedstocks, products and production processes

Keel: en
Alusdokumendid: CEN/TR 17674:2021

EVS-EN 12255-16:2021

Wastewater treatment plants - Part 16: Physical (mechanical) filtration

This document specifies design principles and performance requirements for tertiary clarification (receiving effluent from secondary treatment) by physical filtration plant at wastewater treatment plants serving more than 50 PT. NOTE 1 Ultrafiltration, nanofiltration and reverse osmosis are not covered within the scope of this document as they are not considered to be used for tertiary clarification. NOTE 2 Soil filtration is not covered in this document. NOTE 3 Activated carbon filtration is excluded from the scope of this document as it is not considered to be a form of mechanical filtration.

Keel: en
Alusdokumendid: EN 12255-16:2021
Asendab dokumenti: EVS-EN 12255-16:2005

EVS-EN 14972-3:2021

Fixed firefighting systems - Water mist systems - Part 3: Test protocol for office, school classrooms and hotel for automatic nozzle systems

This document specifies the evaluation of the fire performance of water mist systems for offices, school classrooms and hotels. This fire test protocol is applicable to ceiling mounted automatic nozzles to be used in unlimited volume. This document is applicable for horizontal, solid, flat ceilings with heights of 2 m and above, up to the maximum tested ceiling height.

Keel: en
Alusdokumendid: EN 14972-3:2021

EVS-EN 17443:2021

Winter service equipment - Brine production systems - Requirements and test methods

This document specifies the essential requirements of stationary systems for production of brines for winter road maintenance and includes tests of these requirements. Installation boundary: chloride and water inlet to the saturator, brine outlet to the spreading machine. Within the scope are materials, brine storage and brine loading/unloading equipment also. Mobile systems for production of brines in situ are not content of this document. The following points are not covered by this document: - System and construction requirements; - Requirements according to national and European legislations.

Keel: en
Alusdokumendid: EN 17443:2021

EVS-EN 50131-6:2017+A1:2021

Alarm systems - Intrusion and hold-up systems - Part 6: Power supplies

This European Standard specifies the requirements, performance criteria and testing procedures for PS to be used as part of Intrusion and Hold up Alarm Systems. The PS will either be an integral part of an I&HAS component or stand-alone. The control functions of the PS may be incorporated as part of the PS device, or may be provided by another I&HAS component, e.g. a CIE. This European Standard is not applicable when the PS requirements for I&HAS components are included within the relevant product standard. The requirements correspond to each of the four security grades given in the European Standard EN 50131-1, Alarm Systems – Intrusion and Hold-Up Systems – Part 1: System requirements. Requirements are also given for four environmental classes covering applications in indoor and outdoor locations. This standard covers: a) mandatory functions which will be provided on all PS; and b) optional functions which may be provided. This European Standard does not deal with requirements for compliance with EC regulatory Directives, such as the EMC Directive, Low Voltage Directive, etc. except that it specifies the equipment operating conditions and reduced functional test for EMC susceptibility testing as required by EN

50130-4. Other functions associated with I&HAS not specified in this standard may be provided. Such functions will not affect the requirements of any mandatory or optional functions.

Keel: en
Alusdokumendid: EN 50131-6:2017; EN 50131-6:2017/A1:2021
Konsolideerib dokumenti: EVS-EN 50131-6:2017
Konsolideerib dokumenti: EVS-EN 50131-6:2017/A1:2021

EVS-EN 60335-2-17:2013+A11+A1+A2:2021

Majapidamis- ja muud taolised elektriseadmed. Ohutus. Osa 2-17: Erinõuded tekkidele, patjadele, riietusesemetele ja muudele taolistele paindpehmetele soojendusseadmetele Household and similar electrical appliances - Safety - Part 2-17: Particular requirements for blankets, pads, clothing and similar flexible heating appliances (IEC 60335-2-17:2012 + IEC 60335-2-17:2012/A1:2015, modified + IEC 60335-2-17:2012/A2:2019 , modified)

This clause of Part 1 is replaced by the following. This International Standard deals with the safety of electric blankets, pads, clothing and other flexible appliances that heat the bed or human body, for household and similar purposes, their rated voltage being not more than 250 V. This standard also applies to control units supplied with the appliance. Appliances not intended for normal household use but which nevertheless may be a source of danger to the public, such as appliances intended to be used in beauty parlours or by persons in cold ambient temperatures, are within the scope of this standard. Requirements and tests for clothing are given in Annex CC. This standard deals with the reasonably foreseeable hazards presented by appliances and machines that are encountered by all persons. However, in general, it does not take into account: – children playing with the appliance; – the use of the appliance by very young children; – the use of the appliance by young children without supervision. It is recognized that very vulnerable people may have needs beyond the level addressed in this standard. NOTE 101 Children are considered to be old enough to use an appliance without supervision when they have been adequately instructed by a parent or guardian and are deemed competent to use the appliance safely. NOTE 102 Attention is drawn to the fact that – for appliances intended to be used in vehicles or on board ships or aircraft, additional requirements may be necessary; – in many countries, additional requirements are specified by the national health authorities, the national authorities responsible for the protection of labour and similar authorities. NOTE 103 This standard does not apply to – appliances intended to be used in locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust, vapour or gas); – rigid bed warmers, such as those of metal or ceramic material; – water bed heaters (IEC 60335-2-66); – heating appliances for breeding and rearing animals (IEC 60335-2-71); – foot warmers and heating mats (IEC 60335-2-81); – appliances specifically intended for use under medical supervision (IEC 60601-2-35).

Keel: en
Alusdokumendid: IEC 60335-2-17:2012; EN 60335-2-17:2013; EN 60335-2-17:2013/A11:2019; IEC 60335-2-17:2012/A1:2015; EN 60335-2-17:2013/A1:2020; IEC 60335-2-17:2012/A2:2019; EN 60335-2-17:2013/A2:2021
Konsolideerib dokumenti: EVS-EN 60335-2-17:2013
Konsolideerib dokumenti: EVS-EN 60335-2-17:2013/A1:2020
Konsolideerib dokumenti: EVS-EN 60335-2-17:2013/A11:2019
Konsolideerib dokumenti: EVS-EN 60335-2-17:2013/A2:2021
Konsolideerib dokumenti: EVS-EN 60335-2-17:2013+A11+A1:2020

EVS-EN ISO 10872:2021

Water and soil quality - Determination of the toxic effect of sediment and soil samples on growth, fertility and reproduction of Caenorhabditis elegans (Nematoda) (ISO 10872:2020)

This document specifies a method for determining the toxicity of environmental samples on growth, fertility and reproduction of Caenorhabditis elegans. The method applies to contaminated whole freshwater sediment (maximum salinity 5 g/l), soil and waste, as well as to pore water, elutriates and aqueous extracts that were obtained from contaminated sediment, soil and waste.

Keel: en
Alusdokumendid: ISO 10872:2020; EN ISO 10872:2021

EVS-EN ISO 13160:2021

Water quality - Strontium 90 and strontium 89 - Test methods using liquid scintillation counting or proportional counting (ISO 13160:2021)

This document specifies conditions for the determination of 90Sr and 89Sr activity concentration in samples of environmental water using liquid scintillation counting (LSC) or proportional counting (PC). The method is applicable to test samples of drinking water, rainwater, surface and ground water, marine water, as well as cooling water, industrial water, domestic, and industrial wastewater after proper sampling and handling, and test sample preparation. Filtration of the test sample and a chemical separation are required to separate and purify strontium from a test portion of the sample. The detection limit depends on the sample volume, the instrument used, the sample count time, the background count rate, the detection efficiency and the chemical yield. The method described in this document, using currently available LSC counters, has a detection limit of approximately 10 mBq l−1 and 2 mBq l−1 for 89Sr and 90Sr, respectively, which is lower than the WHO criteria for safe consumption of drinking water (100 Bq·l−1 for 89Sr and 10 Bq·l−1 for 90Sr)[3]. These values can be achieved with a counting time of 1 000 min for a sample volume of 2 l. The methods described in this document are applicable in the event of an emergency situation. When fallout occurs following a nuclear accident, the contribution of 89Sr to the total amount of radioactive strontium is not negligible. This document provides test methods to determine the activity concentration of 90Sr in presence of 89Sr. The analysis of 90Sr and 89Sr adsorbed to suspended matter is not covered by this method. It is the user's responsibility to ensure the validity of this test method selected for the water samples tested.

Keel: en
Alusdokumendid: ISO 13160:2021; EN ISO 13160:2021

Asendab dokumenti: EVS-EN ISO 13160:2015

EVS-EN ISO 18589-1:2021

Measurement of radioactivity in the environment - Soil - Part 1: General guidelines and definitions (ISO 18589-1:2019)

This document specifies the general requirements to carry out radionuclides tests, including sampling of soil including rock from bedrock and ore as well as of construction materials and products, pottery, etc. using NORM or those from technological processes involving Technologically Enhanced Naturally Occurring Radioactive Materials (TENORM) e.g. the mining and processing of mineral sands or phosphate fertilizer production and use. For simplification, the term “soil” used in this document covers the set of elements mentioned above. This document is addressed to people responsible for determining the radioactivity present in soils for the purpose of radiation protection. This concerns soils from gardens and farmland, urban or industrial sites, as well as soil not affected by human activities. This document is applicable to all laboratories regardless of the number of personnel or the extent of the scope of testing activities. When a laboratory does not undertake one or more of the activities covered by this document, such as planning, sampling or testing, the requirements of those clauses do not apply. This document is to be used in conjunction with other parts of ISO 18589 that outline the setting up of programmes and sampling techniques, methods of general processing of samples in the laboratory and also methods for measuring the radioactivity in soil. Its purpose is the following: — define the main terms relating to soils, sampling, radioactivity and its measurement; — describe the origins of the radioactivity in soils; — define the main objectives of the study of radioactivity in soil samples; — present the principles of studies of soil radioactivity; — identify the analytical and procedural requirements when measuring radioactivity in soil. This document is applicable if radionuclide measurements for the purpose of radiation protection are to be made in the following cases: — initial characterization of radioactivity in the environment; — routine surveillance of the impact of nuclear installations or of the evolution of the general territory; — investigations of accident and incident situations; — planning and surveillance of remedial action; — decommissioning of installations or clearance of materials.

Keel: en
Alusdokumendid: ISO 18589-1:2019; EN ISO 18589-1:2021

EVS-EN ISO 18589-4:2021

Measurement of radioactivity in the environment - Soil - Part 4: Plutonium 238 and plutonium 239 + 240 - Test method using alpha spectrometry (ISO 18589-4:2019)

This document describes a method for measuring 238Pu and 239 + 240 isotopes in soil by alpha spectrometry samples using chemical separation techniques. The method can be used for any type of environmental study or monitoring. These techniques can also be used for measurements of very low levels of activity, one or two orders of magnitude less than the level of natural alpha-emitting radionuclides. The test methods described in this document can also be used to measure the radionuclides in sludge, sediment, construction material and products following proper sampling procedure[2][3][4][5][7][8]. The mass of the test portion required depends on the assumed activity of the sample and the desired detection limit. In practice, it can range from 0,1 g to 100 g of the test sample.

Keel: en
Alusdokumendid: ISO 18589-4:2019; EN ISO 18589-4:2021

EVS-EN ISO 18589-5:2021

Measurement of radioactivity in the environment - Soil - Part 5: Strontium 90 - Test method using proportional counting or liquid scintillation counting (ISO 18589-5:2019)

This document describes the principles for the measurement of the activity of 90Sr in equilibrium with 90Y and 89Sr, pure beta emitting radionuclides, in soil samples. Different chemical separation methods are presented to produce strontium and yttrium sources, the activity of which is determined using proportional counters (PC) or liquid scintillation counters (LSC). 90Sr can be obtained from the test samples when the equilibrium between 90Sr and 90Y is reached or through direct 90Y measurement. The selection of the measuring method depends on the origin of the contamination, the characteristics of the soil to be analysed, the required accuracy of measurement and the resources of the available laboratories. These methods are used for soil monitoring following discharges, whether past or present, accidental or routine, liquid or gaseous. It also covers the monitoring of contamination caused by global nuclear fallout. In case of recent fallout immediately following a nuclear accident, the contribution of 89Sr to the total amount of strontium activity will not be negligible. This standard provides the measurement method to determine the activity of 90Sr in presence of 89Sr. The test methods described in this document can also be used to measure the radionuclides in sludge, sediment, construction material and products by following proper sampling procedure. Using samples sizes of 20 g and counting times of 1 000 min, detection limits of (0,1 to 0,5) Bq·kg-1 can be achievable for 90Sr using conventional and commercially available proportional counter or liquid scintillation counter when the presence of 89Sr can be neglected. If 89Sr is present in the test sample, detection limits of (1 to 2) Bq·kg-1 can be obtained for both 90Sr and 89Sr using the same sample size, counting time and proportional counter or liquid scintillation counter as in the previous situation.

Keel: en
Alusdokumendid: ISO 18589-5:2019; EN ISO 18589-5:2021

EVS-EN ISO 18589-6:2021

Measurement of radioactivity in the environment - Soil - Part 6: Gross alpha and gross beta activities - Test method using gas-flow proportional counting (ISO 18589-6:2019)

This document provides a method that allows an estimation of gross radioactivity of alpha- and beta-emitters present in soil samples. It applies, essentially, to systematic inspections based on comparative measurements or to preliminary site studies to guide the testing staff both in the choice of soil samples for measurement as a priority and in the specific analysis methods for implementation. The gross α or β radioactivity is generally different from the sum of the effective radioactivities of the radionuclides present since, by convention, the same alpha counting efficiency is assigned for all the alpha emissions and the

same beta counting efficiency is assigned for all the beta emissions. Soil includes rock from bedrock and ore as well as construction materials and products, potery, etc. using naturally occurring radioactive materials (NORM) or those from technological processes involving Technologically Enhanced Naturally Occurring Radioactive Materials (TENORM), e.g. the mining and processing of mineral sands or phosphate fertilizer production and use. The test methods described in this document can also be used to assess gross radioactivity of alpha- and beta-emitters in sludge, sediment, construction material and products following proper sampling procedure. For simplification, the term “soil” used in this document covers the set of elements mentioned above.

Keel: en
Alusdokumendid: ISO 18589-6:2019; EN ISO 18589-6:2021

EVS-EN ISO 20042:2021

Measurement of radioactivity - Gamma-ray emitting radionuclides - Generic test method using gamma-ray spectrometry (ISO 20042:2019)

This document describes the methods for determining the activity in becquerel (Bq) of gamma-ray emitting radionuclides in test samples by gamma-ray spectrometry. The measurements are carried out in a testing laboratory following proper sample preparation. The test samples can be solid, liquid or gaseous. Applications include: — routine surveillance of radioactivity released from nuclear installations or from sites discharging enhanced levels of naturally occurring radioactive materials; — contributing to determining the evolution of radioactivity in the environment; — investigating accident and incident situations, in order to plan remedial actions and monitor their effectiveness; — assessment of potentially contaminated waste materials from nuclear decommissioning activities; — surveillance of radioactive contamination in media such as soils, foodstuffs, potable water, groundwaters, seawater or sewage sludge; — measurements for estimating the intake (inhalation, ingestion or injection) of activity of gamma-ray emitting radionuclides in the body. It is assumed that the user of this document has been given information on the composition of the test sample or the site. In some cases, the radionuclides for analysis have also been specified if characteristic limits are needed. It is also assumed that the test sample has been homogenised and is representative of the material under test. General guidance is included for preparing the samples for measurement. However, some types of sample are to be prepared following the requirements of specific standards referred to in this document. The generic recommendations can also be useful for the measurement of gamma-ray emitters in situ. This document includes generic advice on equipment selection (see Annex A), detectors (more detailed information is included in Annex D), and commissioning of instrumentation and method validation. Annex F summarises the influence of different measurement parameters on results for a typical gamma-ray spectrometry system. Quality control and routine maintenance are also covered, but electrical testing of the detector and pulse processing electronics is excluded. It is assumed that any data collection and analysis software used has been written and tested in accordance with relevant software standards such as ISO/IEC/IEEE 12207. Calibration using reference sources and/or numerical methods is covered, including verification of the results. It also covers the procedure to estimate the activity content of the sample (Bq) from the spectrum. The principles set out in this document are applicable to measurements by gamma-ray spectrometry in testing laboratories and in situ. However, the detailed requirements for in situ measurement are given in ISO 18589-7 and are outside the scope of this document. This document covers, but is not restricted to, gamma-ray emitters which emit photons in the energy range of 5 keV to 3 000 keV. However, most of the measurements fall into the range 40 keV to 2 000 keV. The activity (Bq) ranges from the low levels (sub-Bq) found in environmental samples to activities found in accident conditions and high level radioactive wastes.

Keel: en
Alusdokumendid: ISO 20042:2019; EN ISO 20042:2021

EVS-EN ISO 20785-4:2021

Dosimetry for exposures to cosmic radiation in civilian aircraft - Part 4: Validation of codes (ISO 20785-4:2019)

This document is intended for the validation of codes used for the calculation of doses received by individuals on board aircraft. It gives guidance to radiation protection authorities and code developers on the basic functional requirements which the code fulfils. Depending on any formal approval by a radiation protection authority, additional requirements concerning the software testing can apply.

Keel: en
Alusdokumendid: ISO 20785-4:2019; EN ISO 20785-4:2021

EVS-EN ISO 21676:2021

Water quality - Determination of the dissolved fraction of selected active pharmaceutical ingredients, transformation products and other organic substances in water and treated waste water - Method using high performance liquid chromatography and mass spectrometric detection (HPLC-MS/MS or -HRMS) after direct injection (ISO 21676:2018)

This document specifies a method for the determination of the dissolved fraction of selected active pharmaceutical ingredients and transformation products, as well as other organic substances (see Table 1 of the document) in drinking water, ground water, surface water and treated waste water. The lower application range of this method can vary depending on the sensitivity of the equipment used and the matrix of the sample. For most compounds to which this document applies, the range is ≥ 0,025 µg/l for drinking water, ground water and surface water, and ≥ 0,050 µg/l for treated waste water. The method can be used to determine further organic substances or in other types of water (e.g. process water) provided that accuracy has been tested and verified for each case, and that storage conditions of both samples and reference solutions have been validated.

Keel: en
Alusdokumendid: ISO 21676:2018; EN ISO 21676:2021

17 METROLOOGIA JA MÕÕTMINE. FÜÜSIKALISED NÄHTUSED

EVS-EN ISO 13160:2021

Water quality - Strontium 90 and strontium 89 - Test methods using liquid scintillation counting or proportional counting (ISO 13160:2021)

This document specifies conditions for the determination of 90Sr and 89Sr activity concentration in samples of environmental water using liquid scintillation counting (LSC) or proportional counting (PC). The method is applicable to test samples of drinking water, rainwater, surface and ground water, marine water, as well as cooling water, industrial water, domestic, and industrial wastewater after proper sampling and handling, and test sample preparation. Filtration of the test sample and a chemical separation are required to separate and purify strontium from a test portion of the sample. The detection limit depends on the sample volume, the instrument used, the sample count time, the background count rate, the detection efficiency and the chemical yield. The method described in this document, using currently available LSC counters, has a detection limit of approximately 10 mBq l−1 and 2 mBq l−1 for 89Sr and 90Sr, respectively, which is lower than the WHO criteria for safe consumption of drinking water (100 Bq·l−1 for 89Sr and 10 Bq·l−1 for 90Sr)[3]. These values can be achieved with a counting time of 1 000 min for a sample volume of 2 l. The methods described in this document are applicable in the event of an emergency situation. When fallout occurs following a nuclear accident, the contribution of 89Sr to the total amount of radioactive strontium is not negligible. This document provides test methods to determine the activity concentration of 90Sr in presence of 89Sr. The analysis of 90Sr and 89Sr adsorbed to suspended matter is not covered by this method. It is the user's responsibility to ensure the validity of this test method selected for the water samples tested.

Keel: en
Alusdokumendid: ISO 13160:2021; EN ISO 13160:2021
Asendab dokumenti: EVS-EN ISO 13160:2015

EVS-EN ISO 18589-1:2021

Measurement of radioactivity in the environment - Soil - Part 1: General guidelines and definitions (ISO 18589-1:2019)

This document specifies the general requirements to carry out radionuclides tests, including sampling of soil including rock from bedrock and ore as well as of construction materials and products, pottery, etc. using NORM or those from technological processes involving Technologically Enhanced Naturally Occurring Radioactive Materials (TENORM) e.g. the mining and processing of mineral sands or phosphate fertilizer production and use. For simplification, the term "soil" used in this document covers the set of elements mentioned above. This document is addressed to people responsible for determining the radioactivity present in soils for the purpose of radiation protection. This concerns soils from gardens and farmland, urban or industrial sites, as well as soil not affected by human activities. This document is applicable to all laboratories regardless of the number of personnel or the extent of the scope of testing activities. When a laboratory does not undertake one or more of the activities covered by this document, such as planning, sampling or testing, the requirements of those clauses do not apply. This document is to be used in conjunction with other parts of ISO 18589 that outline the setting up of programmes and sampling techniques, methods of general processing of samples in the laboratory and also methods for measuring the radioactivity in soil. Its purpose is the following: — define the main terms relating to soils, sampling, radioactivity and its measurement; — describe the origins of the radioactivity in soils; — define the main objectives of the study of radioactivity in soil samples; — present the principles of studies of soil radioactivity; — identify the analytical and procedural requirements when measuring radioactivity in soil. This document is applicable if radionuclide measurements for the purpose of radiation protection are to be made in the following cases: — initial characterization of radioactivity in the environment; — routine surveillance of the impact of nuclear installations or of the evolution of the general territory; — investigations of accident and incident situations; — planning and surveillance of remedial action; — decommissioning of installations or clearance of materials.

Keel: en
Alusdokumendid: ISO 18589-1:2019; EN ISO 18589-1:2021

EVS-EN ISO 18589-4:2021

Measurement of radioactivity in the environment - Soil - Part 4: Plutonium 238 and plutonium 239 + 240 - Test method using alpha spectrometry (ISO 18589-4:2019)

This document describes a method for measuring 238Pu and 239 + 240 isotopes in soil by alpha spectrometry samples using chemical separation techniques. The method can be used for any type of environmental study or monitoring. These techniques can also be used for measurements of very low levels of activity, one or two orders of magnitude less than the level of natural alpha-emitting radionuclides. The test methods described in this document can also be used to measure the radionuclides in sludge, sediment, construction material and products following proper sampling procedure. The mass of the test portion required depends on the assumed activity of the sample and the desired detection limit. In practice, it can range from 0,1 g to 100 g of the test sample.

Keel: en
Alusdokumendid: ISO 18589-4:2019; EN ISO 18589-4:2021

EVS-EN ISO 18589-5:2021

Measurement of radioactivity in the environment - Soil - Part 5: Strontium 90 - Test method using proportional counting or liquid scintillation counting (ISO 18589-5:2019)

This document describes the principles for the measurement of the activity of 90Sr in equilibrium with 90Y and 89Sr, pure beta emitting radionuclides, in soil samples. Different chemical separation methods are presented to produce strontium and yttrium sources, the activity of which is determined using proportional counters (PC) or liquid scintillation counters (LSC). 90Sr can be obtained from the test samples when the equilibrium between 90Sr and 90Y is reached or through direct 90Y measurement. The selection of the measuring method depends on the origin of the contamination, the characteristics of the soil to be

analysed, the required accuracy of measurement and the resources of the available laboratories. These methods are used for soil monitoring following discharges, whether past or present, accidental or routine, liquid or gaseous. It also covers the monitoring of contamination caused by global nuclear fallout. In case of recent fallout immediately following a nuclear accident, the contribution of 89Sr to the total amount of strontium activity will not be negligible. This standard provides the measurement method to determine the activity of 90Sr in presence of 89Sr. The test methods described in this document can also be used to measure the radionuclides in sludge, sediment, construction material and products by following proper sampling procedure. Using samples sizes of 20 g and counting times of 1 000 min, detection limits of (0,1 to 0,5) Bq·kg-1 can be achievable for 90Sr using conventional and commercially available proportional counter or liquid scintillation counter when the presence of 89Sr can be neglected. If 89Sr is present in the test sample, detection limits of (1 to 2) Bq·kg-1 can be obtained for both 90Sr and 89Sr using the same sample size, counting time and proportional counter or liquid scintillation counter as in the previous situation.

Keel: en
Alusdokumendid: ISO 18589-5:2019; EN ISO 18589-5:2021

EVS-EN ISO 18589-6:2021

Measurement of radioactivity in the environment - Soil - Part 6: Gross alpha and gross beta activities - Test method using gas-flow proportional counting (ISO 18589-6:2019)

This document provides a method that allows an estimation of gross radioactivity of alpha- and beta-emitters present in soil samples. It applies, essentially, to systematic inspections based on comparative measurements or to preliminary site studies to guide the testing staff both in the choice of soil samples for measurement as a priority and in the specific analysis methods for implementation. The gross α or β radioactivity is generally different from the sum of the effective radioactivities of the radionuclides present since, by convention, the same alpha counting efficiency is assigned for all the alpha emissions and the same beta counting efficiency is assigned for all the beta emissions. Soil includes rock from bedrock and ore as well as construction materials and products, potery, etc. using naturally occurring radioactive materials (NORM) or those from technological processes involving Technologically Enhanced Naturally Occurring Radioactive Materials (TENORM), e.g. the mining and processing of mineral sands or phosphate fertilizer production and use. The test methods described in this document can also be used to assess gross radioactivity of alpha- and beta-emitters in sludge, sediment, construction material and products following proper sampling procedure. For simplification, the term “soil” used in this document covers the set of elements mentioned above.

Keel: en
Alusdokumendid: ISO 18589-6:2019; EN ISO 18589-6:2021

23 ÜLDKASUTATAVAD HÜDRO- JA PNEUMOSÜSTEEMID JA NENDE OSAD

EVS-EN 14917:2021

Survesüsteemides kasutatavate metallkompensaatorite paisumisvuugid
Metal bellows expansion joints for pressure applications

This document specifies the requirements for design, manufacture and installation of metal bellows expansion joints with circular cross section for pressure applications with maximum allowable pressure greater than 0,5 bar.

Keel: en
Alusdokumendid: EN 14917:2021
Asendab dokumenti: EVS-EN 14917:2009+A1:2012

27 ELEKTRI- JA SOOJUSENERGEETIKA

EVS-EN ISO 10276:2021

Nuclear energy - Fuel technology - Trunnion systems for packages used to transport radioactive material (ISO 10276:2019)

This document covers trunnion systems used for tie-down, tilting and/or lifting of a package of radioactive material during transport operations. Aspects included are the design, manufacture, maintenance, inspection and management system. Regulations which can apply during handling operation in nuclear facilities are not addressed in document. This document does not supersede any of the requirements of international or national regulations, concerning trunnions used for lifting and tie-down.

Keel: en
Alusdokumendid: ISO 10276:2019; EN ISO 10276:2021

EVS-EN ISO 16647:2021

Nuclear facilities - Criteria for design and operation of confinement systems for nuclear worksite and for nuclear installations under decommissioning (ISO 16647:2018)

This document specifies the requirements applicable to the design and use of airborne confinement systems that ensure safety and radioprotection functions in nuclear worksites and in nuclear installations under decommissioning to protect from radioactive contamination produced: aerosol or gas. The purpose of confinement systems is to protect the workers, members of the public and environment against the spread of radioactive contamination resulting from operations in nuclear worksites and from nuclear installations under decommissioning. The confinement of nuclear worksites and of nuclear installations under decommissioning is characterized by the temporary and evolving (dynamic) nature of the operations to be performed. These operations often take place in area not specifically designed for this purpose. This document applies to maintenance or upgrades at worksites which fit the above definition.

Keel: en
Alusdokumendid: ISO 16647:2018; EN ISO 16647:2021

EVS-EN ISO 17225-5:2021

Tahked biokütused. Kütuste spetsifikatsioonid ja klassid. Osa 5: Klassifitseeritud küttepuud
Solid biofuels - Fuel specifications and classes - Part 5: Graded firewood (ISO 17225-5:2021)

See dokument määrab kindlaks klassifitseeritud küttepuude kvaliteediklassid ja spetsifikatsioonid. See dokument hõlmab üksnes järgmistest toorainetest toodetud küttepuid (vt ISO 17725-1:2020, tabel 1): — 1.1.1 Terved puud ilma juurteta; — 1.1.3 Tüvepuit; — 1.1.4 Raiejäägid (jämedad oksad, ladvad jt); — 1.2.1 Keemiliselt töötlemata puidu kõrvalsaadused ja jäägid puidutöötlemistööstusest.

Keel: en, et
Alusdokumendid: ISO 17225-5:2021; EN ISO 17225-5:2021
Asendab dokumenti: EVS-EN ISO 17225-5:2014

EVS-EN ISO 18229:2021

Essential technical requirements for mechanical components and metallic structures foreseen for Generation IV nuclear reactors (ISO 18229:2018)

This document defines the essential technical requirements that are addressed in the process of design and construction of Generation IV (GEN IV) nuclear reactors. It does not address operation, maintenance and in-service inspection of reactors. Six reactor concepts are considered for GEN IV: the sodium fast reactor, the lead fast reactor, the gas fast reactor, the very high temperature reactor, the supercritical water reactor and the molten salt reactor. Annex A details the main characteristics for the different concepts. The scope of application of this document is limited to mechanical components related to nuclear safety and to the prevention of the release of radioactive materials — that are considered to be important in terms of nuclear safety and operability, — that play a role in ensuring leaktightness, partitioning, guiding, securing and supporting, and — that contain and/or are in contact with fluids (such as vessels, pumps, valves, pipes, bellows, box structures, heat exchangers, handling and driving mechanisms).

Keel: en
Alusdokumendid: ISO 18229:2018; EN ISO 18229:2021

29 ELEKTROTEHNIKA

EVS-EN 50604-1:2016+A1:2021

Secondary lithium batteries for light EV (electric vehicle) applications - Part 1: General safety requirements and test methods

This European Standard specifies test procedures and provides acceptable safety requirements for voltage class A and voltage class B removable lithium-ion battery (packs and) systems, to be used as traction batteries of or for electrically propelled road vehicles. This European Standard is related to the testing of safety performance of battery packs and systems for their intended use for a vehicle. This European Standard is not intended to be applied for the evaluation of the safety of battery packs/systems storage, vehicle production, repair and maintenance services. Light EV includes all electrically propelled vehicles of category L1 up to category L7 according to the definition of ECE-TRANS-WP29-78r6e and all electrically propelled or assisted cycles including plug-in hybrid road vehicles (PHEV), that derive all or part of their energy from on-board rechargeable energy storage systems (RESS). This European Standard enables setting up a dedicated test plan for an individual battery pack/system subject to an agreement between customer and supplier. If required, the relevant test procedures and/or test conditions of lithium-ion battery packs and systems may be selected from the standard tests provided in this standard to configure a dedicated test plan. NOTE 1 Testing on cell level is specified in the IEC 62660 series. This document also applies to: — built-in battery packs/systems in EVs. NOTE 2 Informative Annex HH gives information on possible tests for other chemistries. This European Standard does not apply to: — individual cells; — non-removable battery systems; – primary Batteries(including lithium types); – batteries covered by the ISO 12405- series.

Keel: en
Alusdokumendid: EN 50604-1:2016; EN 50604-1:2016/A1:2021
Konsolideerib dokumenti: EVS-EN 50604-1:2016
Konsolideerib dokumenti: EVS-EN 50604-1:2016/A1:2021

EVS-EN IEC 60455-3-8:2021

Resin based reactive compounds used for electrical insulation - Part 3-8: Specifications for individual materials - Resins for cable accessories

IEC 60455-3-8:2021 gives the requirements for resins for power cable accessories that conform to this specification and meet established levels of performance. However, the selection of a material by a user for a specific application will be based on the actual requirements necessary for adequate performance in that application and not on this specification alone. These materials are designed to be used in low and medium voltage cable accessories and as such, electrical performance is proven as part of the assembly. Examples of this are described in EN 50393 and IEC 60502-4. This second edition cancels and replaces the first edition published in 2013. This edition constitutes a technical revision. This edition includes the following significant technical changes with respect to the previous edition: - Clause 1: a link to assemblies according to IEC 60502-4 and EN 50393 was introduced; - designation: the categories, especially the mechanical ones, were redefined; - type tests: the testing was updated based on the chemical basis of the material; - type tests: additional materials were introduced; - Annex A: an examination grid was established.

Keel: en

Alusdokumendid: EN IEC 60455-3-8:2021; IEC 60455-3-8:2021
Asendab dokumenti: EVS-EN 60455-3-8:2013

EVS-EN IEC 60757:2021

Code for designation of colours

This document specifies letter codes for designation of colours and provides rules for their combination to designate colour combinations. The letter codes are intended to be applied in the technical documentation of electrical installations, electrical equipment and products, and in markings of electrical equipment and products. This basic safety publication focusing on safety essential requirements is primarily intended for use by technical committees in the preparation of safety publications in accordance with the principles laid down in IEC Guide 104 and ISO/IEC Guide 51. It is not intended for use by manufacturers or certification bodies. One of the responsibilities of a technical committee is, wherever applicable, to make use of basic safety publications in the preparation of its publications. The requirements of this basic safety publication will not apply unless specifically referred to or included in the relevant publications. This document does not specify any requirements for the encoding of colour properties, nor for their visual representation. Such requirements are under the responsibility of the different technical committees.

Keel: en
Alusdokumendid: EN IEC 60757:2021; IEC 60757:2021
Asendab dokumenti: EVS-HD 457 S1:2003

EVS-EN IEC 60851-1:2021

Winding wires - Test methods - Part 1: General

IEC 60851-1:2021 specifies the general notes on methods of test for winding wires. It also gives the definitions for terms used in IEC 60851 (all parts). A survey of the contents of IEC 60851-2 to IEC 60851-6 is given in Annex A. This third edition cancels and replaces the second edition published in 1996, and its amendment 1:2003 and amendment 2:2009. This edition constitutes a technical revision. This edition includes the following significant technical changes with respect to the previous edition: - revision to Clause 2 to update the list of normative references; - revision to 3.2 atmospheric conditions for testing; - addition to 3.2 with remarks concerning frequency and management of tests; - revision to Annex A to update the contents list of IEC 60851 series of tests.

Keel: en
Alusdokumendid: EN IEC 60851-1:2021; IEC 60851-1:2021
Asendab dokumenti: EVS-EN 60851-1:2003
Asendab dokumenti: EVS-EN 60851-1:2003/A1:2004
Asendab dokumenti: EVS-EN 60851-1:2003/A2:2010

EVS-EN IEC 60938-1:2021

Fixed inductors for electromagnetic interference suppression - Part 1: Generic specification

This International Standard applies to inductors designed for electromagnetic interference suppression intended for use within all kind of electric and electronic equipment. In this Generic Specification normative reference, terms and definitions are given. It also prescribes General requirements and the suitable test and measurement procedures for interference suppression inductors.

Keel: en
Alusdokumendid: EN IEC 60938-1:2021; IEC 60938-1:2021
Asendab dokumenti: EVS-EN 60938-1:2002
Asendab dokumenti: EVS-EN 60938-1:2002/A1:2007

EVS-EN IEC 62271-200:2021

High-voltage switchgear and controlgear - Part 200: AC metal-enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV

IEC 62271-200:2021(E) is applicable to prefabricated metal-enclosed switchgear and controlgear assemblies designed for: – alternating current; – rated voltages above 1 kV and up to and including 52 kV; – service frequencies up to and including 60 Hz; – indoor and outdoor installation. The assembly can include air-insulated and/or fluid-filled compartments. This third edition cancels and replaces the second edition published in 2011. This edition constitutes a technical revision. This edition includes the following significant technical changes with respect to the previous edition: a) clause numbering aligned with IEC 62271-1:2017, including the adoption of the subclause names of Clause 3; b) in Clause 3 specific definitions are added for "in service", "normal operating condition" and "normal use"; c) internal arc testing on pole-mounted switchgear is taken out of this document, as it is now covered by the specific standard IEC 62271-214:2019; d) a more precise description of earthing circuit is given with the inclusion of ratings and test requirements; e) number of mechanical tests on interlocks is reduced for type testing; a more precise description of forces to apply during type testing is given (refer to 7.102); f) resistance measuring on main circuit is only needed before continuous current tests (as reference for routine tests) and no longer needed after this continuous current test. Rationale for this deletion is that this measured resistance does not mean anything; as the temperature rise test was just finished, a new temperature rise test will not give new information; g) IEC 62271-100:2021, IEC 62271-103:2021, IEC 62271-105:2021 and IEC 62271-106:2021 are referred to in the document; h) IEC 62271-107:2019 and IEC IEEE 62271-37-013:2015 are also considered in 7.101.2; i) a more precise description of LSC category is given with the inclusion of an explanatory flowchart (Annex D); j) examples not covered by the IAC test are transferred from Clause 6 to 9.103; k) the term "assembly" is defined in Clause 3 and used as synonym for "metal-enclosed switchgear and controlgear" in this document; l) "metallic" is replaced by "metal" where applicable; m) 6.105 is now covered by 7.7; n) a 1 s rule was introduced for Criterion 4 during IAC tests regarding hot gases versus glowing particles as cause of ignition; o) a more precise description of internal arc tests for switchgear with protrusions is given in Annex A.

Keel: en

Alusdokumendid: IEC 62271-200:2021; EN IEC 62271-200:2021
Asendab dokumenti: EVS-EN 62271-200:2012
Asendab dokumenti: EVS-EN 62271-200:2012/AC:2015

EVS-EN IEC 62990-2:2021

Workplace atmospheres - Part 2: Gas detectors - Selection, installation, use and maintenance of detectors for toxic gases and vapours

IEC 62990-2:2021 gives guidance on the selection, installation, use and maintenance of electrical equipment used for the measurement of toxic gases and vapours in workplace atmospheres. The primary purpose of such equipment is to ensure safety of personnel and property by providing an indication of the concentration of a toxic gas or vapour and warning of its presence. This document is applicable to equipment whose purpose is to provide an indication, alarm or other output function to give a warning of the presence of a toxic gas or vapour in the atmosphere and in some cases to initiate automatic or manual protective actions. It is applicable to equipment in which the sensor automatically generates an electrical signal when gas is present. For the purposes of this document, equipment includes: a) fixed equipment; b) transportable equipment, and c) portable equipment. This document is intended to cover equipment defined within IEC 62990-1, but can provide useful information for equipment not covered by that document.

Keel: en
Alusdokumendid: IEC 62990-2:2021; EN IEC 62990-2:2021

31 ELEKTROONIKA

EVS-EN IEC 60938-1:2021

Fixed inductors for electromagnetic interference suppression - Part 1: Generic specification

This International Standard applies to inductors designed for electromagnetic interference suppression intended for use within all kind of electric and electronic equipment. In this Generic Specification normative reference, terms and definitions are given. It also prescribes General requirements and the suitable test and measurement procedures for interference suppression inductors.

Keel: en
Alusdokumendid: EN IEC 60938-1:2021; IEC 60938-1:2021
Asendab dokumenti: EVS-EN 60938-1:2002
Asendab dokumenti: EVS-EN 60938-1:2002/A1:2007

EVS-EN IEC 61076-2-010:2021

Connectors for electrical and electronic equipment - Product requirements - Part 2-010: Circular connectors - Detail specification for connectors with outer or inner push-pull locking mechanism, based on mating interfaces according to IEC 61076-2-101, IEC 61076-2-109, IEC 61076-2-111 and IEC 61076-2-113

IEC 61076-2-010:2021 specifies circular connectors with a push-pull locking mechanism of a size derived from, and thus being compatible with M12 screw-locking connectors (free connectors with screw-locking according to IEC 61076-2-101, IEC 61076-2-109, IEC 61076-2-111 or IEC 61076-2-113 are compatible with push-pull fixed interfaces according to this document) and with mating interfaces according to IEC 61076-2-101, IEC 61076-2-109, IEC 61076-2-111 (except codings E in general and coding F for inner push-pull) or IEC 61076-2-113. A fixed connector with push-pull locking according to this document is intermateable with a correspondingly coded free connector with M12 screw-locking according to any of the above mentioned standards. M12 is the dimension of the thread of the screw-locking mechanism of circular connectors with M12 screw-locking. IEC 61076-2-012 defines another inner push-pull for fixed female connectors which is however not compatible to the inner push-pull defined in this document. Annex C shows the different styles of female free connectors to extend male free connectors. This document covers both: a) power connectors with current ratings up to 16 A and voltage ratings up to 630 V, typically used for power supply and power applications in industrial premises, and b) connectors for data and signal transmission with frequencies up to 500 MHz. These connectors consist of both, fixed and free connectors, either rewirable or non-rewirable, with M12 push-pull locking as explained above. Male connectors have round contacts from Ø 0,6 mm up to Ø 1,5 mm. In addition, the push-pull mechanisms consist of 2 different push-pull designs: c) An outer push-pull for male and female fixed connector, where the locking groove is placed onto the outer cylindric surface of the housing. The outer push-pull for female fixed connectors is made for 2 different types of male connectors. It has locking means for both types on its outer surface. For design and dimensions see 5.3.2 and 5.3.3. d) An inner push-pull for female fixed connectors and for male free connectors, where the locking means are placed onto the inner cylindric surface of the housing. For design and dimensions see 5.3.4. The different codings provided by IEC 61076-2 series detail specifications mentioned within this document prevent the mating of accordingly coded male or female connectors to any other similarly sized interfaces, covered by other standards and the cross-mating between the different codings provided by any other IEC 61076-2 series detail specification mentioned within this document.

Keel: en
Alusdokumendid: IEC 61076-2-010:2021; EN IEC 61076-2-010:2021

EVS-EN IEC 63002:2021

Interoperability specifications and communication method for external power supplies used with computing and consumer electronics devices

This International Standard defines common charging interoperability guidelines for power sources (external power supplies (EPS) and other Sources) used with computing and consumer electronics devices that implement the IEC 62680-1-3: USB Type-C®1 Cable and Connector Specification. This document defines normative requirements for an EPS to ensure interoperability, in particular it specifies the data communicated from a power source to a device (Figure 1) and certain safety

elements of the EPS, cable, and device. While the requirements focus of this document is on the EPS (External Power Supply) and the behavior at its USB Type-C connector interface, it is also important to comprehend cable assembly and device capabilities and behaviors in order to assure end-to-end charging interoperability. The scope does not apply to all design aspects of an EPS. An EPS compliant with this standard is also expected to follow other applicable global standards and regulatory compliance requirements for aspects such as product safety, EMC and energy efficiency. [Figure 1] This International Standard provides recommendations for the behavior of a device when used with a power source compliant with this document. This International Standard specifies the minimum hardware specification for an EPS implementing IEC 62680-1-3: USB Type-C. This document also specifies the data objects used by a charging system utilizing IEC 62680-1-2: USB Power Delivery Specification to understand the identity, design and performance characteristics, and operating status of an external power supply. IEC 62680-1-2 and IEC 62680-1-3 focus on power delivery applications ranging to 100W for a variety of computing and consumer electronic devices including notebook computers, tablets, smartphones, small form-factor desktops, monitor displays and other related multimedia devices. Future updates to IEC 62680-1-2 and IEC 62680-1-3 specifications will extend to enable power delivery applications that require more than 100W while remaining within the technical limitations of the USB Type-C cable and connector solution. This document relies on established mechanical and electrical specifications, and communication protocols specified by IEC 62680-1-2 and IEC 62680-1-3. These specifications support methods for establishing the best performing interoperability between untested combinations of EPS and devices with the aim of improving consumer satisfaction. Information describing the USB charging interoperability model, overview of USB Type-C and USB Power Delivery specifications, and factors for charging performance are also provided to support implementation of this standard.

Keel: en
Alusdokumendid: IEC 63002:2021; EN IEC 63002:2021
Asendab dokumenti: EVS-EN 63002:2017

33 SIDETEHNIKA

EVS-EN 300 132-3 V2.2.1:2021

Environmental Engineering (EE); Power supply interface at the input of Information and Communication Technology (ICT) equipment; Part 3: Up to 400 V Direct Current (DC)

The present document contains requirements and measurements methods for the physical interface "A3" that is situated between the power supply system(s) and the power consuming ICT equipment: • the nominal voltage at power interface "A3" of ICT equipment defined in the present document is DC voltage up to 400 V; • the output performance of the power equipment including the cable network at the interface "A3"; • the input of the ICT equipment connected to interface "A3". The DC power can be supplied by a DC output power system e.g. via on-grid AC rectifiers, from DC/DC converters in solar systems, fuel cells, standby generators including a battery backup. The present document aims at providing compatibility at interface "A3" between the power supply equipment and different ICT equipment (including/monitoring, cooling system, etc.) connected to the same power supply. The requirements are defined for the purpose of the present document: • to identify a power supply system with the same characteristics for all ICT equipment defined in the area of application; the area of application may be any location where the interface "A3" is used i.e. telecommunication centres, Radio Base Stations, datacentres and customer premises; • to facilitate interworking of different loads; • to facilitate the standardization of power supply systems for ICT equipment; • to facilitate the installation, operation and maintenance in the same network of ICT equipment and systems from different origins. • to secure robustness against temporary voltage deviations and transients during abnormal conditions General requirements for safety and EMC are out of the scope of the present document series unless specific requirement not defined in existing safety or EMC standards.

Keel: en
Alusdokumendid: ETSI EN 300 132-3 V2.2.1

EVS-EN 302 307-2 V1.3.1:2021

Digital Video Broadcasting (DVB); Second generation framing structure, channel coding and modulation systems for Broadcasting, Interactive Services, News athering and other broadband satellite applications; Part 2: DVB-S2 Extensions (DVB-S2X)

The present document specifies the optional extensions of the S2 system, identified by the S2X denomination. The present document also includes amendments to the standard to enable beam hopping operation.

Keel: en
Alusdokumendid: ETSI EN 302 307-2 V1.3.1

EVS-EN 302 567 V2.2.1:2021

Raadiosagedusalas 60 GHz töötavad multi-gigabit/s raadioseadmed; Raadiospektrile juurdepääsu harmoneeritud standard
Multiple-Gigabit/s radio equipment operating in the 60 GHz band; Harmonised Standard for access to radio spectrum

The present document specifies technical characteristics and methods of measurements for radio equipment with integral antennas operating indoor or outdoor at data rates of multiple-gigabit per second in the 60 GHz frequency range. These radio equipment operate with very wideband communications using a variety of directional medium and high gain antennas to enable a high degree of spectrum reuse, and may use a flexible bandwidth scheme under which they normally operate in a wideband mode, and periodically reduce their bandwidth (e.g. for antenna training and other activities). The technical characteristics of applications using these radio equipment are further described in ETSI TR 102 555. Equipment in this frequency range intended for outdoor Fixed Local Area Network Extension (FLANE) or Fixed Point-to-Point applications are not in the scope of the present document. These radio equipment types are capable of operating in all or any part of the frequency bands given in table 1. Table 1: Radiocommunications service frequency band Transmit; 57 GHz to 71 GHz Receive; 57 GHz to 71 GHz NOTE: The

relationship between the present document and essential requirements of article 3.2 of Directive 2014/53/EU is given in annex A.

Keel: en
Alusdokumendid: ETSI EN 302 567 V2.2.1

EVS-EN 303 348 V1.2.1:2021

Raadiosagedusliku magnetkontuuri kuni 45 A juhtseade sagedustel 10 Hz kuni 9 kHz; Raadiospektrile juurdepääsu harmoneeritud standard
Audio frequency induction loop drivers up to 45 A in the frequency range 10 Hz to 9 kHz; Harmonised Standard for access to radio spectrum

The present document specifies technical characteristics and methods of measurements for audio frequency induction loop drivers operating from 10 Hz to 9 kHz used in Audio Frequency Induction Loop System (AFILS) with an upper limit of 45 Arms. NOTE 1: The object of an AFILS is to transmit an audio signal to people with hearing difficulties. The receiver in this case is normally a hearing aid or cochlear implant with a built in telecoil, both of which are covered by ETSI EN 300 422-4. These radio equipment types are capable of operating in the frequency band within the 10 Hz to 9 kHz range: • with (an) output connection(s); • for audio frequency baseband transmission (un-modulated and without the use of a carrier). The present document covers induction loop drivers with output connectors. Integral antenna systems are covered by ETSI EN 300 422-4. NOTE 2: The relationship between the present document and essential requirements of article 3.2 of Directive 2014/53/EU is given in annex A.

Keel: en
Alusdokumendid: ETSI EN 303 348 V1.2.1

EVS-EN 303 423 V1.3.1:2021

Keskkonnatehnika (EE); Majapidamis ja kontori elektri- ja elektroonikaseadmed; Ühendusseadmete tarbitava võimsuse mõõtmine võrguühendusega ooteseisundis
Environmental Engineering (EE); Electrical and electronic household and office equipment; Measurement of networked standby power consumption of Interconnecting equipment

1.1 Equipment in the scope of the present document The present document specifies methods of measurement of electrical power consumption in networked standby and the reporting of the results for network interconnecting equipment. Example of interconnecting equipment are in Annex B. Power consumption in standby (other than networked standby) is covered by CENELEC EN 50564, including the input voltage range. The present document also provides a method to test power management and whether it is possible to deactivate wireless network connection(s). The present document applies to electrical products with a rated input voltage of 230 V a.c. for single phase products and 400 V a.c. for three phase products. The present document is produced under the mandate M/544 and can be used to demonstrate compliance to the EU Regulation (EC) No 1275/2008 amended by Regulation 801/2013. The present document does not apply to televisions as defined in Regulation (EC) No 642/2009. NOTE 1: The EU regulation 801/2013 applies to equipment designed for use with a nominal voltage rating of 250 V and below. NOTE 2: EU regulation 801/2013 does not apply to electrical and electronic household and office equipment placed on the market with a low voltage external power supply to work as intended. NOTE 3: "Low voltage external power supply" is the definition provided in EU regulation 278/2009. NOTE 4: The measurement of energy consumption and performance of equipment during intended use are generally specified in product standards and are not covered by the present document. NOTE 5: Where the present document is referenced by more specific standards or procedures, these should define and name the relevant conditions to which this test procedure is applied. 1.2 Equipment not in the scope of the present document The present document does not apply to the measurement of electrical power consumption in networked standby for edge equipment. The edge equipment is a networked equipment that can be connected to a network and interact with that network or other devices and that does not have, as its primary function, the passing of network traffic to provide a network. Edge equipment are covered in CENELEC EN 50643.

Keel: en
Alusdokumendid: ETSI EN 303 423 V1.3.1

EVS-EN 303 676 V1.1.1:2021

Navigation radar used on inland waterways; Operational, functional and technical requirements

The present document defines the functional and operational requirements for navigational radar installations used in inland waterways as required by CESNI ES-TRIN standard. The present document is applicable to radar equipment and its associated primary navigational display intended for the navigation of vessels on inland waterways with the following characteristics: • Transmitter Peak Envelope Power up to 10 kW. • The antenna is rotating and passive. • Unmodulated single carrier frequency only may be utilized. The applicable frequencies of operation of this type of radio equipment are given in table 1. These frequencies are allocated to the radio navigation service, as defined in article 5 of the ITU Radio Regulations. Table 1: Radio navigation service frequencies Radio navigation service frequencies Transmit 9 300 MHz to 9 500 MHz Receive 9 300 MHz to 9 500 MHz

Keel: en
Alusdokumendid: ETSI EN 303 676 V1.1.1

EVS-EN 303 758 V1.1.1:2021

TETRA raadioseadmed, mis kasutavad vahelduvat mähisjoone modulatsiooni ja kanalilaiust 25 kHz, 50 kHz, 100 kHz või 150 kHz; Raadiospektrile juurdepääsu harmoneeritud standard

TETRA radio equipment using non-constant envelope modulation operating in a channel bandwidth of 25 kHz, 50 kHz, 100 kHz or 150 kHz; Harmonised Standard for access to radio spectrum

The present document specifies the technical requirements and methods of measurements for TETRA radio transmitters and receivers used in stations and technical requirements and methods of measurements for TMO repeater in the Private Mobile Radio (PMR) service. It applies to use in the land mobile service, operating on radio frequencies between 137 MHz and 1 GHz, with channel separations of 25 kHz, 50 kHz, 100 kHz and 150 kHz. Table 1: Radiocommunications service frequency bands Radiocommunications service frequency bands Transmit 137 MHz to 1 000 MHz Receive 137 MHz to 1 000 MHz It applies to equipment for continuous and/or discontinuous transmission of data and/or digital speech. The equipment (base station and mobile station) comprises a transmitter and associated encoder and modulator and/or a receiver and associated demodulator and decoder. The types of equipment covered by the present document are as follows: • base station (equipment fitted with an antenna connector, intended for use in a fixed location); • mobile station (equipment fitted with an antenna connector, normally used in a vehicle or as a transportable); • TMO Repeater; and • those hand portable stations: a) fitted with an antenna connector; or b) without an external antenna connector (integral antenna equipment), but fitted with a permanent internal or a temporary internal 50 Ω Radio Frequency (RF) connector which allows access to the transmitter output and the receiver input. Hand portable equipment without an external or internal RF connector and without the possibility of having a temporary internal 50 Ω RF connector is not covered by the present document. NOTE: The relationship between the present document and essential requirements of article 3.2 of Directive 2014/53/EU is given in annex A.

Keel: en
Alusdokumendid: ETSI EN 303 758 V1.1.1

EVS-EN IEC 61970-600-1:2021

Energy management system application program interface (EMS-API) - Part 600-1: Common Grid Model Exchange Standard (CGMES) - Structure and rules

IEC 61970-600-1:2021 covers the definition of Common Grid Model Exchange Standard (CGMES), defines the main rules and application's requirements to meet business requirements for assembled and merged model to fit relevant business services. This document does not define the business requirements, business processes nor how applications are implemented. This document defines how relevant Common Information Model (CIM) standards work together so that specific business requirements can be resolved. It also includes extensions to the Common Information Model (CIM). The current extensions are defined in IEC 61970-301:2020 and will be covered in its future Amendment 1, but additional extensions can be defined in other standards in the IEC 61970-600-series. The extensions can be used to define additional profiles or to expand IEC 61970-450-series or IEC 61968-13 profiles. However, primary CGMES includes additional constraints on existing profiles and validation of assembled and merged models that is based on existing profiles. This can be done by making optional attributes and associations mandatory (required). In addition, this document includes the specification of the serialisation that must be supported by referring to an existing standard defined in IEC 61970-550-series, e.g. IEC 61970-552, and making relevant constraints related to it. The goal is to achieve interoperability between applications using CGMES in a high-performance environment with combined minimum effort so that relevant business processes are satisfied. This first edition cancels and replaces IEC TS 61970-600-1 published in 2017. This edition constitutes a technical revision.

Keel: en
Alusdokumendid: IEC 61970-600-1:2021; EN IEC 61970-600-1:2021

EVS-EN IEC 61970-600-2:2021

Energy management system application program interface (EMS-API) - Part 600-2: Common Grid Model Exchange Specification (CGMES) - Exchange profiles specification

IEC 61970-600-2:2021 defines the profiles included in the Common Grid Model Exchange Standard (CGMES) that are based on IEC 61970-450-series and IEC 61968-13 profiles. This document refers to the IEC 61970-450-series and IEC 61968-13 profiles only in cases where they are identical. If the referenced profile is not yet published, this document includes the profile definition and related constraints' definitions. In the case where a CGMES profile makes restriction on the referenced profile, the restriction is defined in this document. The equipment boundary profile (EQBD) is the only profile that is not part of IEC 61970-450-series and IEC 61968-13 profiles. This profile is deprecated as modifications have been made to align between EQBP and the equipment profile (EQ). Although the updated EQBD is addressing the requirement that boundary also can be located inside a substation, which will be the case for many Distribution System Operators (DSOs), additional information would need to be exchanged. For instance, system integrity protection schemes, that can be shared by multiple utility would require another way of boundary handling. In this document EQBD is included in CGMES only to create better backwards compatibility with previous version of the CGMES. The machine-readable documentation that supports model driven development of the profiles defined in this part are generated as Resource Description Framework Schema (RDFS) according to IEC 61970-501:2006 (with some extension) and IEC 61970-501:ED2 when published.

Keel: en
Alusdokumendid: IEC 61970-600-2:2021; EN IEC 61970-600-2:2021

35 INFOTEHNOLOOGIA

CEN/TR 17419-2:2021

Digital information interchange in the insurance industry - Transfer of electronic documents - Part 2: Implementation of EN 17419-1 in Open API 3.0 specification

This document specifies a concrete REST webservice API description of the processes and data (see EN 17419-1:2020 for more information) as an OpenAPI definition specified by the OpenAPI specification.

Keel: en

Alusdokumendid: CEN/TR 17419-2:2021

CEN/TS 17642:2021

Intelligent Transport Systems - eSafety - eCall Interface for PSAPs to access cargo and dangerous goods databases

Within the context of 112-eCall (operating requirements defined in EN 16072), this document defines specifications for the provision of 112-eCall for regulated commercial vehicles, including rigid body trucks and variants thereof, prime mover and trailer combinations (sometimes called "semi's", road trains [one prime mover with multiple trailers]) and other regulated commercial vehicles (for example vans carrying medical supplies or radioactive material). The work of CEN/TS 16405 is adopted and extended in this document. (A revised version of CEN/TS 16405 will remain the principal reference document for the content and definition of the commercial vehicle optional additional data set). As with the existing provisions for 112-eCall for Category M1/N1 vehicles, these are specified within the paradigm of being OEM fit equipment supplied with new vehicles. The scope of this specification is limited to the provision of eCall from a commercial vehicle prime mover /rigid body truck) designed for conveying cargo. (UNECE Category N). This document specifies the requirements for the use of 112-eCall by a commercial vehicle prime mover /rigid body truck and defines the interface between the PSAPs and an external transport database. Unless superseded by European Regulation at some future date, all data schemas specified herein and defined in a revision of CEN/TS 16405 are “Optional Additional Data” (OAD) concepts, as enabled in accordance with EN 15722:2020 as part of the minimum set of data As OAD they, and the elements within them, are, by definition, “optional” with use at the discretion of the operator of the vehicle. This document defines how eCall for commercial vehicles is expected to interact with the future eFTI standards and the prerequisites for these standards to allow the access to the relevant freight information for the PSAPSs in case of an eCall. NOTE 1 The provision of eCall from IVS located within trailers is not included in this document, but could be the subject of a further standards deliverable. NOTE 2 The provision of eCall for vehicles via the aftermarket (post sale and registration) will be the subject of other work, and in respect of the operational requirements for any such aftermarket solutions for commercial vehicles, will use this document as a principle reference point. NOTE 3 The 112-eCall paradigm involves a direct call from the vehicle to the most appropriate PSAP (third party service provision by comparison, involves the support of an intermediary third party service provider before the call is forwarded to the PSAP). The specifications herein relate only to the provision of 112-eCall or IMS-112-eCall, and do not provide specifications for third party service provision of eCall, although in the case of 112-eCall for commercial vehicles, links to third party provision of service aspects (such as cargo contents) could be required.

Keel: en
Alusdokumendid: CEN/TS 17642:2021

EVS-EN IEC 63002:2021

Interoperability specifications and communication method for external power supplies used with computing and consumer electronics devices

This International Standard defines common charging interoperability guidelines for power sources (external power supplies (EPS) and other Sources) used with computing and consumer electronics devices that implement the IEC 62680-1-3: USB Type-C®1 Cable and Connector Specification. This document defines normative requirements for an EPS to ensure interoperability, in particular it specifies the data communicated from a power source to a device (Figure 1) and certain safety elements of the EPS, cable, and device. While the requirements focus of this document is on the EPS (External Power Supply) and the behavior at its USB Type-C connector interface, it is also important to comprehend cable assembly and device capabilities and behaviors in order to assure end-to-end charging interoperability. The scope does not apply to all design aspects of an EPS. An EPS compliant with this standard is also expected to follow other applicable global standards and regulatory compliance requirements for aspects such as product safety, EMC and energy efficiency. [Figure 1] This International Standard provides recommendations for the behavior of a device when used with a power source compliant with this document. This International Standard specifies the minimum hardware specification for an EPS implementing IEC 62680-1-3: USB Type-C. This document also specifies the data objects used by a charging system utilizing IEC 62680-1-2: USB Power Delivery Specification to understand the identity, design and performance characteristics, and operating status of an external power supply. IEC 62680-1-2 and IEC 62680-1-3 focus on power delivery applications ranging to 100W for a variety of computing and consumer electronic devices including notebook computers, tablets, smartphones, small form-factor desktops, monitor displays and other related multimedia devices. Future updates to IEC 62680-1-2 and IEC 62680-1-3 specifications will extend to enable power delivery applications that require more than 100W while remaining within the technical limitations of the USB Type-C cable and connector solution. This document relies on established mechanical and electrical specifications, and communication protocols specified by IEC 62680-1-2 and IEC 62680-1-3. These specifications support methods for establishing the best performing interoperability between untested combinations of EPS and devices with the aim of improving consumer satisfaction. Information describing the USB charging interoperability model, overview of USB Type-C and USB Power Delivery specifications, and factors for charging performance are also provided to support implementation of this standard.

Keel: en
Alusdokumendid: IEC 63002:2021; EN IEC 63002:2021
Asendab dokumenti: EVS-EN 63002:2017

45 RAUDTEETEHNIKA

EVS-EN 17168:2021

Railway applications - Platform barrier systems

This European Standard specifies requirements for the design, construction and operation of platform barrier systems positioned at the edge of a station platform immediately adjacent to rail or other guided vehicles in stations and boarding points for passenger services and includes: - requirements for the fixed structure and fixed parts along the platform; - physical requirements for the movable doors and gates normally used by passengers; - requirements for emergency doors; - requirements for driver access doors; - requirements for platform extremity doors; - requirements for management of safety risks that are particular to barrier systems. This European Standard also gives requirements for the integration of barriers with the

overall rail system including: - synchronization of vehicle and platform barrier doors or gates; - audible and visible alerts; - integrity of control systems; - testing of the barrier installation; - operational performance; - requirements relating to other interfacing sub-systems, notably signalling and vehicles. For barrier systems set back from the platform edge, which are used to control access to trains or for crowd management, relevant sections of the document can be used as guidance. This European Standard applies to all actors involved in the implementation and system integration of a platform barrier system, including infrastructure owners, designers, installers and operators. This European Standard does not cover barrier systems using bars, ropes, etc. or which operate in a vertical direction. This European Standard applies to light rail services, e.g. metro and tramway systems and heavy rail services as requested by a project specification. It applies to small systems, working in conjunction with a single vehicle, or with larger systems working with a complete train. This European Standard applies to platform barrier systems used at sub-surface stations, enclosed surface stations (e.g. those enclosed for the purposes of providing an air-conditioned environment for waiting passengers), and those fully in the open-air. This European Standard does not cover normative requirements relating to fire performance or fire requirements arising from use of platform barrier systems as fire barriers.

Keel: en
Alusdokumendid: EN 17168:2021

EVS-EN 50155:2021

Raudteealased rakendused. Raudteeveerem. Elektroonikaseadmed
Railway applications - Rolling stock - Electronic equipment

See Euroopa standard kehtib kõigile raudteeveeremile paigaldatud juhtimis-, reguleerimis-, kaitse-, diagnostika-, elektritoite- jms süsteemide elektroonikaseadmetele. Selle dokumendi tähenduses on elektroonikaseadmed määratletud kui seadmed, mis koosnevad elektroonikakomponentidest (nt takistid, kondensaatorid, transistorid, dioodid, integraallülitused, hübriidid, rakenduse spetsiifilised integraallülitused, mähitud komponendid ja releed) ja tunnustatud seotud komponentidest (nt pistikud, mehaanilised osad). Need komponendid on paigaldatud peamiselt trükkplaatidele. Jõuelektroonika seadmete andurid (nt vool, pinge, kiirus) ja pooljuhtseadised on samuti selle standardiga kaetud. Terviklikke pooljuhtseadmeid ja muundureid käsitletakse standardis EN 61287-1. See dokument hõlmab elektroonikaseadmete töötingimuste, projekteerimise, dokumenteerimise, katsetamise ja integreerimise nõudeid, samuti ühilduvate ja usaldusväärsete seadmete jaoks vajalikuks peetavaid riist- ja tarkvaranõudeid. Konkreetseid nõudeid praktikatele, mis on vajalikud ohutuse terviklikkuse taseme või funktsionaalse ohutuse tagamiseks, pole käesolevas dokumendis käsitletud. Sellest hoolimata kehtib see dokument kõigi veeremi elektroonikaseadmete või -süsteemide, millega täidetakse ohutusega seotud funktsioone riistvarale. Nõuded rongi siseste raudteeseadmete tarkvarale on määratletud standardis EN 50657.

Keel: en
Alusdokumendid: EN 50155:2021
Asendab dokumenti: EVS-EN 50155:2017

47 LAEVAEHITUS JA MERE-EHITISED

EVS-EN ISO 8847:2021

Väikelaevad. Rooliseade. Trossidega plokisüsteemid
Small craft - Steering gear - Cable over pulley systems (ISO 8847:2021)

This document specifies the requirements for the design, installation and testing of cable over pulley steering systems on small craft with or without a propulsion engine(s), and on small craft with outboard engine(s) up to and including 37 kW total power. It specifies the requirements for the design and testing of all components of a cable over pulley steering system, from the steering mechanism to the mechanical interface with the rudder shaft or the outboard engine. It applies to cable over pulley steering systems, whether for pedestal or bulkhead types. This document does not address emergency means of steering the craft.

Keel: en
Alusdokumendid: ISO 8847:2021; EN ISO 8847:2021
Asendab dokumenti: EVS-EN ISO 8847:2017

49 LENNUNDUS JA KOSMOSETEHNIKA

CEN/CLC/TR 17603-20-05:2021

Space engineering - High voltage engineering and design handbook

This Handbook establishes guidelines to ensure a reliable design, manufacturing and testing of high voltage electronic equipment and covers: • Design • Manufacturing • Verification/Testing of equipment generating, carrying or consuming high voltage, like: high voltage power conditioner, high voltage distribution (cables and connectors). This Handbook is dedicated to all parties involved at all levels in the realization of space segment hardware and its interface with high voltage for which EN 16603-20 (based on ECSS-E-ST-20) is applicable. This handbook sets out to: • summarize most relevant aspects and data of high voltage insulation • provide design guidelines for high voltage insulation • provide design guidelines for high voltage electronic equipment • give an overview of appropriate high voltage test methods • establish a set of recommendations for generation design and verification rules and methods • provide best practices Applicability is mainly focused on power conditioning equipment but may be also applicable for all other high voltage electric and electronic power equipment used on space missions, except items of experimental nature.

Keel: en
Alusdokumendid: CEN/CLC/TR 17603-20-05:2021

CEN/CLC/TR 17603-31-01:2021

Space Engineering - Thermal design handbook - Part 1: View factors

In this Part 1 of the spacecraft thermal control and design data handbooks, view factors of diffuse and specular thermal surfaces are discussed. For diffuse surfaces, calculations are given for radiation emission and absorption between different configurations of planar, cylindrical, conical, spherical and ellipsoidal surfaces for finite and infinite surfaces. For specular surfaces the affect of reflectance on calculations for view factors is included in the calculations. View factors for specular and diffuse surfaces are also included. The Thermal design handbook is published in 16 Parts TR 17603-31-01 Part 1 Thermal design handbook – Part 1: View factors TR 17603-31-01 Part 2 Thermal design handbook – Part 2: Holes, Grooves and Cavities TR 17603-31-01 Part 3 Thermal design handbook – Part 3: Spacecraft Surface Temperature TR 17603-31-01 Part 4 Thermal design handbook – Part 4: Conductive Heat Transfer TR 17603-31-01 Part 5 Thermal design handbook – Part 5: Structural Materials: Metallic and Composite TR 17603-31-01 Part 6 Thermal design handbook – Part 6: Thermal Control Surfaces TR 17603-31-01 Part 7 Thermal design handbook – Part 7: Insulations TR 17603-31-01 Part 8 Thermal design handbook – Part 8: Heat Pipes TR 17603-31-01 Part 9 Thermal design handbook – Part 9: Radiators TR 17603-31-01 Part 10 Thermal design handbook – Part 10: Phase – Change Capacitors TR 17603-31-01 Part 11 Thermal design handbook – Part 11: Electrical Heating TR 17603-31-01 Part 12 Thermal design handbook – Part 12: Louvers TR 17603-31-01 Part 13 Thermal design handbook – Part 13: Fluid Loops TR 17603-31-01 Part 14 Thermal design handbook – Part 14: Cryogenic Cooling TR 17603-31-01 Part 15 Thermal design handbook – Part 15: Existing Satellites TR 17603-31-01 Part 16 Thermal design handbook – Part 16: Thermal Protection System.

Keel: en
Alusdokumendid: CEN/CLC/TR 17603-31-01:2021

CEN/CLC/TR 17603-31-02:2021

Space Engineering - Thermal design handbook - Part 2: Holes, Grooves and Cavities

In this Part 2 of the spacecraft thermal control and design data handbooks, the radiant heat transfer properties of cavities that do not contain an absorbing-emitting medium are analyzed. The effect of radiant energy entering a cavity with one or more openings is discussed taking into consideration the characteristics and properties of the constituents. Examples support the solutions discussed. The Thermal design handbook is published in 16 Parts TR 17603-31-01 Part 1 Thermal design handbook – Part 1: View factors TR 17603-31-01 Part 2 Thermal design handbook – Part 2: Holes, Grooves and Cavities TR 17603-31-01 Part 3 Thermal design handbook – Part 3: Spacecraft Surface Temperature TR 17603-31-01 Part 4 Thermal design handbook – Part 4: Conductive Heat Transfer TR 17603-31-01 Part 5 Thermal design handbook – Part 5: Structural Materials: Metallic and Composite TR 17603-31-01 Part 6 Thermal design handbook – Part 6: Thermal Control Surfaces TR 17603-31-01 Part 7 Thermal design handbook – Part 7: Insulations TR 17603-31-01 Part 8 Thermal design handbook – Part 8: Heat Pipes TR 17603-31-01 Part 9 Thermal design handbook – Part 9: Radiators TR 17603-31-01 Part 10 Thermal design handbook – Part 10: Phase – Change Capacitors TR 17603-31-01 Part 11 Thermal design handbook – Part 11: Electrical Heating TR 17603-31-01 Part 12 Thermal design handbook – Part 12: Louvers TR 17603-31-01 Part 13 Thermal design handbook – Part 13: Fluid Loops TR 17603-31-01 Part 14 Thermal design handbook – Part 14: Cryogenic Cooling TR 17603-31-01 Part 15 Thermal design handbook – Part 15: Existing Satellites TR 17603-31-01 Part 16 Thermal design handbook – Part 16: Thermal Protection System.

Keel: en
Alusdokumendid: CEN/CLC/TR 17603-31-02:2021

CEN/CLC/TR 17603-31-03:2021

Space Engineering - Thermal design handbook - Part 3: Spacecraft Surface Temperature

Factors affecting the equilibrium temperature of a spacecraft surface are described in this Part 3 using simple geometrical configurations and basic assumptions. Methods for conducting calculations on the affect of Solar, planetary and albedo radiation are given taking into consideration the internal and immediate environmental factors and incorporating the various configurations and dimensions of the constituent parts. The Thermal design handbook is published in 16 Parts TR 17603-31-01 Part 1 Thermal design handbook – Part 1: View factors TR 17603-31-01 Part 2 Thermal design handbook – Part 2: Holes, Grooves and Cavities TR 17603-31-01 Part 3 Thermal design handbook – Part 3: Spacecraft Surface Temperature TR 17603-31-01 Part 4 Thermal design handbook – Part 4: Conductive Heat Transfer TR 17603-31-01 Part 5 Thermal design handbook – Part 5: Structural Materials: Metallic and Composite TR 17603-31-01 Part 6 Thermal design handbook – Part 6: Thermal Control Surfaces TR 17603-31-01 Part 7 Thermal design handbook – Part 7: Insulations TR 17603-31-01 Part 8 Thermal design handbook – Part 8: Heat Pipes TR 17603-31-01 Part 9 Thermal design handbook – Part 9: Radiators TR 17603-31-01 Part 10 Thermal design handbook – Part 10: Phase – Change Capacitors TR 17603-31-01 Part 11 Thermal design handbook – Part 11: Electrical Heating TR 17603-31-01 Part 12 Thermal design handbook – Part 12: Louvers TR 17603-31-01 Part 13 Thermal design handbook – Part 13: Fluid Loops TR 17603-31-01 Part 14 Thermal design handbook – Part 14: Cryogenic Cooling TR 17603-31-01 Part 15 Thermal design handbook – Part 15: Existing Satellites TR 17603-31-01 Part 16 Thermal design handbook – Part 16: Thermal Protection System.

Keel: en
Alusdokumendid: CEN/CLC/TR 17603-31-03:2021

CEN/CLC/TR 17603-31-04:2021

Space Engineering - Thermal design handbook - Part 4: Conductive Heat Transfer

This Part 4 of the spacecraft thermal control and design data handbooks, provides information on calculating the conductive heat transfer rate for a variety of two and three-dimensional configurations. Calculations for the conductance of the interface between two surfaces (joints) require special consideration and are included as a separate clause. The Thermal design handbook is published in 16 Parts TR 17603-31-01 Part 1 Thermal design handbook – Part 1: View factors TR 17603-31-01 Part 2 Thermal design handbook – Part 2: Holes, Grooves and Cavities TR 17603-31-01 Part 3 Thermal design handbook – Part 3: Spacecraft Surface Temperature TR 17603-31-01 Part 4 Thermal design handbook – Part 4: Conductive Heat Transfer TR 17603-31-01 Part 5 Thermal design handbook – Part 5: Structural Materials: Metallic and Composite TR 17603-31-01 Part 6

Thermal design handbook – Part 6: Thermal Control Surfaces TR 17603-31-01 Part 7 Thermal design handbook – Part 7: Insulations TR 17603-31-01 Part 8 Thermal design handbook – Part 8: Heat Pipes TR 17603-31-01 Part 9 Thermal design handbook – Part 9: Radiators TR 17603-31-01 Part 10 Thermal design handbook – Part 10: Phase – Change Capacitors TR 17603-31-01 Part 11 Thermal design handbook – Part 11: Electrical Heating TR 17603-31-01 Part 12 Thermal design handbook – Part 12: Louvers TR 17603-31-01 Part 13 Thermal design handbook – Part 13: Fluid Loops TR 17603-31-01 Part 14 Thermal design handbook – Part 14: Cryogenic Cooling TR 17603-31-01 Part 15 Thermal design handbook – Part 15: Existing Satellites TR 17603-31-01 Part 16 Thermal design handbook – Part 16: Thermal Protection System.

Keel: en
Alusdokumendid: CEN/CLC/TR 17603-31-04:2021

CEN/CLC/TR 17603-31-05:2021

Space Engineering - Thermal design handbook - Part 5: Structural Materials: Metallic and Composite

In this Part 5 of the spacecraft thermal control and design data handbooks, clause 4 contains technical data on the metallic alloys used in spacecrafts is given: composition, application areas, properties and behaviour from a thermal and thermo-optics point of view, degeneration and aging. All other properties of the metallic alloys are outside the scope of this document. Properties of composite materials combined to form heterogeneous structures are given in clause 5. The Thermal design handbook is published in 16 Parts TR 17603-31-01 Part 1 Thermal design handbook – Part 1: View factors TR 17603-31-01 Part 2 Thermal design handbook – Part 2: Holes, Grooves and Cavities TR 17603-31-01 Part 3 Thermal design handbook – Part 3: Spacecraft Surface Temperature TR 17603-31-01 Part 4 Thermal design handbook – Part 4: Conductive Heat Transfer TR 17603-31-01 Part 5 Thermal design handbook – Part 5: Structural Materials: Metallic and Composite TR 17603-31-01 Part 6 Thermal design handbook – Part 6: Thermal Control Surfaces TR 17603-31-01 Part 7 Thermal design handbook – Part 7: Insulations TR 17603-31-01 Part 8 Thermal design handbook – Part 8: Heat Pipes TR 17603-31-01 Part 9 Thermal design handbook – Part 9: Radiators TR 17603-31-01 Part 10 Thermal design handbook – Part 10: Phase – Change Capacitors TR 17603-31-01 Part 11 Thermal design handbook – Part 11: Electrical Heating TR 17603-31-01 Part 12 Thermal design handbook – Part 12: Louvers TR 17603-31-01 Part 13 Thermal design handbook – Part 13: Fluid Loops TR 17603-31-01 Part 14 Thermal design handbook – Part 14: Cryogenic Cooling TR 17603-31-01 Part 15 Thermal design handbook – Part 15: Existing Satellites TR 17603-31-01 Part 16 Thermal design handbook – Part 16: Thermal Protection System.

Keel: en
Alusdokumendid: CEN/CLC/TR 17603-31-05:2021

CEN/CLC/TR 17603-31-06:2021

Space Engineering - Thermal design handbook - Part 6: Thermal Control Surfaces

This Part 6 of the spacecraft thermal control and design data handbooks, provides information on coatings on spacecrafts for the purposes of thermal and thermo-optical regulation. Properties of pigmented and contact coatings, are described and are classified according to their thermal radiation characteristics. Also included in this Part are the properties and characteristics of foils and tapes with particular emphasis on their adhesive characteristics; these are not classified according to their thermal radiation properties. The Thermal design handbook is published in 16 Parts TR 17603-31-01 Part 1 Thermal design handbook – Part 1: View factors TR 17603-31-01 Part 2 Thermal design handbook – Part 2: Holes, Grooves and Cavities TR 17603-31-01 Part 3 Thermal design handbook – Part 3: Spacecraft Surface Temperature TR 17603-31-01 Part 4 Thermal design handbook – Part 4: Conductive Heat Transfer TR 17603-31-01 Part 5 Thermal design handbook – Part 5: Structural Materials: Metallic and Composite TR 17603-31-01 Part 6 Thermal design handbook – Part 6: Thermal Control Surfaces TR 17603-31-01 Part 7 Thermal design handbook – Part 7: Insulations TR 17603-31-01 Part 8 Thermal design handbook – Part 8: Heat Pipes TR 17603-31-01 Part 9 Thermal design handbook – Part 9: Radiators TR 17603-31-01 Part 10 Thermal design handbook – Part 10: Phase – Change Capacitors TR 17603-31-01 Part 11 Thermal design handbook – Part 11: Electrical Heating TR 17603-31-01 Part 12 Thermal design handbook – Part 12: Louvers TR 17603-31-01 Part 13 Thermal design handbook – Part 13: Fluid Loops TR 17603-31-01 Part 14 Thermal design handbook – Part 14: Cryogenic Cooling TR 17603-31-01 Part 15 Thermal design handbook – Part 15: Existing Satellites TR 17603-31-01 Part 16 Thermal design handbook – Part 16: Thermal Protection System.

Keel: en
Alusdokumendid: CEN/CLC/TR 17603-31-06:2021

CEN/CLC/TR 17603-31-07:2021

Space Engineering - Thermal design handbook - Part 7: Insulations

There are 3 main categories of insulators used in spacecrafts: 1. foams: organic and inorganic; 2. fibrous insulations: for internal and external insulation and for high temperature environments 3. multilayer insulations (MLI): layers of radiation reflecting shields. Properties, thermal behaviour and application areas of the insulation materials used in spacecrafts are detailed in this Part 7. The Thermal design handbook is published in 16 Parts TR 17603-31-01 Part 1 Thermal design handbook – Part 1: View factors TR 17603-31-01 Part 2 Thermal design handbook – Part 2: Holes, Grooves and Cavities TR 17603-31-01 Part 3 Thermal design handbook – Part 3: Spacecraft Surface Temperature TR 17603-31-01 Part 4 Thermal design handbook – Part 4: Conductive Heat Transfer TR 17603-31-01 Part 5 Thermal design handbook – Part 5: Structural Materials: Metallic and Composite TR 17603-31-01 Part 6 Thermal design handbook – Part 6: Thermal Control Surfaces TR 17603-31-01 Part 7 Thermal design handbook – Part 7: Insulations TR 17603-31-01 Part 8 Thermal design handbook – Part 8: Heat Pipes TR 17603-31-01 Part 9 Thermal design handbook – Part 9: Radiators TR 17603-31-01 Part 10 Thermal design handbook – Part 10: Phase – Change Capacitors TR 17603-31-01 Part 11 Thermal design handbook – Part 11: Electrical Heating TR 17603-31-01 Part 12 Thermal design handbook – Part 12: Louvers TR 17603-31-01 Part 13 Thermal design handbook – Part 13: Fluid Loops TR 17603-31-01 Part 14 Thermal design handbook – Part 14: Cryogenic Cooling TR 17603-31-01 Part 15 Thermal design handbook – Part 15: Existing Satellites TR 17603-31-01 Part 16 Thermal design handbook – Part 16: Thermal Protection System.

Keel: en

Alusdokumendid: CEN/CLC/TR 17603-31-07:2021

CEN/CLC/TR 17603-31-08:2021

Space Engineering - Thermal design handbook - Part 8: Heat Pipes

Heat pipes are a solution to many thermal dissipation problems encountered in space systems. The types of heat pipes that can be used in spacecrafts are described. Details on design and construction, usability, compatibility and the limitations of each type are given. The Thermal design handbook is published in 16 Parts TR 17603-31-01 Part 1 Thermal design handbook – Part 1: View factors TR 17603-31-01 Part 2 Thermal design handbook – Part 2: Holes, Grooves and Cavities TR 17603-31-01 Part 3 Thermal design handbook – Part 3: Spacecraft Surface Temperature TR 17603-31-01 Part 4 Thermal design handbook – Part 4: Conductive Heat Transfer TR 17603-31-01 Part 5 Thermal design handbook – Part 5: Structural Materials: Metallic and Composite TR 17603-31-01 Part 6 Thermal design handbook – Part 6: Thermal Control Surfaces TR 17603-31-01 Part 7 Thermal design handbook – Part 7: Insulations TR 17603-31-01 Part 8 Thermal design handbook – Part 8: Heat Pipes TR 17603-31-01 Part 9 Thermal design handbook – Part 9: Radiators TR 17603-31-01 Part 10 Thermal design handbook – Part 10: Phase – Change Capacitors TR 17603-31-01 Part 11 Thermal design handbook – Part 11: Electrical Heating TR 17603-31-01 Part 12 Thermal design handbook – Part 12: Louvers TR 17603-31-01 Part 13 Thermal design handbook – Part 13: Fluid Loops TR 17603-31-01 Part 14 Thermal design handbook – Part 14: Cryogenic Cooling TR 17603-31-01 Part 15 Thermal design handbook – Part 15: Existing Satellites TR 17603-31-01 Part 16 Thermal design handbook – Part 16: Thermal Protection System.

Keel: en
Alusdokumendid: CEN/CLC/TR 17603-31-08:2021

EVS-EN ISO 20785-4:2021

Dosimetry for exposures to cosmic radiation in civilian aircraft - Part 4: Validation of codes (ISO 20785-4:2019)

This document is intended for the validation of codes used for the calculation of doses received by individuals on board aircraft. It gives guidance to radiation protection authorities and code developers on the basic functional requirements which the code fulfils. Depending on any formal approval by a radiation protection authority, additional requirements concerning the software testing can apply.

Keel: en
Alusdokumendid: ISO 20785-4:2019; EN ISO 20785-4:2021

59 TEKSTIILI- JA NAHATEHNOLOOGIA

EVS-EN 17117-2:2021

Rubber- or plastics-coated fabrics - Mechanical test methods under biaxial stress states - Part 2: Determination of the pattern compensation values

This document describes methods for the determination of compensation values for orthotropic coated fabrics (different properties along ideally perpendicular directions, such as the weft and warp yarns for woven based coated fabrics, or along the courses and wales of knitted based coated fabrics) for determining cutting patterns. NOTE The final interpretation and the determination of the compensation values remains the responsibility of the project engineer. Annex C describes a method to determine comparable measures of extensibility along ideally perpendicular directions of coated fabrics. The comparable measures of extensibility can be used by design engineers to assess the extensibility of a coated fabric by comparison with other coated fabrics. In this way, they can help to interpret results of compensation tests. Moreover, they can be used by material suppliers to measure the consistency of extensibility along perpendicular directions of a coated fabric from batch to batch.

Keel: en
Alusdokumendid: EN 17117-2:2021

EVS-EN ISO 1833-22:2021

Textiles - Quantitative chemical analysis - Part 22: Mixtures of viscose or certain types of cupro or modal or lyocell with flax fibres (method using formic acid and zinc chloride) (ISO 1833 22:2020)

This document specifies a method, using formic acid and zinc chloride, to determine the mass percentage of viscose or certain types of cupro or modal or lyocell, after removal of non-fibrous matter, in textiles made of mixtures of - viscose or certain types of the cupro or modal or lyocell fibres with - flax fibres. This document is not applicable to mixtures in which the flax fibre has suffered extensive chemical degradation, nor when the viscose, cupro, modal or lyocell fibre is rendered incompletely soluble by the presence of certain permanent finishes or reactive dyes that cannot be removed completely.

Keel: en
Alusdokumendid: ISO 1833-22:2020; EN ISO 1833-22:2021
Asendab dokumenti: EVS-EN ISO 1833-22:2013

65 PÕLLUMAJANDUS

EVS-EN IEC 62841-4-3:2021

Käeshoitavad elektrimootoriga tööriistad, transporditavad tööriistad ja muru- ning aiatöömasinad. Ohutus. Osa 4-3: Erinõuded lükatavatele muruniidukitele
Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 4-3: Particular requirements for pedestrian controlled walk-behind lawnmowers

IEC 62841-4-3:2020 This document applies to the design of pedestrian controlled walk-behind - cylinder lawnmowers; and - rotary lawnmowers equipped with - metallic cutting means; and/or - rigid non-metallic cutting means; and/or - non-metallic cutting means with one or more cutting elements pivotally mounted on a generally circular drive unit, where these cutting elements rely on centrifugal force to achieve cutting, and have a kinetic energy for each single cutting element of greater than 10 J. This document does not apply to - robotic lawnmowers; - remote-controlled lawnmowers; - flail mowers or flail-type attachments; - scissors type lawnmowers; - grassland mowers; - sickle bar mowers; - towed/semi-mounted grass-cutting machines; - scrub-clearing machines; - lawn trimmers and lawn edge trimmers; - lawn edgers; - grass trimmers; - brush cutters; - brush saws; - agricultural mowers; - trailing seat/sulky units; - ride-on machines; - non-powered lawnmowers; - combustion engine powered lawnmowers; - hybrid and fuel cell powered machines and associated charging systems; and - garden tractors or their attachments. Robotic lawnmowers are covered by IEC 60335-2-107, and will be covered by a future part of IEC 62841.

Keel: en
Alusdokumendid: IEC 62841-4-3:2020; EN IEC 62841-4-3:2021
Asendab dokumenti: EVS-EN 60335-2-77:2010

EVS-EN IEC 62841-4-3:2021/A11:2021

Käeshoitavad elektrimootoriga tööriistad, transporditavad tööriistad ja muru- ning aiatöömasinad. Ohutus. Osa 4-3: Erinõuded lükatavatele muruniidukitele
Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 4-3: Particular requirements for pedestrian controlled walk-behind lawnmowers

Amendment to EN IEC 62841-4-3:2021

Keel: en
Alusdokumendid: EN IEC 62841-4-3:2021/A11:2021
Muudab dokumenti: EVS-EN IEC 62841-4-3:2021

67 TOIDUAINETE TEHNOLOOGIA

CEN ISO/TR 29263:2021

Cereals and cereal products - Sampling studies (ISO/TR 29263:2021)

This document presents the description and the results of the three studies conducted by United Kingdom, France and Germany related to grain sampling in order to define a harmonized sampling protocol for official controls. These results had been used to draft ISO 24333

Keel: en
Alusdokumendid: CEN ISO/TR 29263:2021; ISO/TR 29263:2021

71 KEEMILINE TEHNOLOOGIA

CEN/TR 17674:2021

Bio-based products- Use of stable isotope ratios of Carbon, Hydrogen, Oxygen and Nitrogen as tools for verification of the origin of bio-based feedstock and characteristics of production processes - Overview of relevant existing applications

The stable isotope ratios of carbon, hydrogen, oxygen and nitrogen can be used to obtain information about the origin of bio-based feedstock and characteristics of production processes of bio-based products. However, no or limited attention for the use of the elements nitrogen and sulphur is given in this document due to the fact that these applications are not yet available. This Technical Report provides an overview of existing applications of isotope ratio analysis of carbon, hydrogen, oxygen and nitrogen that are relevant to the analysis of bio-based feedstocks, products and production processes

Keel: en
Alusdokumendid: CEN/TR 17674:2021

75 NAFTA JA NAFTATEHNOLOOGIA

EVS-EN 17278:2021

Maagaasisõidukid. Sõidukite tankimisseadmed
Natural gas vehicles - Vehicle fuelling appliances

See dokument käsitleb sõidukite tankimisseadmete (vehicle fuelling appliances, VFA-d) projekteerimist ja tootmist, paigaldamist ja katsetamist, käitamist ja hooldust. VFA-d on surveseadmete komplektid, mille — maksimaalne kompressori voolukiirus on 20 m3/h, — maksimaalne tankimisrõhk temperatuuril 15 °C on 200 bar ja mis on ette nähtud surumaagaasiga (compressed natural gas, CNG) maagaasisõidukite (natural gas vehicles, NGV-d) tankimiseks mittekaubanduslikul eesmärgil. Seda dokumenti

kohaldatakse VFA-de suhtes, mida varustatakse maagaasiga, nagu on määratletud kohalikes kohaldatavates gaasikoostise määrustes või standardis EN 16723-2, või muude gaasidega, mis vastavad eelnimetatud nõuetele, sealhulgas biometaan, puhastatud kaevandusgaas (coal-bed methane, CBM) ja veeldatud maagaas (liquefied natural gas, LNG) kohapeal gaasistatuna või torustikust tuleva gaasina. Sertifitseeritud VFA koostu kombineerimisel lisaseadmetega, näiteks väliste hoiustussüsteemi ja/või tankuritega, kohaldatakse sellise uue koostu suhtes standardit EN ISO 16923. Omavahel ühendatud VFA koostude kombinatsioonide korral kohaldatakse sertifitseeritud VFA koostude kogu uue koosteüksuse suhtes standardit EN ISO 16923.

Keel: en, et
Alusdokumendid: EN 17278:2021

EVS-EN ISO 17225-5:2021

Tahked biokütused. Kütuste spetsifikatsioonid ja klassid. Osa 5: Klassifitseeritud küttepuud
Solid biofuels - Fuel specifications and classes - Part 5: Graded firewood (ISO 17225-5:2021)

See dokument määrab kindlaks klassifitseeritud küttepuude kvaliteediklassid ja spetsifikatsioonid. See dokument hõlmab üksnes järgmistest toorainetest toodetud küttepuid (vt ISO 17725-1:2020, tabel 1): — 1.1.1 Terved puud ilma juurteta; — 1.1.3 Tüvepuit; — 1.1.4 Raiejäägid (jämedad oksad, ladvad jt); — 1.2.1 Keemiliselt töötlemata puidu kõrvalsaadused ja jäägid puidutöötlemistööstusest.

Keel: en, et
Alusdokumendid: ISO 17225-5:2021; EN ISO 17225-5:2021
Asendab dokumenti: EVS-EN ISO 17225-5:2014

EVS-ISO 1928-MOD:2021

Kivisüsi ja koks. Küttevääртuse määramine
Coal and coke - Determination of gross calorific value (ISO 1928:2020, modified)

See dokument käsitleb meetodit tahkete mineraalsete kütuste ülemise küttevääртuse määramiseks konstantsel ruumalal ja referentstemperatuuril 25 °C kalorimeetrilises põletusanumas, mis on kalibreeritud sertifitseeritud bensoehappe põletamisega. Saadud tulemus on analüüsitava proovi ülemine küttevääртus konstantsel ruumalal koos kõigi põlemisproduktide veega vedela vee kujul. Praktikas on kütus põletatud konstantsel (atmosfääri) rõhul ja vesi ei kondenseeru, vaid eraldub auruna koos suitsugaasidega. Nendes tingimustes on tegelik põlemise soojus kütuse ülemine küttevääртus konstantsel rõhul. Võib kasutada ka ülemist küttevääртust konstantsel ruumalal, valemid on esitatud mõlema väärtuse arvutamiseks. Üldised põhimõtted ja kalibreerimisprotseduurid ning kütuste testid on esitatud põhitekstis, samal ajal kui eri tüüpi kalorimeetrilise aparatuuri kasutamisse puutuv on kirjeldatud lisades A kuni C. Lisa D sisaldab loendeid kirjeldatud kalorimeetrite tüüpide kohta kalibreerimiseks ja kütuste testimiseks. Lisa E annab näiteid mõnede arvutuste illustreerimiseks. Lisa F käsitleb kalorimeetriliste põletusanumate ohutut kasutamist, hooldust ja testimist. MÄRKUS Märksõnad: tahked kütused, süsi, koks, [MOD] põlevkivi [MOD], testid, määramine, küttevääртus, arvutusmeetodid, kalorimeetria.

Keel: en
Alusdokumendid: ISO 1928:2020
Asendab dokumenti: EVS-ISO 1928:2016

77 METALLURGIA

EVS-EN ISO 15349-2:2021

Unalloyed steel - Determination of low carbon content - Part 2: Infrared absorption method after combustion in an induction furnace (with preheating) (ISO 15349-2:2021)

This document specifies an infrared absorption method after combustion in an induction furnace for the determination of the low carbon content in unalloyed steel. The method is applicable to carbon contents between 0,000 3 % (mass fraction) and 0,009 % (mass fraction).

Keel: en
Alusdokumendid: ISO 15349-2:2021; EN ISO 15349-2:2021
Asendab dokumenti: EVS-EN ISO 15349-2:2004

79 PUIDUTEHNOLOOGIA

EVS-EN ISO 19085-17:2021

Puidutöötlemismasinad. Ohutus. Osa 17: Kettfiidriga servapealistusmasinad
Woodworking machines - Safety - Part 17: Edge banding machines fed by chains (ISO 19085-17:2021)

This document gives the safety requirements and measures for edge banding machines fed by chains or belts, with manual loading and unloading and maximum workpiece height capacity of 100 mm, capable of continuous production use, hereinafter referred as “machines”. It deals with all significant hazards, hazardous situations and events, listed in Annex A, relevant to the machines, when operated, adjusted and maintained as intended and under the conditions foreseen by the manufacturer; reasonably foreseeable misuse has been considered too. Also, transport, assembly, dismantling, disabling and scrapping phases are taken into account. The machines are designed to process in one pass one end (single-end machine) or both ends (double-end machine) of panels of: — materials with similar physical characteristics to wood (see ISO 19085-1:2021, 3.2), even with a core sheet of aluminium light alloy; — gypsum plaster boards. Edges to be applied by the machine can be made of: — paper; — melamine; — plastic; — composite materials; — aluminium; — light alloy; — veneer; — solid wood. It is also applicable to machines fitted with one or more of the following devices/working units, whose hazards have been dealt with: —

hot air banding unit; — laser banding unit; — infrared banding unit; — dynamic processing units; — sanding belt units; — milling unit installed out of the integral enclosure at the panel side on single-end machines; — milling unit installed out of the integral enclosure between machines halves of double-end machines; — additional fixed or movable workpiece support along the feed; — additional infeed workpiece support; — additional outfeed workpiece support; — in-feed device for transversal loading of panels in single-end machines; — intermediate workpiece support in double-end machines; — automatic panel returner in single-end machines; — automatic tool changing; — quick tool changing system; — automatic multiple edges infeed device; — workpiece heaters. This document does not deal with any hazards relating to: a) systems for loading and unloading of the workpiece to a single machine other than automatic panel returner and infeed and outfeed workpiece supports (e.g. robots); b) the combination of a single machine being used with other machines (as part of a line); c) workpiece dividing unit installed out of the integral enclosure and/or whose tools protrude out of the integral enclosure; d) plasma banding unit. It is not applicable to machines intended for use in potentially explosive atmosphere nor manufactured before the date of its publication.

Keel: en
Alusdokumendid: ISO 19085-17:2021; EN ISO 19085-17:2021
Asendab dokumenti: EVS-EN ISO 18217:2015

83 KUMMI- JA PLASTITÖÖSTUS

EVS-EN ISO 1043-4:2021

Plastics - Symbols and abbreviated terms - Part 4: Flame retardants (ISO 1043-4:2021)

This document provides uniform symbols for flame retardants added to plastics materials.

Keel: en
Alusdokumendid: ISO 1043-4:2021; EN ISO 1043-4:2021
Asendab dokumenti: EVS-EN ISO 1043-4:2000
Asendab dokumenti: EVS-EN ISO 1043-4:2000/A1:2016

91 EHITUSMATERJALID JA EHITUS

EVS-EN 12390-1:2021

Kivistunud betooni katsetamine. Osa 1: Kuju, mõõtmed ja muud katsekehadele ja vormidele esitatavad nõuded
Testing hardened concrete - Part 1: Shape, dimensions and other requirements for specimens and moulds

See dokument esitab betoonist vormitud kuubi-, silindri- ja prismakujuliste katsekehade ja nende valmistamisel kasutatavate vormide kujud, mõõtmed ja tolerantsid. MÄRKUS Selles dokumendis kindlaks määratud tolerantsid tulenevad tugevuskatse vajadustest, kuid neid võib kasutada ka teiste omaduste katsetamisel.

Keel: en, et
Alusdokumendid: EN 12390-1:2021
Asendab dokumenti: EVS-EN 12390-1:2012

EVS-EN 1264-3:2021

Veepõhised piirdesisesed kütte- ja jahutussüsteemid. Osa 3: Dimensioneerimine
Water based surface embedded heating and cooling systems - Part 3: Dimensioning

EN 1264 sari annab juhised hoonetesse, elamud ja mitteelamud (nt kontorid, avalikud, kommerts- ja tööstushooned), soojusmugavuse eesmärgil paigaldatud piirdesisestele kütte- ja jahutussüsteemidele. EN 1264 sari annab juhised köetava või jahutatava ruumi välispiirdesse paigaldatud veepõhiste kütte- ja jahutussüsteemide jaoks. Samuti määratleb see teiste soojuskandjate kasutuse vee asemel, nagu asjakohane. EN 1264 sari määratleb standardiseeritud toote omadused arvutuste ja küttekoormuse katsete kaudu tehniliste spetsifikatsioonide ja sertifikaatide jaoks. Arvutusteks, nende süsteemide rajamise ja kasutamise jaoks vaata standardid EN 1264-3 ja EN 1264-4 tüüpidele A, B, C, D, H, I ja J. Tüüpide E, F ja G jaoks vaata EN ISO 11855 sarja. EN 1264 sarjas määratletud süsteemid külgnevad hoone välispiirde konstruktsiooniga, paigaldatud otse või kinnituskanduritega. EN 1264 sari ei määratle ripplagedesse paigaldatud laesüsteeme, kus süsteemi ja ehituskonstruktsiooni vahel on kavandatud avatud õhuvahe, mis võimaldab õhu termilist ringlust. Nende süsteemide soojuskoormust saab määrata standardisarja EN 14037 ja standardi EN 14240 kohaselt. EN 1264-3 täpsustab EN 1264-2 ja EN 1264-5 tulemuste kasutamist praktikas. Küttesüsteemide puhul võetakse pinnatemperatuuride määramisel arvesse füsioloogilisi piiranguid. Põrandküttesüsteemide korral realiseeritakse piirangud standardi EN 1264-2 kohaselt määratud tunnuskõveratele ja piirkõveratele. Jahutussüsteemide puhul võetakse arvesse ainult kastepunkti piiranguid. Valdavas praktikas tähendab see, et kaasatud on ka füsioloogilised piirangud.

Keel: en, et
Alusdokumendid: EN 1264-3:2021
Asendab dokumenti: EVS-EN 1264-3:2009

97 OLME. MEELELAHUTUS. SPORT

EVS-EN 60335-2-17:2013+A11+A1+A2:2021

Majapidamis- ja muud taolised elektriseadmed. Ohutus. Osa 2-17: Erinõuded tekkidele, patjadele, riietusesemetele ja muudele taolistele paindpehmetele soojendusseadmetele
Household and similar electrical appliances - Safety - Part 2-17: Particular requirements for blankets, pads, clothing and similar flexible heating appliances (IEC 60335-2-17:2012 + IEC 60335-2-17:2012/A1:2015, modified + IEC 60335-2-17:2012/A2:2019 , modified)

This clause of Part 1 is replaced by the following. This International Standard deals with the safety of electric blankets, pads, clothing and other flexible appliances that heat the bed or human body, for household and similar purposes, their rated voltage being not more than 250 V. This standard also applies to control units supplied with the appliance. Appliances not intended for normal household use but which nevertheless may be a source of danger to the public, such as appliances intended to be used in beauty parlours or by persons in cold ambient temperatures, are within the scope of this standard. Requirements and tests for clothing are given in Annex CC. This standard deals with the reasonably foreseeable hazards presented by appliances and machines that are encountered by all persons. However, in general, it does not take into account: – children playing with the appliance; – the use of the appliance by very young children; – the use of the appliance by young children without supervision. It is recognized that very vulnerable people may have needs beyond the level addressed in this standard. NOTE 101 Children are considered to be old enough to use an appliance without supervision when they have been adequately instructed by a parent or guardian and are deemed competent to use the appliance safely. NOTE 102 Attention is drawn to the fact that – for appliances intended to be used in vehicles or on board ships or aircraft, additional requirements may be necessary; – in many countries, additional requirements are specified by the national health authorities, the national authorities responsible for the protection of labour and similar authorities. NOTE 103 This standard does not apply to – appliances intended to be used in locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust, vapour or gas); – rigid bed warmers, such as those of metal or ceramic material; – water bed heaters (IEC 60335-2-66); – heating appliances for breeding and rearing animals (IEC 60335-2-71); – foot warmers and heating mats (IEC 60335-2-81); – appliances specifically intended for use under medical supervision (IEC 60601-2-35).

Keel: en
Alusdokumendid: IEC 60335-2-17:2012; EN 60335-2-17:2013; EN 60335-2-17:2013/A11:2019; IEC 60335-2-17:2012/A1:2015; EN 60335-2-17:2013/A1:2020; IEC 60335-2-17:2012/A2:2019; EN 60335-2-17:2013/A2:2021
Konsolideerib dokumenti: EVS-EN 60335-2-17:2013
Konsolideerib dokumenti: EVS-EN 60335-2-17:2013/A1:2020
Konsolideerib dokumenti: EVS-EN 60335-2-17:2013/A11:2019
Konsolideerib dokumenti: EVS-EN 60335-2-17:2013/A2:2021
Konsolideerib dokumenti: EVS-EN 60335-2-17:2013+A11+A1:2020

ASENDATUD VÕI TÜHISTATUD EESTI STANDARDID JA STANDARDILAADSED DOKUMENDID

01 ÜLDKÜSIMUSED. TERMINOLOOGIA. STANDARDIMINE. DOKUMENTATSIOON

EVS-HD 457 S1:2003
Code for designation of colours

Keel: en
Alusdokumendid: IEC 60757:1983; HD 457 S1:1985
Asendatud järgmise dokumendiga: EVS-EN IEC 60757:2021
Standardi staatus: Kehtetu

EVS-ISO 8909-1:2001
Saagikoristusmasinad. Rohusöödakoristid. Osa 1: Sõnavara
Equipment for harvesting - Forage harvesters - Part 1: Vocabulary

Keel: en, et
Alusdokumendid: ISO 8909-1:1994
Standardi staatus: Kehtetu

13 KESKKONNA- JA TERVISEKAITSE. OHUTUS

CEN ISO/TS 29843-2:2014
Soil quality - Determination of soil microbial diversity - Part 2: Method by phospholipid fatty acid analysis (PLFA) using the simple PLFA extraction method (ISO/TS 29843-2:2011)

Keel: en
Alusdokumendid: ISO/TS 29843-2:2011; CEN ISO/TS 29843-2:2014
Asendatud järgmise dokumendiga: CEN ISO/TS 29843-2:2021
Standardi staatus: Kehtetu

EVS-EN 12255-16:2005
Wastewater treatment plants - Part 16: Physical (mechanical) filtration

Keel: en
Alusdokumendid: EN 12255-16:2005
Asendatud järgmise dokumendiga: EVS-EN 12255-16:2021
Standardi staatus: Kehtetu

EVS-EN ISO 13160:2015
Water quality - Strontium 90 and strontium 89 - Test methods using liquid scintillation counting or proportional counting (ISO 13160:2012)

Keel: en
Alusdokumendid: ISO 13160:2012; EN ISO 13160:2015
Asendatud järgmise dokumendiga: EVS-EN ISO 13160:2021
Standardi staatus: Kehtetu

17 METROLOOGIA JA MÕÕTMINE. FÜÜSIKALISED NÄHTUSED

EVS-EN ISO 13160:2015
Water quality - Strontium 90 and strontium 89 - Test methods using liquid scintillation counting or proportional counting (ISO 13160:2012)

Keel: en
Alusdokumendid: ISO 13160:2012; EN ISO 13160:2015
Asendatud järgmise dokumendiga: EVS-EN ISO 13160:2021
Standardi staatus: Kehtetu

23 ÜLDKASUTATAVAD HÜDRO- JA PNEUMOSÜSTEEMID JA NENDE OSAD

EVS-EN 14917:2009+A1:2012
Survesüsteemides kasutatavate metallkompensaatorite paisumisvuugid KONSOLIDEERITUD TEKST
Metal bellows expansion joints for pressure applications CONSOLIDATED TEXT

Keel: en
Alusdokumendid: EN 14917:2009+A1:2012

Asendatud järgmise dokumendiga: EVS-EN 14917:2021
Standardi staatus: Kehtetu

27 ELEKTRI- JA SOOJUSENERGEETIKA

EVS-EN ISO 17225-5:2014
Solid biofuels - Fuel specifications and classes - Part 5: Graded firewood (ISO 17225-5:2014)

Keel: en
Alusdokumendid: ISO 17225-5:2014; EN ISO 17225-5:2014
Asendatud järgmise dokumendiga: EVS-EN ISO 17225-5:2021
Standardi staatus: Kehtetu

29 ELEKTROTEHNIKA

EVS-EN 60455-3-8:2013
Resin based reactive compounds used for electrical insulation - Part 3: Specifications for individual materials - Sheet 8: Resinous compounds for cable accessories (IEC 60455-3-8:2013)

Keel: en
Alusdokumendid: IEC 60455-3-8:2013; EN 60455-3-8:2013
Asendatud järgmise dokumendiga: EVS-EN IEC 60455-3-8:2021
Standardi staatus: Kehtetu

EVS-EN 60851-1:2003
Winding wires - Test methods - Part 1: General

Keel: en
Alusdokumendid: IEC 60851-1:1996; EN 60851-1:1996
Asendatud järgmise dokumendiga: EVS-EN IEC 60851-1:2021
Muudetud järgmise dokumendiga: EVS-EN 60851-1:2003/A1:2004
Muudetud järgmise dokumendiga: EVS-EN 60851-1:2003/A2:2010
Standardi staatus: Kehtetu

EVS-EN 60851-1:2003/A1:2004
Winding wires - Test methods - Part 1: General

Keel: en
Alusdokumendid: IEC 60851-1:1996/A1:2003; EN 60851-1:1996/A1:2004
Asendatud järgmise dokumendiga: EVS-EN IEC 60851-1:2021
Standardi staatus: Kehtetu

EVS-EN 60851-1:2003/A2:2010
Winding wires - Test methods - Part 1: General

Keel: en
Alusdokumendid: IEC 60851-1:1996/A2:2009; EN 60851-1:1996/A2:2009
Asendatud järgmise dokumendiga: EVS-EN IEC 60851-1:2021
Standardi staatus: Kehtetu

EVS-EN 60938-1:2002
Fixed inductors for electromagnetic interference suppression - Part 1: Generic specification

Keel: en
Alusdokumendid: IEC 60938-1:1999; EN 60938-1:1999
Asendatud järgmise dokumendiga: EVS-EN IEC 60938-1:2021
Muudetud järgmise dokumendiga: EVS-EN 60938-1:2002/A1:2007
Standardi staatus: Kehtetu

EVS-EN 60938-1:2002/A1:2007
Fixed inductors for electromagnetic interference suppression - Part 1: Generic specification

Keel: en
Alusdokumendid: IEC 60938-1:1999/A1:2006; EN 60938-1:1999/A1:2007
Asendatud järgmise dokumendiga: EVS-EN IEC 60938-1:2021
Standardi staatus: Kehtetu

EVS-EN 62271-200:2012
High-voltage switchgear and controlgear - Part 200: AC metal-enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV

Keel: en

Alusdokumendid: IEC 62271-200:2011; EN 62271-200:2012
Asendatud järgmise dokumendiga: EVS-EN IEC 62271-200:2021
Parandatud järgmise dokumendiga: EVS-EN 62271-200:2012/AC:2015
Standardi staatus: Kehtetu

EVS-EN 62271-200:2012/AC:2015

High-voltage switchgear and controlgear - Part 200: AC metal-enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV

Keel: en
Alusdokumendid: EN 62271-200:2012/AC:2015
Asendatud järgmise dokumendiga: EVS-EN IEC 62271-200:2021
Standardi staatus: Kehtetu

EVS-HD 457 S1:2003

Code for designation of colours

Keel: en
Alusdokumendid: IEC 60757:1983; HD 457 S1:1985
Asendatud järgmise dokumendiga: EVS-EN IEC 60757:2021
Standardi staatus: Kehtetu

31 ELEKTROONIKA

EVS-EN 60938-1:2002

Fixed inductors for electromagnetic interference suppression - Part 1: Generic specification

Keel: en
Alusdokumendid: IEC 60938-1:1999; EN 60938-1:1999
Asendatud järgmise dokumendiga: EVS-EN IEC 60938-1:2021
Muudetud järgmise dokumendiga: EVS-EN 60938-1:2002/A1:2007
Standardi staatus: Kehtetu

EVS-EN 60938-1:2002/A1:2007

Fixed inductors for electromagnetic interference suppression - Part 1: Generic specification

Keel: en
Alusdokumendid: IEC 60938-1:1999/A1:2006; EN 60938-1:1999/A1:2007
Asendatud järgmise dokumendiga: EVS-EN IEC 60938-1:2021
Standardi staatus: Kehtetu

EVS-EN 63002:2017

Identification and communication interoperability method for external power supplies used with portable computing devices

Keel: en
Alusdokumendid: IEC 63002:2016; EN 63002:2017
Asendatud järgmise dokumendiga: EVS-EN IEC 63002:2021
Standardi staatus: Kehtetu

35 INFOTEHNOLOOGIA

EVS-EN 63002:2017

Identification and communication interoperability method for external power supplies used with portable computing devices

Keel: en
Alusdokumendid: IEC 63002:2016; EN 63002:2017
Asendatud järgmise dokumendiga: EVS-EN IEC 63002:2021
Standardi staatus: Kehtetu

45 RAUDTEETEHNIKA

EVS-EN 50155:2017

Raudteealased rakendused. Raudteeveerem. Elektroonikaseadmed
Railway applications - Rolling stock - Electronic equipment

Keel: en
Alusdokumendid: EN 50155:2017
Asendatud järgmise dokumendiga: EVS-EN 50155:2021
Standardi staatus: Kehtetu

47 LAEVAEHITUS JA MERE-EHITISED

EVS-EN ISO 8847:2017
Small craft - Steering gear - Cable and pulley systems (ISO 8847:2004)

Keel: en
Alusdokumendid: ISO 8847:2004; EN ISO 8847:2017
Asendatud järgmise dokumendiga: EVS-EN ISO 8847:2021
Standardi staatus: Kehtetu

59 TEKSTIILI- JA NAHATEHNOLOOGIA

EVS-EN ISO 1833-22:2013
Textiles - Quantitative chemical analysis - Part 22: Mixtures of viscose or certain types of cupro or modal or lyocell and flax fibres (method using formic acid and zinc chloride) (ISO 1833-22:2013)

Keel: en
Alusdokumendid: ISO 1833-22:2013; EN ISO 1833-22:2013
Asendatud järgmise dokumendiga: EVS-EN ISO 1833-22:2021
Standardi staatus: Kehtetu

65 PÕLLUMAJANDUS

EVS-EN 60335-2-77:2010
Majapidamismasinate ja nendetaoliste seadmete ohutus. Osa 2-77: Erinõuded kõndimisel eesjuhitavatele elektritoitelistele muruniidukitele
Safety of household and similar appliances - Part 2-77: Particular requirements for pedestrian-controlled walk-behind electrically powered lawn mowers

Keel: en
Alusdokumendid: IEC 60335-2-77:2002; EN 60335-2-77:2010
Asendatud järgmise dokumendiga: EVS-EN IEC 62841-4-3:2021
Standardi staatus: Kehtetu

EVS-ISO 8909-1:2001
Saagikoristusmasinad. Rohusöödakoristid. Osa 1: Sõnavara
Equipment for harvesting - Forage harvesters - Part 1: Vocabulary

Keel: en, et
Alusdokumendid: ISO 8909-1:1994
Standardi staatus: Kehtetu

EVS-ISO 8909-2:2001
Saagikoristusmasinad. Rohusöödakoristid. Osa 2: Karakteristikute ja tootlikkuse määramine
Equipment for harvesting - Forage harvesters - Part 2: Specification of characteristics and performance

Keel: en, et
Alusdokumendid: ISO 8909-2:1994
Standardi staatus: Kehtetu

EVS-ISO 8909-3:2001
Saagikoristusmasinad. Rohusöödakoristid. Osa 3: Katsemeetodid
Equipment for harvesting - Forage harvesters - Part 3: Test methods

Keel: en, et
Alusdokumendid: ISO 8909-3:1994
Standardi staatus: Kehtetu

75 NAFTA JA NAFTATEHNOLOOGIA

EVS-EN ISO 17225-5:2014
Solid biofuels - Fuel specifications and classes - Part 5: Graded firewood (ISO 17225-5:2014)

Keel: en
Alusdokumendid: ISO 17225-5:2014; EN ISO 17225-5:2014
Asendatud järgmise dokumendiga: EVS-EN ISO 17225-5:2021
Standardi staatus: Kehtetu

EVS-ISO 1928:2016

Tahked mineraalsed kütused. Ülemise kütteväärtuse määramine kalorimeetrilise pommi meetodil ja alumise kütteväärtuse arvutamine
Solid mineral fuels. Determination of gross calorific value by the bomb calorimetric method and calculation of net calorific value (ISO 1928:2009, modifitseeritud)

Keel: en
Alusdokumendid: ISO 1928:2009
Asendatud järgmise dokumendiga: EVS-ISO 1928-MOD:2021
Standardi staatus: Kehtetu

77 METALLURGIA

EVS-EN ISO 15349-2:2004

Unalloyed steel - Determination of low carbon content - Part 2: Infrared absorption method after combustion in an induction furnace (with preheating)

Keel: en
Alusdokumendid: ISO 15349-2:1999; EN ISO 15349-2:2003
Asendatud järgmise dokumendiga: EVS-EN ISO 15349-2:2021
Standardi staatus: Kehtetu

79 PUIDUTEHNOLOOGIA

EVS-EN ISO 18217:2015

Puidutöötlemismasinate ohutus. Kettfiidriga servakantimismasinad
Safety of woodworking machines - Edge-banding machines fed by chain(s) (ISO 18217:2015)

Keel: en
Alusdokumendid: ISO 18217:2015; EN ISO 18217:2015
Asendatud järgmise dokumendiga: EVS-EN ISO 19085-17:2021
Standardi staatus: Kehtetu

83 KUMMI- JA PLASTITÖÖSTUS

EVS-EN ISO 1043-4:2000

Plastid. Tähised ja terminilühendid. Osa 4: Leegiaeglustid
Plastics - Symbols and abbreviated terms - Part 4: Flame retardants (ISO 1043-4:1998)

Keel: en
Alusdokumendid: ISO 1043-4:1998; EN ISO 1043-4:1999
Asendatud järgmise dokumendiga: EVS-EN ISO 1043-4:2021
Muudetud järgmise dokumendiga: EVS-EN ISO 1043-4:2000/A1:2016
Standardi staatus: Kehtetu

EVS-EN ISO 1043-4:2000/A1:2016

Plastid. Tähised ja terminilühendid. Osa 4: Leegiaeglustid
Plastics - Symbols and abbreviated terms - Part 4: Flame retardants (ISO 1043-4:1998/Amd 1:2016)

Keel: en
Alusdokumendid: ISO 1043-4:1998/Amd 1:2016; EN ISO 1043-4:1999/A1:2016
Asendatud järgmise dokumendiga: EVS-EN ISO 1043-4:2021
Standardi staatus: Kehtetu

91 EHITUSMATERJALID JA EHITUS

EVS-EN 12390-1:2012

Kivistunud betooni katsetamine. Osa 1: Kuju, mõõtmed ja muud katsekehadele ja vormidele esitatavad nõuded
Testing hardened concrete - Part 1: Shape, dimensions and other requirements for specimens and moulds

Keel: en, et
Alusdokumendid: EN 12390-1:2012
Asendatud järgmise dokumendiga: EVS-EN 12390-1:2021
Standardi staatus: Kehtetu

EVS-EN 1264-3:2009

Veepõhised piirdesisesed kütte- ja jahutussüsteemid. Osa 3: Dimensioneerimine
Water based surface embedded heating and cooling systems - Part 3: Dimensioning

Keel: en
Alusdokumendid: EN 1264-3:2009
Asendatud järgmise dokumendiga: EVS-EN 1264-3:2021
Standardi staatus: Kehtetu

STANDARDIKAVANDITE ARVAMUSKÜSITLUS

Selleks, et tagada standardite vastuvõtmine, järgides konsensuse põhimõtteid, peab standardite vastuvõtmisele eelnema standardikavandite avalik arvamusküsitlus, milleks ettenähtud perioodi jooksul (üldjuhul 60 päeva) on asjast huvitatuil võimalik tutvuda standardikavanditega, esitada kommentaare ning teha ettepanekuid parandusteks. Eriti on oodatud teave, kui rahvusvahelist või Euroopa standardikavandit ei peaks vastu võtma Eesti standardiks (vastuolu Eesti õigusaktidega, pole Eestis rakendatav jt põhjustel).

Arvamusküsitlusele esitatakse Euroopa ja rahvusvahelised standardikavandid, mis on kavas üle võtta Eesti standarditeks, ja Eesti algupärased standardikavandid ning algupäraste tehniliste spetsifikatsioonide ja juhendite kavandid.

Iga arvamusküsitlusel oleva kavandi kohta on esitatud alljärgnev informatsioon:
• tähis;
• pealkiri;
• käsitlusala;
• keel (en = inglise; et = eesti);
• Euroopa või rahvusvahelise alusdokumendi tähis, selle olemasolul;
• asendusseos, selle olemasolul;
• arvamuste esitamise tähtaeg.

Kavanditega saab tutvuda ja kommentaare esitada Eesti Standardimis- ja Akrediteerimiskeskuse veebilehel asuvas kommenteerimisportaalis: https://www.evs.ee/kommenteerimisportaal/

Igal kuul uuendatav teave eestikeelsena avaldatavate Eesti standardite kohta, sh eeldatavad kommenteerimise ja avaldamise tähtpäevad, on leitav Eesti Standardimis- ja Akrediteerimiskeskuse veebilehel avaldatavast standardimisprogrammist.

01 ÜLDKÜSIMUSED. TERMINOLOOGIA. STANDARDIMINE. DOKUMENTATSIOON

prEN ISO 19403-1

Paints and varnishes - Wettability - Part 1: Terminology and general principles (ISO/DIS 19403-1:2021)

The ISO 19403 series specifies optical test methods — for the measurement of the contact angle, — for the determination of the free surface energy of a solid surface, including the polar and dispersive fractions, — for the determination of the surface tension of liquids, including the polar and dispersive fractions, and — for the checking of the measurement arrangement with reference materials. It can be applied for the characterization of substrates, coatings and coating materials. The applicability can be restricted for liquids with non-Newtonian rheology1). This document specifies terms and definitions and defines the general principles.

Keel: en
Alusdokumendid: ISO/DIS 19403-1; prEN ISO 19403-1
Asendab dokumenti: EVS-EN ISO 19403-1:2020

Arvamusküsitluse lõppkuupäev: 15.10.2021

03 TEENUSED. ETTEVÕTTE ORGANISEERIMINE, JUHTIMINE JA KVALITEET. HALDUS. TRANSPORT. SOTSIOLOOGIA

prEVS-ISO 10014

Kvaliteedijuhtimine - Organisatsiooni juhtimine kvalitiivsete tulemuste saavutamiseks - Juhised rahaliste ja majanduslike hüvede saavutamiseks
Quality management systems - Managing an organization for quality results - Guidance for realizing financial and economic benefits

Käesolev dokument annab juhiseid rahalise ja majandusliku kasu realiseerimiseks, rakendades ülalt alla struktureeritud lähenemisviisi rahalise ja majandusliku kasu saavutamiseks. Struktureeritud lähenemisviis kasutab kvaliteedijuhtimise põhimõtteid ja kvaliteedijuhtimissüsteemi, mida on kirjeldatud ISO 9000 juhtimissüsteemi standardite perekonnas, et: a) jälgida ja hallata peamiste toimivusmõõdikute suundumusi; b) rakendada täiustatud meetmeid, mis põhinevad täheldatud mõõdikutel. See dokument on suunatud konkreetselt organisatsiooni tippjuhtkonnale. See dokument on kohaldatav igale organisatsioonile, olenemata sellest, kas tegemist on avaliku, era- või mittetulundussektoriga, olenemata selle ärimudelist, tuludest, töötajate arvust, toote- ja teenustepakkumiste mitmekesisusest, organisatsioonikultuurist, protsesside keerukusest, kohast või asukohtade arv. See dokument täiendab standardeid ISO 9001: 2015 ja ISO 9004: 2018 ning toob näiteid nendes standardites kasutatavate mõistete rakendamisest saavutatava kasu kohta. Selles dokumendis tuuakse välja praktilised juhtimismeetodid ja -vahendid, mis aitavad kasu saada.

Keel: en
Alusdokumendid: ISO 10014:2021
Asendab dokumenti: EVS-ISO 10014:2007

Arvamusküsitluse lõppkuupäev: 15.10.2021

07 LOODUS- JA RAKENDUSTEADUSED

EN ISO 21872-1:2017/prA1

Microbiology of the food chain - Horizontal method for the determination of Vibrio spp. - Part 1: Detection of potentially enteropathogenic Vibrio parahaemolyticus, Vibrio cholerae and Vibrio vulnificus - Amendment 1: Performance testing for the media ASPW, TCBS and SNA (ISO 21872 1:2017/DAM 1:2021)

Amendment to EN ISO 21872-1:2017

Keel: en
Alusdokumendid: EN ISO 21872-1:2017/prA1; ISO 21872 1:2017/DAM 1:2021
Muudab dokumenti: EVS-EN ISO 21872-1:2017

Arvamusküsitluse lõppkuupäev: 15.10.2021

11 TERVISEHOOLDUS

prEN ISO 18113-1

In vitro diagnostic medical devices - Information supplied by the manufacturer (labelling) - Part 1: Terms, definitions, and general requirements (ISO/DIS 18113-1:2021)

This document defines concepts, establishes general principles, and specifies essential requirements for information supplied by the manufacturer of IVD medical devices. This document does not address language requirements since that is the domain of national laws and regulations. This document does not apply to: a) IVD medical devices for performance evaluation (e.g. for investigational use only); b) packaging list; c) material safety data sheets / Safety Data Sheets; d) marketing information (consistent with applicable legal requirements).

Keel: en
Alusdokumendid: ISO/DIS 18113-1; prEN ISO 18113-1
Asendab dokumenti: EVS-EN ISO 18113-1:2011

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN ISO 18113-2

In vitro diagnostic medical devices - Information supplied by the manufacturer (labelling) - Part 2: In vitro diagnostic reagents for professional use (ISO/DIS 18113-2:2021)

This document specifies requirements for information supplied by the manufacturer of IVD reagents, calibrators and controls intended for professional use. This document can also be applied to accessories. This document applies to the labels for outer and immediate containers and to the instructions for use. This document does not apply to: a) IVD instruments or equipment; b) IVD reagents for self-testing.

Keel: en
Alusdokumendid: ISO/DIS 18113-2; prEN ISO 18113-2
Asendab dokumenti: EVS-EN ISO 18113-2:2011

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN ISO 18113-3

In vitro diagnostic medical devices - Information supplied by the manufacturer (labelling) - Part 3: In vitro diagnostic instruments for professional use (ISO/DIS 18113-3:2021)

This document specifies requirements for information supplied by the manufacturer of IVD instruments intended for professional use. This document also applies to apparatus and equipment intended to be used with IVD instruments for professional use. This document can also be applied to accessories. This document does not apply to: a) instructions for instrument servicing or repair; b) IVD reagents, including calibrators and control materials for use in control of the reagent; c) IVD instruments for self-testing.

Keel: en
Alusdokumendid: ISO/DIS 18113-3; prEN ISO 18113-3
Asendab dokumenti: EVS-EN ISO 18113-3:2011

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN ISO 18113-4

In vitro diagnostic medical devices - Information supplied by the manufacturer (labelling) - Part 4: In vitro diagnostic reagents for self-testing (ISO/DIS 18113-4:2021)

This document specifies requirements for information supplied by the manufacturer of IVD reagents, calibrators, and controls intended for self-testing. This document can also be applied to accessories. This document applies to the labels for outer and immediate containers and to the instructions for use. This document does not apply to: a) IVD instruments or equipment; b) IVD reagents for professional use.

Keel: en
Alusdokumendid: ISO/DIS 18113-4; prEN ISO 18113-4
Asendab dokumenti: EVS-EN ISO 18113-4:2011

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN ISO 18113-5

In vitro diagnostic medical devices - Information supplied by the manufacturer (labelling) - Part 5: In vitro diagnostic instruments for self-testing (ISO/DIS 18113-5:2021)

This document specifies requirements for information supplied by the manufacturer of IVD instruments intended for self-testing. This document also applies to apparatus and equipment intended to be used with in vitro diagnostic (IVD) instruments for self-testing. This document can also be applied to accessories. This document does not apply to a) instructions for instrument servicing or repair; b) IVD reagents, including calibrators and control materials for use in control of the reagent; c) IVD instruments for professional use.

Keel: en
Alusdokumendid: ISO/DIS 18113-5; prEN ISO 18113-5
Asendab dokumenti: EVS-EN ISO 18113-5:2011

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN ISO 80601-2-12

Medical electrical equipment - Part 2-12: Particular requirements for basic safety and essential performance of critical care ventilators (ISO/DIS 80601-2-12:2021)

Replacement: NOTE 1 There is guidance or rationale for this subclause contained in Clause A.2. This document applies to the basic safety and essential performance of a ventilator in combination with its accessories, hereafter referred to as ME equipment: - intended for use in an environment that provides specialized care for patients whose conditions can be life-threatening and who can require comprehensive care and constant monitoring in a professional healthcare facility; NOTE 1 For the purposes of this document, such an environment is referred to as a critical care environment. Ventilators for this environment are considered life-sustaining. NOTE 2 For the purposes of this document, such a ventilator can provide transport within a professional healthcare facility (i.e. be a transit-operable ventilator). NOTE 3 A critical care ventilator intended for use in transport within a professional healthcare facility is not considered as an emergency medical services environment ventilator. - intended to be operated by a healthcare professional operator; and - intended for those patients who need differing levels of support from artificial ventilation including for ventilator-dependent patients. A critical care ventilator is not considered to utilize a physiologic closed-loop-control system unless it uses a physiological patient variable to adjust the ventilation therapy settings. This document is also applicable to those accessories intended by their manufacturer to be connected to a ventilator breathing system, or to a ventilator, where the characteristics of those accessories can affect the basic safety or essential performance of the ventilator. NOTE 4 If a clause or subclause is specifically intended to be applicable to ME equipment only, or to ME systems only, the title and content of that clause or subclause will say so. If that is not the case, the clause or subclause applies both to ME equipment and to ME systems, as relevant.

Keel: en
Alusdokumendid: ISO/DIS 80601-2-12; prEN ISO 80601-2-12
Asendab dokumenti: EVS-EN ISO 80601-2-12:2020

Arvamusküsitluse lõppkuupäev: 15.10.2021

13 KESKKONNA- JA TERVISEKAITSE. OHUTUS

prEN 12255-4

Wastewater treatment plants - Part 4: Primary treatment

This document specifies the design requirements for plant and equipment to remove solids, other than screenings and grit, from raw wastewater, at wastewater treatment plants for over 50 PT. It includes primary treatment with sedimentation, fine screens and micro-screens NOTE 1 The removal of screenings and grit, are covered in EN 12255, Part 3. NOTE 2 Dissolved air flotation (DAF) is not covered in detail in this document because it is not commonly used for primary treatment in municipal wastewater treatment plants. It may be used for primary treatment of industrial wastewater, but then the design is specific to the application.

Keel: en
Alusdokumendid: prEN 12255-4
Asendab dokumenti: EVS-EN 12255-4:2002

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN 12255-9

Wastewater treatment plants - Part 9: Odour control and ventilation

This document specifies design principles and performance requirements for odour control and associated ventilation for wastewater treatment plants serving more than 50PT.

Keel: en
Alusdokumendid: prEN 12255-9
Asendab dokumenti: EVS-EN 12255-9:2002

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN 659

Protective gloves for firefighters

This document defines minimum performance requirements and test methods for firefighters' protective gloves. This document applies only to firefighters' protective gloves which protect the hands during normal firefighting, including structural fire, wildland and rescue. These gloves are not intended for deliberate handling of liquid chemicals, but provide some protection against accidental contact with chemicals. Protective gloves for special operations within firefighting service are excluded from the scope of this document.

Keel: en
Alusdokumendid: prEN 659
Asendab dokumenti: EVS-EN 659:2003+A1:2008
Asendab dokumenti: EVS-EN 659:2003+A1:2008/AC:2009

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN ISO 8130-4

Coating powders - Part 4: Calculation of lower explosion limit (ISO/DIS 8130-4:2021)

This document specifies a method for the calculation of the lower explosion limit of a coating powder, i.e. the minimum concentration of the coating powder in air which will form an explosive mixture. It is based on the measurement of the gross calorific value of the product, as determined by the method described in ISO 1928. Reliable methods for the measurement of the lower explosion limit or the gross calorific value require the use of special apparatus which may not be readily available. A method for determining the explosion indices of combustible dusts in air is given in ISO 6184-1. This method is, however, very intricate and requires considerable expertise. The lower explosion limit can also be estimated by summation of the gross calorific value of the individual constituents of the coating powder. It is an estimation since the gross calorific value of the constituent may not be known or available. The calculation method leads to lower explosion limits which have been proved in practice to be satisfactory when applied to coating application plants. NOTE A comparison with a direct method e.g. EN 14034-3 for determining the lower explosion limit is encouraged.

Keel: en
Alusdokumendid: ISO/DIS 8130-4; prEN ISO 8130-4
Asendab dokumenti: EVS-EN ISO 8130-4:2010

Arvamusküsitluse lõppkuupäev: 15.10.2021

19 KATSETAMINE

prEN IEC 62052-41-ED1:2021

Electricity metering equipment - General requirements, tests and test conditions - Part 41: Energy registration methods and requirements for multi-energy and multi-rate meters

This part of IEC 62052 applies only to newly manufactured multi-energy and/or multi-rate static meters and it applies to their type tests only. Note 1: For other general requirements, such as electrical, mechanical, safety, marking, dependability etc., see the relevant IEC 62052 or IEC 62059 standards. For accuracy requirements and other requirements specific to class indices, see the relevant IEC 62053 standards. This International Standard applies to newly manufactured electricity metering equipment designed to: • measure and control electrical energy on networks with voltage up to 1,000 V a.c, or 1,500 V d.c; Note 2: The voltage mentioned above is the line-to-neutral voltage derived from nominal voltages. See IEC 62052-31:2015 table 7. • have all functional elements, including add-on modules, enclosed in, or forming a single meter case with exception of indicating displays; • operate with integrated or detached indicating displays, or without an indicating display. • be installed in a specified matching sockets or racks; • provide additional functions other than those for measurement of electrical energy; Note 3: Modern electricity meters typically contain additional functions such as measurement of voltage magnitude, current magnitude, power, frequency, power factor, etc.; measurement of power quality parameters; load control functions; delivery, time, test, accounting, recording functions; data communication interfaces and associated data security functions. The relevant standards for these functions may apply in addition to the requirements of this standard. However, the requirements for such functions are outside the scope of this standard. Note 4: Product requirements for power monitoring devices and measurement functions such as voltage magnitude, current magnitude, power, frequency, etc. are covered in IEC 61557-12. However, devices compliant with IEC 61557-12 are not intended to be used as billing meters unless they are also compliant with the IEC 62052-11 and a relevant IEC 62053-xx accuracy class standards. Note 5: Product requirements for power quality monitoring instruments are covered in IEC 62586-1. Requirements for power quality measurement techniques (functions) are covered in IEC 61000-4-30. Requirements for testing of the power quality measurement functions are covered in IEC 62586-2.

Keel: en
Alusdokumendid: IEC 62052-41-ED1:202X; prEN IEC 62052-41-ED1:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

25 TOOTMISTEHNOLOOGIA

prEN IEC 61158-1:2021

Industrial communication networks - Fieldbus specifications - Part 1: Overview and guidance for the IEC 61158 and IEC 61784 series

This document specifies the generic concept of fieldbuses. This document also presents an overview and guidance for the IEC 611581 series by: • explaining the structure and content of the IEC 61158 series; • relating the structure of the IEC 61158 series to the ISO/IEC 7498-1 OSI Basic Reference Model; • showing the logical structure of the IEC 617842 series; 246 • showing how to use parts of the IEC 61158 series in combination with the IEC 61784 series; • providing explanations of some aspects of the

IEC 61158 series that are common to the type specific parts of the IEC 61158-5 series including the application layer service description concepts and the generic fieldbus data types.

Keel: en
Alusdokumendid: IEC 61158-1:202X; prEN IEC 61158-1:2021
Asendab dokumenti: EVS-EN IEC 61158-1:2019

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61158-2:2021

Industrial communication networks - Fieldbus specifications - Part 2: Physical layer specification and service definition

This part of IEC 61158 specifies the requirements for fieldbus component parts. It also specifies the media and network configuration requirements necessary to ensure agreed levels of a) data integrity before data-link layer error checking; b) interoperability between devices at the physical layer. The fieldbus physical layer conforms to layer 1 of the OSI 7-layer model as defined by ISO/IEC 7498 with the exception that, for some types, frame delimiters are in the physical layer while for other types they are in the data-link layer.

Keel: en
Alusdokumendid: IEC 61158-2:202X; prEN IEC 61158-2:2021
Asendab dokumenti: EVS-EN 61158-2:2014

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61158-3-X:2021

Industrial communication networks - Fieldbus specifications - Part 3-X: Data-link layer service definition - Type X elements

This part of IEC 61158 provides common elements for basic time-critical messaging communications between devices in an automation environment. The term “time-critical” is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the Type 2 fieldbus data-link layer in terms of: a) the primitive actions and events of the service; b) the parameters associated with each primitive action and event, and the form which they take; and c) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to: • the Type 2 fieldbus application layer at the boundary between the application and data-link layers of the fieldbus reference model; • systems management at the boundary between the data-link layer and systems management of the fieldbus reference model. Type 2 DL-service provides both a connected and a connectionless subset of those services specified in ISO/IEC 8886.

Keel: en
Alusdokumendid: IEC 61158-3-X:202X; prEN IEC 61158-3-X:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61158-4-X:2021

Industrial communication networks - Fieldbus specifications - Part 4-X: Data-link layer protocol specification - Type X elements

The data-link layer provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities, sequentially and in a cyclic synchronous manner. Foreground scheduled access is available for time-critical activities together with background unscheduled access for less critical activities. Deterministic and synchronized transfers can be provided at cyclic intervals up to 1 ms and device separations of 25 km. This performance is adjustable dynamically and on-line by re-configuring the parameters of the local link whilst normal operation continues. By similar means, DL connections and new devices may be added or removed during normal operation. This protocol provides means to maintain clock synchronization across an extended link with a precision better than 10 µs. This protocol optimizes each access opportunity by concatenating multiple DLSDUs and associated DLPCI into a single DLPDU, thereby improving data transfer efficiency for data-link entities that actively source multiple streams of data. The maximum system size is an unlimited number of links of 99 nodes, each with 255 DLSAP-addresses. Each link has a maximum of 224 related peer and publisher DLCEPs.

Keel: en
Alusdokumendid: IEC 61158-4-X:202X; prEN IEC 61158-4-X:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61158-5-X:2021

Industrial communication networks - Fieldbus specifications - Part 5-X: Application layer service definition - Type X elements

1.1 General The fieldbus application layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This part of IEC 61158 provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 2 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This International Standard defines in an abstract

way the externally visible service provided by the Type 2 fieldbus application layer in terms of: a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this document is to define the services provided to: a) the FAL user at the boundary between the user and the application layer of the fieldbus reference model, and b) Systems Management at the boundary between the application layer and Systems Management of the fieldbus reference model. This document specifies the structure and services of the Type 2 fieldbus application layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498-1) and the OSI application layer structure (ISO/IEC 9545). FAL services and protocols are provided by FAL application-entities (AE) contained within the application processes. The FAL AE is composed of a set of object-oriented application service elements (ASEs) and a layer management entity (LME) that manages the AE. The ASEs provide communication services that operate on a set of related application process object (APO) classes. One of the FAL ASEs is a management ASE that provides a common set of services for the management of the instances of FAL classes. Although these services specify, from the perspective of applications, how request and responses are issued and delivered, they do not include a specification of what the requesting and responding applications are to do with them. That is, the behavioral aspects of the applications are not specified; only a definition of what requests and responses they can send/receive is specified. This permits greater flexibility to the 318 FAL users in standardizing such object behavior. In addition to these services, some supporting services are also defined in this document to provide access to the FAL to control certain aspects of its operation.

Keel: en
Alusdokumendid: IEC 61158-5-X:202X; prEN IEC 61158-5-X:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61158-6-X:2021

Industrial communication networks - Fieldbus specifications - Part 6-X: Application layer protocol specification - Type X elements

1.1 General The Fieldbus Application Layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This part of IEC 61158 provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 2 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This International Standard specifies interactions between remote applications and defines the externally visible behavior provided by the Type 2 fieldbus application layer in terms of a) the formal abstract syntax defining the application layer protocol data units conveyed between communicating application entities; b) the transfer syntax defining encoding rules that are applied to the application layer protocol data units; c) the application context state machine defining the application service behavior visible between communicating application entities; d) the application relationship state machines defining the communication behavior visible between communicating application entities. The purpose of this document is to define the protocol provided to a) define the wire-representation of the service primitives defined in IEC 61158-5-2, and b) define the externally visible behavior associated with their transfer. This document specifies the protocol of the Type 2 fieldbus application layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498-1) and the OSI application layer structure (ISO/IEC 9545). 1.2 Specifications The principal objective of this document is to specify the syntax and behavior of the application layer protocol that conveys the application layer services defined in IEC 61158-5-2. A secondary objective is to provide migration paths from previously-existing industrial communications protocols. 1.3 Conformance This document does not specify individual implementations or products, nor does it constrain the implementations of application layer entities within industrial automation systems. Conformance is achieved through implementation of this application layer protocol specification.

Keel: en
Alusdokumendid: IEC 61158-6-X:202X; prEN IEC 61158-6-X:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61158-X-27:2021

Industrial communication networks - Fieldbus specifications and Profiles - Type 27 elements (MECHATROLINK)

1.1 General The fieldbus application layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This part of IEC 61158 provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 27 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This International Standard defines in an abstract way the externally visible service provided by the different Types of fieldbus Application Layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service, c) the parameters associated with each primitive action and event, and the form which they take, and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this International Standard is to define the services provided to a) the FAL user at the boundary between the user and the Application Layer of the Fieldbus Reference Model, and b) Systems Management at the boundary between the Application Layer and Systems Management of the Fieldbus Reference Model. This International Standard specifies the structure and services of the IEC fieldbus Application Layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498-1) and the OSI Application Layer Structure (ISO/IEC 9545). FAL services and protocols are provided by FAL application-entities (AE) contained within the application processes. The FAL AE is composed of a set of object-oriented Application Service Elements (ASEs) and a Layer Management Entity (LME) that manages the AE. The ASEs provide communication services that operate

on a set of related application process object (APO) classes. One of the FAL ASEs is a management ASE that provides a common set of services for the management of the instances of FAL classes. Although these services specify, from the perspective of applications, how request and responses are issued and delivered, they do not include a specification of what the requesting and responding applications are to do with them. That is, the behavioral aspects of the applications are not specified; only a definition of what requests and responses they can send/receive is specified. This permits greater flexibility to the 289 FAL users in standardizing such object behavior. In addition to these services, some supporting services are also defined in this International Standard to provide access to the FAL to control certain aspects of its operation.

Keel: en
Alusdokumendid: IEC 61158-X-27:202X; prEN IEC 61158-X-27:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61158-X-28:2021

Industrial communication networks - Fieldbus specifications and Profiles - Type 28 elements (AUTBUS)

1.1 General This document of IEC 61158 describes basic packet communication services and models in an automation control industrial field environment. The Type 28 data-link layer provides time critical and non-time-critical communication services. Time-critical refers to the requirement to complete specified functions between devices in a defined time window in an industrial field environment. Failure to complete specified functions within the time window may lead to failure or harm in industrial production. This document defines in an abstract way the externally visible service provided by the Type 28 fieldbus data-link layer in terms of a) function description; b) primitive actions and events with primitive sequence diagram; c) the form of externally service interface and related parameters. The purpose of this document is to define the services provided to: - the Type 28 fieldbus application layer at the boundary between the application and data link layers of the fieldbus reference model; - systems management at the boundary between the data-link layer and systems management of the fieldbus reference model. Type 28 DL-service provides both a connected and a connectionless subset of those services provided by OSI data-link protocols as specified in ISO/IEC 8886. 1.2 Specifications The principal objective of this document is to specify the characteristics of conceptual data-link layer services suitable for time-critical communications and thus supplement the OSI Basic Reference Model in guiding the development of data-link protocols for time-sensitive communications. A secondary objective is to provide migration paths from previously-existing industrial communications protocols. This specification may be used as the basis for formal DL-Programming-Interfaces. Nevertheless, it is not a formal programming interface, and any such interface will need to address implementation issues not covered by this specification, including: a) the sizes and octet ordering of various multi-octet service parameters; and b) the correlation of paired request and confirm, or indication and response primitives. 1.3 Conformance This document does not specify individual implementations or products, nor does it constrain the implementations of data-link entities within industrial automation systems. There is no conformance of equipment to this data-link layer service definition standard. Instead, conformance is achieved through implementation of the corresponding data-link protocol that fulfills the Type 28 data-link layer services defined in this document.

Keel: en
Alusdokumendid: IEC 61158-X-28:202X; prEN IEC 61158-X-28:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 62453-302:2021

Field device tool (FDT) interface specification - Part 302: Communication profile integration - IEC 61784 CPF 2

Communication Profile Family 2 (commonly known as CIPTM1) defines communication profiles based on IEC 61158-2 Type 2, IEC 61158-3-2, IEC 61158-4-2, IEC 61158-5-2, IEC 61158-6-2, and IEC 62026-3. The basic profiles CP 2/1 (ControlNetTM2), CP 2/2 (EtherNet/IPTM3), and CP 2/3 (DeviceNetTM1) are defined in IEC 61784-1 and IEC 61784-2. An additional communication profile (CompoNetTM1), also based on CIPTM, is defined in [15]. This part of IEC 62453 provides information for integrating the CIPTM technology into the FDT interface specification (IEC 62453-2). This part of IEC 62453 specifies communication and other services. This specification neither contains the FDT specification nor modifies it.

Keel: en
Alusdokumendid: IEC 62453-302 ED3; prEN IEC 62453-302:2021
Asendab dokumenti: EVS-EN 62453-302:2017

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN ISO 5817

Welding - Fusion-welded joints in steel, nickel, titanium and their alloys (beam welding excluded) - Quality levels for imperfections (ISO/DIS 5817:2021)

This document provides quality levels of imperfections in fusion-welded joints (except for beam welding) in all types of steel, nickel, titanium and their alloys. It applies to material thickness more or equal 0,5 mm. It covers fully penetrated butt welds and all fillet welds. Its principles can also be applied to partial-penetration butt welds. Quality levels for beam-welded joints in steel are presented in ISO 13919-1. Three quality levels are given in order to permit application to a wide range of welded fabrication. They are designated by symbols B, C and D. Quality level B corresponds to the highest requirement on the finished weld. Several types of loads are considered, e.g. static load, thermal load, corrosion load, pressure load. Additional guidance on fatigue loads is given in Annex C. The quality levels refer to production and good workmanship. This document is applicable to a) non-alloy and alloy steels, b) nickel and nickel alloys, c) titanium and titanium alloys, d) manual, mechanized and automated welding, e) all welding positions, f) all types of welds, e.g. butt welds, fillet welds and branch connections g) the following welding processes and their sub-processes, as defined in ISO 4063: — 11 metal arc welding without gas protection; — 12 submerged arc welding; — 13 gas-shielded metal arc welding; — 14 gas-shielded arc welding with non-consumable tungsten electrode; — 15 plasma arc welding; — 31 oxyfuel gas welding (for steel only). Metallurgical aspects, e.g. grain size, hardness, are not covered by this document.

Keel: en
Alusdokumendid: ISO/DIS 5817; prEN ISO 5817
Asendab dokumenti: EVS-EN ISO 5817:2014

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN ISO/ASTM 52920

Additive manufacturing - Qualification principles - Part 2: Requirements for industrial additive manufacturing sites (ISO/ASTM DIS 52920:2021)

This document defines the requirements for manufacturing centers, in which additive manufacturing methods are used (referred to below as additive manufacturing centers), which are independent of the material and manufacturing method used. This document specifies criteria for additive manufacturing processes as well as quality-relevant characteristics and factors along the process chain and defines activities and sequences within an additive manufacturing center. This document is applicable to the additive manufacturing technologies defined according to DIN EN ISO/ASTM 52900 and follows an approach oriented to the manufacturing process.

Keel: en
Alusdokumendid: ISO/ASTM DIS 52920; prEN ISO/ASTM 52920

Arvamusküsitluse lõppkuupäev: 15.10.2021

27 ELEKTRI- JA SOOJUSENERGEETIKA

EN IEC 61215-1-2:2021/prA1:2021

Terrestrial photovoltaic (PV) modules - Design qualification and type approval - Part 1-2: Special requirements for testing of thin-film Cadmium Telluride (CdTe) based photovoltaic (PV) modules

Amendment to EN IEC 61215-1-2:2021

Keel: en
Alusdokumendid: IEC 61215-1-2/AMD1:202X; EN IEC 61215-1-2:2021/prA1:2021
Muudab dokumenti: EVS-EN IEC 61215-1-2:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN 15502-2-1

Gas-fired central heating boilers - Part 2-1: Specific standard for type C appliances and type B2, B3 and B5 appliances of a nominal heat input not exceeding 1 000 kW

EN 15502-1:2020, Clause 1 is replaced by the following: This document specifies, the requirements and test methods concerning, as well as the classification and marking of gas-fired central heating boilers that are fitted with atmospheric burners, fan assisted atmospheric burners or fully premixed burners, and are hereafter referred to as "boilers". This document is to be used in conjunction with FprEN 15502-1:2020. This document covers certain gas-fired central heating boilers from the types C1 up to C(11) and the types B2, B3 and B5: NOTE 1 For further background information on appliance types see EN 1749:2020. a) that have a nominal heat input (on the basis of net calorific value) not exceeding 1 000 kW; b) that use one or more combustible gases of the three gas families at the pressures stated in EN 437:2018; c) where the temperature of the heat transfer fluid does not exceed 105 °C during normal operation; d) where the maximum operating pressure in the water circuit does not exceed 6 bar; e) which can give rise to condensation under certain circumstances; f) which are declared in the instructions for installation to be either a "condensing" boiler or a "low temperature boiler" or a "standard boiler"; if no declaration is given the boiler is to be considered a "standard boiler"; g) which are intended to be installed inside a building or in a partially protected place; h) which are intended to produce also hot water either by the instantaneous or storage principle as a single unit; i) which are designed for either sealed water systems or for open water systems; j) which are either modular boilers, or non modular boilers. k) which are from the types C(10) that are equipped with a gas-air ratio control and that have a Δpmax, saf(min) of 25 Pa, and C(11) that have condensing boiler modules that are equipped with a gas-air ratio control and that have a Δpmax, saf(min) of 25 Pa. NOTE 2 This document provides requirements for boilers with known constructions. For boilers with any alternative constructions, which might not fully be covered by this standard, the risk associated with this alternative construction needs to be assessed. An example of an assessment methodology, based upon risk assessment, is given in Clause 11. This document does not cover all the requirements for: aa) appliances above 1 000 kW; ab) appliances that are intended to be connected to gas grids where the quality of the distributed gas is likely to vary to a large extent over the lifetime of the appliance (see Annex AB); ac) appliances using flue dampers; ad) appliances of the types B21, B31, B51, C21, C41, C51, C61, C71, C81, C(12) and C(13); ae) C7 appliances that have a nominal heat input (on the basis of net calorific value) exceeding 70 kW; af) appliances incorporating flexible plastic flue liners; ag) C(10) boilers: 1) without a gas-air ratio control, or 2) which are non-condensing appliances, or 3) which have a maximum safety pressure difference at minimum heat input not equal to 25 Pa (Δpmax, saf(min)); ah) C(11) boilers that have boiler modules: 1) without a gas-air ratio control, or 2) which are non-condensing appliances, or 3) which have a maximum safety pressure difference at minimum heat input not equal to 25 Pa (Δpmax, saf(min)); ai) appliances intended to be connected to a flue having mechanical extraction; aj) surface temperatures of external parts particular to children and elderly people; ak) appliances that are intended to burn natural gases of the second family where hydrogen is added to the natural gas; al) appliances equipped with an adaptive combustion control function (ACCF); am) boilers intended to be installed in areas accessible to elderly people and children.

Keel: en
Alusdokumendid: prEN 15502-2-1
Asendab dokumenti: EVS-EN 15502-2-1:2012+A1:2016

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61400-12:2021

Wind energy generation systems - Part 12: Power performance measurements of electricity producing wind turbines - Overview

The IEC 61400 series of standards addresses wind energy generation technical requirements up to the point of interconnection with the utility grid system. Part 12 of the IEC 61400 series of standards comprises a sub-set of standards which are to be used in the evaluation and measurement of the power performance characteristics of wind turbines. The power performance characterisation of wind turbines of all types and sizes is covered. Wind turbine power performance characteristics are determined from a measured power curve and an associated estimated annual energy production (AEP) and its uncertainty. The measured power curve, defined as the relationship between the wind speed and the wind turbine power output, is determined by collecting simultaneous measurements of meteorological variables (including wind speed), as well as wind turbine signals (including power output) at the test site for a period that is long enough to establish a statistically significant database over a range of wind speeds and under varying wind and atmospheric conditions. The AEP is calculated by applying the measured power curve to reference wind speed frequency distributions, assuming 100 % availability. Part 12-0 provides a general introduction to the available options for power performance measurement and the contributing evaluations which are further detailed in the other parts of the IEC 61400-12 series. Although the -12 series also defines the specifications of the meteorological variables (and in particular wind speed) required for the power performance evaluation, the methods and procedures for measuring or otherwise acquiring the wind speed data are defined in the IEC 61400-50 wind measurement series of standards. The evaluation of the wind turbine power performance characteristic according to this series of standards requires the measured power curve and derived energy production figures to be supplemented by an assessment of uncertainty sources and their combined effects. The basis of the uncertainty assessment is ISO/IEC Guide 98-3. The wind measurement uncertainty sources shall be identified and quantified from procedures described in the relevant wind measurement standards contained in the IEC 61400-50 series. The wind measurement uncertainties shall be propagated through to and combined with the other sources of uncertainty in the power curve and annual energy production using methods and assumptions described in the IEC 61400-12 series of standards.

Keel: en
Alusdokumendid: IEC 61400-12 ED1; prEN IEC 61400-12:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61400-12-1:2021

Wind energy generation systems - Part 12-1: Power performance measurement of electricity producing wind turbines

This part of IEC 61400 specifies a procedure for measuring the power performance characteristics of a single wind turbine and applies to the testing of wind turbines of all types and sizes connected to the electrical power network. In addition, this standard describes a procedure to be used to determine the power performance characteristics of small wind turbines (as defined in IEC 61400-2) when connected to either the electric power network or a battery bank. The procedure can be used for performance evaluation of specific wind turbines at specific locations, but equally the methodology can be used to make generic comparisons between different wind turbine models or different wind turbine settings when site-specific conditions and data filtering influences are taken into account. The wind turbine power performance characteristics are determined by the measured power curve and the estimated annual energy production (AEP). The measured power curve, defined as the relationship between the wind speed and the wind turbine power output, is determined by collecting simultaneous measurements of meteorological variables (including wind speed), as well as wind turbine signals (including power output) at the test site for a period that is long enough to establish a statistically significant database over a range of wind speeds and under varying wind and atmospheric conditions. The AEP is calculated by applying the measured power curve to reference wind speed frequency distributions, assuming 100 % availability. The standard describes a measurement methodology that requires the measured power curve and derived energy production figures to be supplemented by an assessment of uncertainty sources and their combined effects. Uncertainty sources of wind measurements shall be achieved from procedures described in the relevant wind measurement equipment standards while uncertainty of the power curve and annual energy production shall be achieved by 86 procedures in this standard.

Keel: en
Alusdokumendid: IEC 61400-12-1 ED3; prEN IEC 61400-12-1:2021
Asendab dokumenti: EVS-EN 61400-12-1:2017
Asendab dokumenti: EVS-EN 61400-12-1:2017/AC:2019
Asendab dokumenti: EVS-EN 61400-12-1:2017/AC:2020
Asendab dokumenti: EVS-EN 61400-12-1:2017/AC:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61400-12-2:2021

Wind energy generation systems - Part 12-2: Power performance of electricity producing wind turbines based on nacelle anemometry

This part of IEC 61400-12 specifies a procedure for verifying the power performance characteristics of a single electricity-producing, horizontal axis wind turbine, which is not considered to be a small wind turbine per IEC 61400-2. It is expected that this standard shall be used when the specific operational or contractual specifications may not comply with the requirements set forth in IEC Publication 61400-12-1. The procedure can be used for power performance evaluation of specific turbines at specific locations, but equally the methodology can be used to make generic comparisons between different turbine models or different turbine settings. The wind turbine power performance characterised by the measured power curve and the estimated AEP based on nacelle-measured wind speed will be affected by the turbine rotor (i.e. speeded up or slowed down wind speed). The nacelle-measured wind speed shall be corrected for this flow distortion effect through the use of a Nacelle Transfer Function (NTF). In IEC 61400-12-1, an anemometer is located on a meteorological tower that is located between two and four rotor diameters upwind of the test turbine. This location allows direct measurement of the ‘free’ wind with minimum interference from the test turbine’s rotor. In this IEC 61400-12-2 procedure, the anemometer is located on or near the test turbine’s nacelle.

In this location, the anemometer is measuring wind speed that is strongly affected by the test turbine's rotor and the nacelle. The NTF is applied to provide an appropriate correction for this interference. However, it must be noted that such corrections inherently increase the measurement uncertainty compared to a properly-configured test conducted in accordance with IEC 61400-12-1. This IEC 61400-12-2 standard describes how to characterise a wind turbine's power performance in terms of a measured power curve and the estimated AEP. The measured power curve is determined by collecting simultaneous measurements of nacelle-measured wind speed and power output for a period that is long enough to establish a statistically significant database over a range of wind speeds and under varying wind and atmospheric conditions. In order to accurately measure the power curve, the nacelle-measured wind speed is adjusted using a transfer function to estimate the free stream wind speed. The procedure to measure such a transfer function is given in IEC 61400-12-6 The AEP is calculated by applying the measured power curve to the reference wind speed frequency distributions, assuming 100% availability. The procedure also provides guidance on determination of measurement uncertainty including assessment of uncertainty sources and recommendations for combining them into uncertainties in reported power and AEP.

Keel: en
Alusdokumendid: IEC 61400-12-2 ED2; prEN IEC 61400-12-2:2021
Asendab dokumenti: EVS-EN 61400-12-2:2013
Asendab dokumenti: EVS-EN 61400-12-2:2013/AC:2016

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61400-12-3:2021

Wind energy generation systems - Part 12-3: Power Performance - Measurement Based Site Calibration

Part 12-3 of IEC 61400 specifies a measurement and analysis procedure for deriving the wind speed correction due to terrain effects and applies to the performance testing of wind turbines of all types and sizes connected to the electrical power network as described in Part 12-1 of IEC 61400. The procedure applies to the performance evaluation of specific wind turbines at specific locations.

Keel: en
Alusdokumendid: IEC 61400-12-3 ED1; prEN IEC 61400-12-3:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61400-12-5:2021

Wind energy generation systems - Part 12-5: Power performance - Assessment of obstacles and terrain

Part 12-5 of IEC 61400 specifies the procedures for assessing the significance of obstacles and terrain variations on a proposed power performance measurement site and applies to the performance testing of wind turbines of all types and sizes connected to the electrical power network as described in other parts of the IEC 61400 series. The procedure applies to the performance evaluation of specific wind turbines at specific locations.

Keel: en
Alusdokumendid: IEC 61400-12-5 ED1; prEN IEC 61400-12-5:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61400-12-6:2021

Wind energy generation systems - Part 12-6: Measurement based nacelle transfer function of electricity producing wind turbines

This part of IEC 61400-12 specifies a procedure for measuring the nacelle transfer function of a single electricity-producing, horizontal axis wind turbine, which is not considered to be a small wind turbine per IEC 61400-2. It is expected that this standard shall be used when a valid Nacelle Transfer Function is needed to execute a power performance measurement according to the IEC 61400-12-2 standard. A wind speed measured on the nacelle or hub of a wind turbine will be affected by the turbine rotor (i.e. speeded up or slowed down wind speed). Therefore, the nacelle-measured wind speed shall be corrected for this flow distortion effect. Procedures for determining that correction will be included in the methodology. In IEC 61400-12-1, an anemometer is located on a meteorological tower that is located between two and four rotor diameters upwind of the test turbine. This location allows direct measurement of the 'free' wind with minimum interference from the test turbine's rotor. In this IEC 61400-12-6 procedure, the anemometer is located on or near the test turbine's nacelle. In this location, the anemometer is measuring a wind speed that is strongly affected by the test turbine's rotor and the nacelle. The procedure in this standard includes methods for determining and applying appropriate corrections for this interference. However, it must be noted that these corrections inherently increase the measurement uncertainty compared to a properly-configured test conducted in accordance with IEC 61400-12-1. This IEC 61400-12-6 standard describes how to characterise a wind turbine's nacelle transfer function. The nacelle transfer function is determined by collecting simultaneous measurements of nacelle-measured wind speed and free stream wind speed (as measured on a meteorological mast) for a period that is long enough to establish a statistically significant database over a range of wind speeds and under varying wind and atmospheric conditions. The procedure also provides guidance on determination of measurement uncertainty including assessment of uncertainty sources and recommendations for combining them.

Keel: en
Alusdokumendid: IEC 61400-12-6 ED1; prEN IEC 61400-12-6:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61400-21-2:2021

Wind energy generation systems - Part 21-2: Measurement and assessment of electrical characteristics - Wind power plants

IEC 61400-21-2 - Wind energy generation systems - Measurement and assessment of electrical characteristics - Wind power plants - has the following scope: IEC 61400-21-2 defines and specifies the quantities that shall be determined to characterize the electrical characteristics of grid-connected power plants (PP). IEC 61400-21-2 defines the measurement and test procedures for quantifying the electrical characteristics as basis for the verification of compliance of PP, including: - Power quality aspects - Steady state operation - Dynamic response (undervoltage and overvoltage fault ride-through) - Disconnection from grid (Grid protection) - Control performance IEC 61400-21-2 defines a uniform functionality test and measurement procedure for the power plant controller (PPC), as a basis for the unit test of the power plant controller. IEC 61400-21-2 defines the procedures for assessing compliance with electrical connection requirements, including the aggregation methods for power quality aspects such as voltage variations, flicker, harmonics and interharmonics. IEC 61400-21-2 defines the procedures for measurement and fault recording for the verification of power plant electrical simulation models in relation to undervoltage and overvoltage ride through events. These measurement procedures are valid for power plants, including the power plant controller and other connected equipment, necessary for the operation of the Power Plant. The measurement procedures are valid for any size of power plant connected to the point of connection (POC) at one connection point. The procedures for assessing and verifying the compliance with grid connection requirements are valid for power plants in power systems with fixed frequency and a sufficient short-circuit power. Out of the scope of this standard are: - Multi park control, i.e. cluster management of several power plants (PP) or several connection points - Compliance test and performance requirements, including pass or fail criteria - Specific component test and validation of the PP equipment (switchgear, cables, transformers, etc.), which are covered by other IEC standards - Wind power plant model validation, as defined in the IEC 61400-27-2 - Load flow calculation methods and load flow study guidelines - Test and measurement of the communication interface and system of the PP as defined in the IEC 61400-25 series NOTE For the purposes of this document, the following terms for system voltage apply, based on IEC 60038 Low voltage (LV) refers to 100 V < Un ≤ 1 kV; Medium voltage (MV) refers 106 to 1 kV < Un ≤ 35 kV; High voltage (HV) refers to 35 kV < Un ≤ 230 kV; Extra high voltage (EHV) refers to Un > 230 kV

Keel: en
Alusdokumendid: IEC 61400-21-2:202X; prEN IEC 61400-21-2:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61400-50:2021

Wind energy generation systems - Part 50: Wind measurements

The IEC 61400 series of standards addresses wind energy generation technical requirements up to the point of interconnection with the utility grid system. Part 50 of the IEC 61400 series of standards comprises a sub-set of standards which specify the requirements for equipment and methods to be used in the measurement of the wind. Wind measurements are required as inputs to various tests and analyses described in other use-case standards in the IEC 61400 series (e.g. power performance, resource assessment, noise measurement). Whereas those other standards define use-cases for wind measurements, Part 50 sets those wind measurement requirements which are independent of the use-case. Its purpose is to ensure that wind measurements and the evaluation of uncertainties in those measurements are carried out consistently across the wind industry and that wind measurements are carried out such that the uncertainties can be quantified and that those uncertainties are within an acceptable range. Part 50-0 provides a general introduction to the options that are available for wind measurement which are further detailed in the other parts of the -50 series.

Keel: en
Alusdokumendid: IEC 61400-50 ED1; prEN IEC 61400-50:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61400-50-1:2021

Wind energy generation systems - Part 50-1: Wind Measurement - Application of Meteorological Mast, Nacelle and Spinner Mounted Instruments

Part 50 of IEC 61400 specifies methods and requirements for the application of instruments to measure wind speed (and related parameters, e.g. turbulence intensity). Such measurements are required as an input to some of the evaluation and testing procedures for wind energy and wind turbine technology (e.g. resource evaluation and turbine performance testing) described by other standards in the IEC 61400 series. Part 50-1 is applicable specifically to the use of wind measurement instruments mounted on meteorological masts, turbine nacelles or turbine spinners which measure the wind at the location at which the instruments are mounted. This document excludes remote sensing devices which measure the wind at some location distant from the location at which the instrument is mounted (e.g. vertical profile or forward facing lidars).

Keel: en
Alusdokumendid: prEN IEC 61400-50-1:2021; IEC 61400-50-1 ED1 (88/828/CDV)

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61400-50-2:2021

Wind energy generation systems - Part 50-2: Wind Measurement - Application of Ground Mounted Remote Sensing Technology

Part 50 of IEC 61400 specifies methods and requirements for the application of instruments to measure wind speed (and related parameters, e.g. wind direction and turbulence intensity). Such measurements are required as an input to some of the evaluation and testing procedures for wind energy and wind turbine technology (e.g. resource evaluation and turbine testing) described by other standards in the IEC 61400 series. Part 50-2 is applicable specifically to the use of ground mounted remote sensing wind measurement instruments, i.e devices which measure the wind at some location generally above and distant from

the location at which the instrument is mounted (e.g. sodars, vertical profiling lidars). This document specifically excludes other types of RSD such as forward facing or scanning lidars.

Keel: en
Alusdokumendid: IEC 61400-50-2 ED1; prEN IEC 61400-50-2:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN ISO 20675

Biogas - Biogas production, conditioning, upgrading and utilization - Terms, definitions and classification scheme (ISO 20675:2018)

This document defines terms and describes classifications related to biogas production by anaerobic digestion, gasification from biomass and power to gas from biomass sources, biogas conditioning, biogas upgrading and biogas utilization from a safety, environmental, performance and functionality perspective, during the design, manufacturing, installation, construction, testing, commissioning, acceptance, operation, regular inspection and maintenance phases. Biogas installations are, among others, applied at industrial plants like food and beverage industries, waste water treatment plants, waste plants, landfill sites, small scale plants next to agricultural companies and small scale household installations. The following topics are excluded from this document: — boilers, burners, furnaces and lightening, in case these are not specifically applied for locally produced biogas; — gas-fuelled engines for vehicles and ships; — the public gas grid; — specifications to determine biomethane quality; — transportation of compressed or liquefied biogas; — transportation of biomass or digestate; — assessment and determination whether biomass is sourced sustainably or not. This document describes the following for information purposes as well: — the parameters to determine the size (e.g. small, medium-sized, or large scale); — the parameters to determine the type of installation (e.g. domestic, industrial); — the parameters to describe the type of technique; — terms and processes in order to develop health, safety and environmental protection guidelines for biogas installations. NOTE For an explanation of the Scope, see Annex A.

Keel: en
Alusdokumendid: ISO 20675:2018; prEN ISO 20675

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN ISO 22580

Flares for combustion of biogas (ISO 22580:2020)

This document applies to the design, manufacture, installation and operation of flares for the combustion of biogas. Test methods and performance requirements are also included. Biogas systems are amongst others applied at industrial plants like food and beverage industries, waste water treatment plants, waste plants, landfill sites, small scale plants next to agricultural companies and small-scale household systems.

Keel: en
Alusdokumendid: ISO 22580:2020; prEN ISO 22580

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN ISO 23590

Household biogas system requirements: design, installation, operation, maintenance and safety (ISO 23590:2020)

This document covers the requirements for the design, installation, operation, maintenance and the safety of Household Biogas Systems (HBSs), producing biogas in an amount equivalent to an installation capacity of less than 100 MWh per year. The document applies to HBSs comprising of pipeline and equipment with pressure levels of less than 5 kPa. Any equipment or appliances connected to an HBS or utilizing the biogas energy of an HBS are not a part of the scope of this document.

Keel: en
Alusdokumendid: ISO 23590:2020; prEN ISO 23590

Arvamusküsitluse lõppkuupäev: 15.10.2021

29 ELEKTROTEHNIKA

prEN 50187:2021

High-voltage switchgear and controlgear - Gas-filled compartments of AC switchgear and controlgear with rated voltages above 1 kV up to and including 52 kV

This document applies to pressurized compartments (gas-filled compartments with maximum allowable pressure above 50 kPa relative) of AC switchgear and controlgear with rated voltages above 1 kV up to and including 52 kV for indoor or outdoor installations. All gases stable and non-corrosive in the conditions that prevail inside the compartment are covered e.g. gases such as SF6, compressed air, natural-origin gases, alternative fluorinated compounds used alone or in gas mixtures with natural origin gases. The gas or gas mixture being used principally for its dielectric and/or arc-quenching properties.

Keel: en
Alusdokumendid: prEN 50187:2021
Asendab dokumenti: EVS-EN 50187:2002

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN 61439-7:2021

Low-voltage switchgear and controlgear assemblies - Part 7: Assemblies for specific applications such as marinas, camping sites, market squares, electric vehicle charging stations

Clause 1 of IEC 61439-1:2020 is applicable except as follows. Replacement: This part of IEC 61439 defines the specific requirements for Assemblies for the following applications: marinas, camping sites, market squares and electric vehicle charging stations as follows: - Assemblies for which the rated voltage does not exceed 1 000 V AC or 1 500 V DC; - Assemblies intended for use in connection with the generation, transmission, distribution and conversion of electric energy, and for the control of electric energy consuming equipment; - Assemblies operated by ordinary persons (e.g. to plug and unplug of electrical equipment); - Assemblies intended to be installed and used in market squares, marinas, camping sites and other similar sites accessible to the public including temporary installations; - Assemblies intended for charging stations for electric vehicles (AEVCS) for Mode 3 and Mode 4. They are designed to integrate the functionality and additional requirements for electric vehicle conductive charging systems according to IEC 61851-1:2017. NOTE 1 Throughout this document, the terms AMHS (see 3.1.701), ACCS (see 3.1.702), AMPS (see 3.1.703), AEVCS (see 3.1.704) are used for low-voltage switchgear and controlgear assemblies intended for use respectively in marinas and similar locations (AMHS), camping sites and similar locations (ACCS), market squares and other similar external public sites (AMPS) and charging stations (AEVCS). The term assemblies is used for indicating all these boards. This standard is not applicable to assemblies intended to be installed on board of ships, houseboats, pleasure crafts and similar vessels. For the correct selection of the switching devices and components, the following standards apply: - IEC 60364-7-709 (AMHS) or - IEC 60364-7-708 (ACCS) or - IEC 60364-7-740 (AMPS) or - IEC 60364-7-722 (AEVCS). This document applies to all assemblies whether they are designed, manufactured and verified on a one-off basis or fully standardised and manufactured in quantity. The manufacturing and/or assembling may be carried out other than by the original manufacturer (see 3.10.1 of IEC 61439-1:2020). This document does not apply to individual devices and self-contained components such as circuit breakers, fuse switches, electronic equipment, which comply with their relevant product standards. NOTE 2 Where electrical equipment is directly connected to public low-189 voltage supply system and equipped with an energy meter for billing of the legal provider of the low-voltage supply, additional particular requirements based on national regulations apply, if any. This document does not apply to boxes and enclosures for electrical accessories for household and similar fixed electrical installations as defined in IEC 60670-24.

Keel: en
Alusdokumendid: IEC 61439-7 ED2; prEN 61439-7:2021
Asendab dokumenti: EVS-EN IEC 61439-7:2020

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 60072-1:2021

Dimensions and output series for rotating electrical machines - Part 1: Frame numbers 56 to 400 and flange numbers 55 to 1080

This document is applicable for the majority of rotating electrical machines for industrial purposes within the dimension range and output powers: Foot- mounted: shaft heights: 56mm to 400mm Flange- mounted: pitch circle diameter of flange: 55mm to 1080mm It specifies the fixing dimension, shaft extension dimensions and the assignment of output powers and frame sizes.

Keel: en
Alusdokumendid: IEC 60072-1 ED7; prEN IEC 60072-1:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61543/prAA

Residual current-operated protective devices (RCDs) for household and similar use - Electromagnetic compatibility

Amendment to prEN IEC 61543:2021

Keel: en
Alusdokumendid: prEN IEC 61543/prAA
Muudab dokumenti: prEN IEC 61543:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61543:2021

Residual current-operated protective devices (RCDs) for household and similar use - Electromagnetic compatibility

This document provides specific emission and immunity requirements, tests and performance criteria for residual current-operated protective devices (RCDs), for household and similar use, for rated voltages not exceeding 440 V. Household and similar use corresponds to the description given in the generic standard IEC 61000-6-1 for residential, commercial, and light-industrial electromagnetic environments. This document is intended to be referred to by RCD product standards and is not intended to be used as a standalone document. Residual current-operated protective devices are: - Residual current operated circuit-breakers without integral overcurrent protection for household and similar use (RCCBs) covered by IEC 61008 series and IEC 62423; - Residual current operated circuit-breakers with integral overcurrent protection for household and similar use (RCBOs) covered by IEC 61009 series and IEC 62423; - Residual current devices with or without overcurrent protection for socket-outlets (SRCDs) covered by IEC 62640; - Portable residual current devices without integral overcurrent protection (PRCDs) covered by IEC 61540; - Devices with an RCD functionality for household and similar use according product standards following the group safety publications for general safety requirements for RCDs, IEC 60755. This edition applies if it is referred to as a dated reference in the relevant product standard. This document is also intended to be used as a guideline in the preparation of EMC requirements and tests for other product standards under the scope of SC 23E. It also specifies generic

performance criteria intended to be transformed into specific performance criteria by the relevant product standard. Note: Examples of other product standards under the scope of SC 23E are: - IEC 62020-1 "Electrical accessories - Residual current monitors (RCMs) – Part 1: RCMs for household and similar uses"; - IEC 62606 "General requirements for arc fault detection devices"; - IEC 63024 "Requirements for automatic reclosing devices (ARDs) for circuit breakers, RCBOs-RCCBs for household and similar uses"; - IEC 63052 "Power frequency overvoltage protective devices (POPs) for household and similar applications"; - IEC 62752 "In-cable control and protection device for mode 2 charging of electric road vehicles (IC-CPD)"; - IEC 62955 "Residual direct current detecting device (RDC-DD) to be used for mode 3 charging of electric vehicles".

Keel: en
Alusdokumendid: prEN IEC 61543:2021; IEC 61543 ED2 (23E/1235/CDV)
Asendab dokumenti: EVS-EN 61543:2001
Asendab dokumenti: EVS-EN 61543:2001/A11:2003
Asendab dokumenti: EVS-EN 61543:2001/A12:2005
Asendab dokumenti: EVS-EN 61543:2001/A2:2006

Arvamusküsitluse lõppkuupäev: 15.10.2021

33 SIDETEHNIKA

prEN 301 908-10 V4.3.0

IMT kärgsidesidevõrgud; Raadiospektrile juurdepääsu harmoneeritud standard; Osa 10. Kolmanda põlvkonna mobiilsidevõrgu IMT-2000 baasjaamad (BS), repiiterid ja kasutajaseadmed (UE)
IMT cellular networks; Harmonised Standard for access to radio spectrum; Part 10: Base Stations (BS), Repeaters and User Equipment (UE) for IMT-2000 Third-Generation cellular networks

The present document applies to the following equipment types for IMT-FT. IMT-FT is the Digital Enhanced Cordless Telecommunications (DECT) system being a member of the ITU IMT-2000 family: a) Base Station (BS) (termed as Fixed Part (FP) throughout the present document) b) User Equipment (UE) (termed as Portable Part (PP) throughout the present document) c) Cordless Terminal Adapter (CTA) (specific type of UE) d) Repeater (termed as Wireless Relay Station (WRS) (FP and PP combined) throughout the present document) e) Hybrid Part (HyP) (a PP with capability to act as a FP to provide PP to PP communication) These radio equipment types can operate in all or any part of the frequency bands given in table 1. Table 1: Radiocommunications service frequency bands Transmit 1 900 MHz to 1 980 MHz Receive 1 900 MHz to 1 980 MHz Transmit 2 010 MHz to 2 025 MHz Receive 2 010 MHz to 2 025 MHz The IMT-FT (DECT) service frequency bands for transmitting and receiving for all elements are the parts of the IMT spectrum applicable for TDD operation, 1 900 MHz to 1 980 MHz and 2 010 MHz to 2 025 MHz. NOTE 1: IMT-FT equipment may have a second mode for providing operation also in the DECT band 1 880 MHz to 1 900 MHz. Application of DECT in the band 1 880 MHz to 1 900 MHz is covered by ETSI EN 301 406. Details of the DECT Common Interface may be found in ETSI EN 300 175-1, ETSI EN 300 175 parts 2 to 3, ETSI EN 300 175-4, ETSI EN 300 175 parts 5 to 6 and ETSI EN 300 175 parts 7 to 8. Further details of the DECT system may be found in ETSI TR 101 178. Information about ULE may be found in ETSI TS 102 939-1 and ETSI TS 102 939-2. The present document contains requirements to demonstrate that radio equipment both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference. NOTE 2: The relationship between the present document and essential requirements of article 3.2 of Directive 2014/53/EU is given in annex A

Keel: en
Alusdokumendid: Draft ETSI EN 301 908-10 V4.3.0

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN 319 411-2 V2.3.3

Electronic Signatures and Infrastructures (ESI); Policy and security requirements for Trust Service Providers issuing certificates; Part 2: Requirements for trust service providers issuing EU qualified certificates

The present document specifies policy and security requirements for the issuance, maintenance and life-cycle management of EU qualified certificates as defined in Regulation (EU) No 910/2014. These policy and security requirements support reference certificate policies for the issuance, maintenance and life-cycle management of EU qualified certificates issued to natural persons (including natural persons associated with a legal person or a website) and to legal persons (including legal persons associated with a website), respectively. The present document does not specify how the requirements identified can be assessed by an independent party, including requirements for information to be made available to such independent assessors, or requirements on such assessors. NOTE: See ETSI EN 319 403 for guidance on assessment of TSP's processes and services. The present document references ETSI EN 319 411-1 for general requirements on TSP issuing certificates.

Keel: en
Alusdokumendid: Draft ETSI EN 319 411-2 V2.3.3

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN 319 412-4 V1.2.0

Electronic Signatures and Infrastructures (ESI); Certificate Profiles; Part 4: Certificate profile for web site certificates

The present document specifies a certificate profile for web site certificates that are accessed by the TLS protocol [IETF RFC 5246: "The Transport Layer Security (TLS) Protocol Version 1.2"]. The profile defined in the present document builds on the CA/Browser Forum Baseline requirements, Extended validation guidelines and other parts of the present multipart deliverable.

The present document focuses on requirements on certificate content. Requirements on decoding and processing rules are limited to aspects required to process certificate content defined in the present document. Further processing requirements are only specified for cases where it adds information that is necessary for the sake of interoperability. This profile can be used for legal and natural persons. For certificates issued to legal persons, the profile builds on the CAB Forum EV Profile or baseline requirements. For certificates issued to natural persons, the profile builds only on CAB Forum baseline requirements.

Keel: en
Alusdokumendid: Draft ETSI EN 319 412-4 V1.2.0

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61158-1:2021

Industrial communication networks - Fieldbus specifications - Part 1: Overview and guidance for the IEC 61158 and IEC 61784 series

This document specifies the generic concept of fieldbuses. This document also presents an overview and guidance for the IEC 611581 series by: • explaining the structure and content of the IEC 61158 series; • relating the structure of the IEC 61158 series to the ISO/IEC 7498-1 OSI Basic Reference Model; • showing the logical structure of the IEC 617842 series; 246 • showing how to use parts of the IEC 61158 series in combination with the IEC 61784 series; • providing explanations of some aspects of the IEC 61158 series that are common to the type specific parts of the IEC 61158-5 series including the application layer service description concepts and the generic fieldbus data types.

Keel: en
Alusdokumendid: IEC 61158-1:202X; prEN IEC 61158-1:2021
Asendab dokumenti: EVS-EN IEC 61158-1:2019

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 62496-4-3:2021

Optical circuit boards - Part 4-3: Interface standards - Terminated waveguide OCB assembly using a single-row thirty-two-channel PMT connector intermateable with 250 µm pitch MPO 16

This part of IEC 62496 defines the standard interface dimensions for a terminated waveguide optical circuit board (OCB) assembly (referred to simply as assembly) using single-row thirty-two-channel connectors for polymer waveguides connected with a PMT connector, and the PMT connector is intermateable with MPO 16 specified in IEC 61754-7-4.

Keel: en
Alusdokumendid: IEC 62496-4-3:202X; prEN IEC 62496-4-3:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 63267-1:2021

Fibre optic interconnecting devices and passive components - Connector optical interfaces for enhanced macro bend loss multimode fibres - Part 1: Optical interfaces for 50 um core diameter fibres - General and guidance

This part of IEC 63267 covers multimode fibre optic connection interfaces. It includes references, document structure details, definitions, and standardised optical connection grades. The grades are based on random mated connections between two optical connector populations according to prescribed characteristics including the core diameter and numerical aperture mismatches. The document describes the rules under which an optical interface is created. It also defines standardised test methods where appropriate.

Keel: en
Alusdokumendid: IEC 63267-1:202X; prEN IEC 63267-1:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

35 INFOTEHNOLOOGIA

prEN 14908-6

Open Data Communication in Building Automation, Controls and Building Management - Control Network Protocol - Part 6: Application elements

This document provides mechanisms through which various vendors of building automation, control, and building management systems may exchange information in a standardized way. This document provides specifications for the Application Elements of Control Network Protocol packets as follows: - definitions of standardized packet (network-variable) data types; - definitions of device-interface files; - definitions of standardized configuration-property types; - definitions of standardized enumeration types; - definitions of standardized functional profiles; - definition of the standardized method of file transfer between devices. The purpose of this specification is to ensure interoperability between various CNP implementations. This document contains all the information necessary to read and interpret the format of data and control information that is used by EN 14908-5. It also defines the device interface for a device as specified, which is necessary to exchange data between various devices from different manufacturers.

Keel: en
Alusdokumendid: prEN 14908-6
Asendab dokumenti: EVS-EN 14908-6:2015

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61158-1:2021

Industrial communication networks - Fieldbus specifications - Part 1: Overview and guidance for the IEC 61158 and IEC 61784 series

This document specifies the generic concept of fieldbuses. This document also presents an overview and guidance for the IEC 611581 series by: • explaining the structure and content of the IEC 61158 series; • relating the structure of the IEC 61158 series to the ISO/IEC 7498-1 OSI Basic Reference Model; • showing the logical structure of the IEC 617842 series; 246 • showing how to use parts of the IEC 61158 series in combination with the IEC 61784 series; • providing explanations of some aspects of the IEC 61158 series that are common to the type specific parts of the IEC 61158-5 series including the application layer service description concepts and the generic fieldbus data types.

Keel: en
Alusdokumendid: IEC 61158-1:202X; prEN IEC 61158-1:2021
Asendab dokumenti: EVS-EN IEC 61158-1:2019

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61158-2:2021

Industrial communication networks - Fieldbus specifications - Part 2: Physical layer specification and service definition

This part of IEC 61158 specifies the requirements for fieldbus component parts. It also specifies the media and network configuration requirements necessary to ensure agreed levels of a) data integrity before data-link layer error checking; b) interoperability between devices at the physical layer. The fieldbus physical layer conforms to layer 1 of the OSI 7-layer model as defined by ISO/IEC 7498 with the exception that, for some types, frame delimiters are in the physical layer while for other types they are in the data-link layer.

Keel: en
Alusdokumendid: IEC 61158-2:202X; prEN IEC 61158-2:2021
Asendab dokumenti: EVS-EN 61158-2:2014

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61158-3-X:2021

Industrial communication networks - Fieldbus specifications - Part 3-X: Data-link layer service definition - Type X elements

This part of IEC 61158 provides common elements for basic time-critical messaging communications between devices in an automation environment. The term “time-critical” is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the Type 2 fieldbus data-link layer in terms of: a) the primitive actions and events of the service; b) the parameters associated with each primitive action and event, and the form which they take; and c) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to: • the Type 2 fieldbus application layer at the boundary between the application and data-link layers of the fieldbus reference model; • systems management at the boundary between the data-link layer and systems management of the fieldbus reference model. Type 2 DL-service provides both a connected and a connectionless subset of those services specified in ISO/IEC 8886.

Keel: en
Alusdokumendid: IEC 61158-3-X:202X; prEN IEC 61158-3-X:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61158-4-X:2021

Industrial communication networks - Fieldbus specifications - Part 4-X: Data-link layer protocol specification - Type X elements

The data-link layer provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities, sequentially and in a cyclic synchronous manner. Foreground scheduled access is available for time-critical activities together with background unscheduled access for less critical activities. Deterministic and synchronized transfers can be provided at cyclic intervals up to 1 ms and device separations of 25 km. This performance is adjustable dynamically and on-line by re-configuring the parameters of the local link whilst normal operation continues. By similar means, DL connections and new devices may be added or removed during normal operation. This protocol provides means to maintain clock synchronization across an extended link with a precision better than 10 µs. This protocol optimizes each access opportunity by concatenating multiple DLSDUs and associated DLPCI into a single DLPDU, thereby improving data transfer efficiency for data-link entities that actively source multiple streams of data. The maximum system size is an unlimited number of links of 99 nodes, each with 255 DLSAP-addresses. Each link has a maximum of 224 related peer and publisher DLCEPs.

Keel: en
Alusdokumendid: IEC 61158-4-X:202X; prEN IEC 61158-4-X:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61158-5-X:2021

Industrial communication networks - Fieldbus specifications - Part 5-X: Application layer service definition - Type X elements

1.1 General The fieldbus application layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This part of IEC 61158 provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 2 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This International Standard defines in an abstract way the externally visible service provided by the Type 2 fieldbus application layer in terms of: a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this document is to define the services provided to: a) the FAL user at the boundary between the user and the application layer of the fieldbus reference model, and b) Systems Management at the boundary between the application layer and Systems Management of the fieldbus reference model. This document specifies the structure and services of the Type 2 fieldbus application layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498-1) and the OSI application layer structure (ISO/IEC 9545). FAL services and protocols are provided by FAL application-entities (AE) contained within the application processes. The FAL AE is composed of a set of object-oriented application service elements (ASEs) and a layer management entity (LME) that manages the AE. The ASEs provide communication services that operate on a set of related application process object (APO) classes. One of the FAL ASEs is a management ASE that provides a common set of services for the management of the instances of FAL classes. Although these services specify, from the perspective of applications, how request and responses are issued and delivered, they do not include a specification of what the requesting and responding applications are to do with them. That is, the behavioral aspects of the applications are not specified; only a definition of what requests and responses they can send/receive is specified. This permits greater flexibility to the 318 FAL users in standardizing such object behavior. In addition to these services, some supporting services are also defined in this document to provide access to the FAL to control certain aspects of its operation.

Keel: en
Alusdokumendid: IEC 61158-5-X:202X; prEN IEC 61158-5-X:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61158-6-X:2021

Industrial communication networks - Fieldbus specifications - Part 6-X: Application layer protocol specification - Type X elements

1.1 General The Fieldbus Application Layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This part of IEC 61158 provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 2 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This International Standard specifies interactions between remote applications and defines the externally visible behavior provided by the Type 2 fieldbus application layer in terms of a) the formal abstract syntax defining the application layer protocol data units conveyed between communicating application entities; b) the transfer syntax defining encoding rules that are applied to the application layer protocol data units; c) the application context state machine defining the application service behavior visible between communicating application entities; d) the application relationship state machines defining the communication behavior visible between communicating application entities. The purpose of this document is to define the protocol provided to a) define the wire-representation of the service primitives defined in IEC 61158-5-2, and b) define the externally visible behavior associated with their transfer. This document specifies the protocol of the Type 2 fieldbus application layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498-1) and the OSI application layer structure (ISO/IEC 9545). 1.2 Specifications The principal objective of this document is to specify the syntax and behavior of the application layer protocol that conveys the application layer services defined in IEC 61158-5-2. A secondary objective is to provide migration paths from previously-existing industrial communications protocols. 1.3 Conformance This document does not specify individual implementations or products, nor does it constrain the implementations of application layer entities within industrial automation systems. Conformance is achieved through implementation of this application layer protocol specification.

Keel: en
Alusdokumendid: IEC 61158-6-X:202X; prEN IEC 61158-6-X:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61158-X-27:2021

Industrial communication networks - Fieldbus specifications and Profiles - Type 27 elements (MECHATROLINK)

1.1 General The fieldbus application layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This part of IEC 61158 provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 27 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This International Standard defines in an abstract

way the externally visible service provided by the different Types of fieldbus Application Layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service, c) the parameters associated with each primitive action and event, and the form which they take, and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this International Standard is to define the services provided to a) the FAL user at the boundary between the user and the Application Layer of the Fieldbus Reference Model, and b) Systems Management at the boundary between the Application Layer and Systems Management of the Fieldbus Reference Model. This International Standard specifies the structure and services of the IEC fieldbus Application Layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498-1) and the OSI Application Layer Structure (ISO/IEC 9545). FAL services and protocols are provided by FAL application-entities (AE) contained within the application processes. The FAL AE is composed of a set of object-oriented Application Service Elements (ASEs) and a Layer Management Entity (LME) that manages the AE. The ASEs provide communication services that operate on a set of related application process object (APO) classes. One of the FAL ASEs is a management ASE that provides a common set of services for the management of the instances of FAL classes. Although these services specify, from the perspective of applications, how request and responses are issued and delivered, they do not include a specification of what the requesting and responding applications are to do with them. That is, the behavioral aspects of the applications are not specified; only a definition of what requests and responses they can send/receive is specified. This permits greater flexibility to the 289 FAL users in standardizing such object behavior. In addition to these services, some supporting services are also defined in this International Standard to provide access to the FAL to control certain aspects of its operation.

Keel: en
Alusdokumendid: IEC 61158-X-27:202X; prEN IEC 61158-X-27:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61158-X-28:2021

Industrial communication networks - Fieldbus specifications and Profiles - Type 28 elements (AUTBUS)

1.1 General This document of IEC 61158 describes basic packet communication services and models in an automation control industrial field environment. The Type 28 data-link layer provides time critical and non-time-critical communication services. Time-critical refers to the requirement to complete specified functions between devices in a defined time window in an industrial field environment. Failure to complete specified functions within the time window may lead to failure or harm in industrial production. This document defines in an abstract way the externally visible service provided by the Type 28 fieldbus data-link layer in terms of a) function description; b) primitive actions and events with primitive sequence diagram; c) the form of externally service interface and related parameters. The purpose of this document is to define the services provided to: - the Type 28 fieldbus application layer at the boundary between the application and data link layers of the fieldbus reference model; - systems management at the boundary between the data-link layer and systems management of the fieldbus reference model. Type 28 DL-service provides both a connected and a connectionless subset of those services provided by OSI data-link protocols as specified in ISO/IEC 8886. 1.2 Specifications The principal objective of this document is to specify the characteristics of conceptual data-link layer services suitable for time-critical communications and thus supplement the OSI Basic Reference Model in guiding the development of data-link protocols for time-sensitive communications. A secondary objective is to provide migration paths from previously-existing industrial communications protocols. This specification may be used as the basis for formal DL-Programming-Interfaces. Nevertheless, it is not a formal programming interface, and any such interface will need to address implementation issues not covered by this specification, including: a) the sizes and octet ordering of various multi-octet service parameters; and b) the correlation of paired request and confirm, or indication and response primitives. 1.3 Conformance This document does not specify individual implementations or products, nor does it constrain the implementations of data-link entities within industrial automation systems. There is no conformance of equipment to this data-link layer service definition standard. Instead, conformance is achieved through implementation of the corresponding data-link protocol that fulfills the Type 28 data-link layer services defined in this document.

Keel: en
Alusdokumendid: IEC 61158-X-28:202X; prEN IEC 61158-X-28:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61784-1-22:2021

Industrial networks - Profiles - Part 1-22: Fieldbus profiles - Communication Profile Family 22

This document defines Communication Profile Family 22 (CPF 22). CPF 22 specifies a protocol specific communication profile (CP) based on the IEC 61158 series (Type 28) and other standards, to be used in the design of devices involved in communications in factory manufacturing and process control. NOTE All CPs are based on standards or draft standards or International Standards published by the IEC or from standards or International Standards established by other standards bodies or open standards processes. Each CP selects an appropriate consistent and compatible subset of services and protocols from the relevant set that is defined and modelled in the IEC 61158 series. For the selected subset of services and protocols, the profile also describes any possible or necessary constraints in parameter values.

Keel: en
Alusdokumendid: IEC 61784-1-22:202X; prEN IEC 61784-1-22:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61784-1-X:2021

Industrial networks - Profiles - Part 1-X: Fieldbus profiles

IEC 61784-1 (all parts) defines several Communication Profile Families (CPF). Each CPF specifies a set of protocol specific communication profiles (CPs) based primarily on the IEC 61158 series, to be used in the design of devices involved in communications in factory manufacturing and process control. This document defines a common terminology for all CPFs and

conventions to be used in the specification of the CPs. It also provides a conformance statement and an overview of the structure and contents of the CPFs in IEC 61784-1 (all parts).

Keel: en
Alusdokumendid: IEC 61784-1-X:202X; prEN IEC 61784-1-X:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61784-2-19:2021

Industrial networks - Profiles - Part 2-19: Additional real-time fieldbus profiles based on ISO/IEC/IEEE 8802-3 - CPF 19

This document defines extensions of Communication Profile Family 19 (CPF 19) for Real-Time Ethernet (RTE). CPF 19 specifies a Real-Time Ethernet (RTE) communication profile (CP) and related network components based on the IEC 61158 series (Type 27), ISO/IEC/IEEE 8802-3 and other standards. For each RTE communication profile, this document also specifies the relevant RTE performance indicators and the dependencies between these RTE performance indicators. NOTE 1 All CPs are based on standards or draft standards or International Standards published by the IEC or from standards or International Standards established by other standards bodies or open standards processes. NOTE 2 The RTE communication profile uses ISO/IEC/IEEE 8802-3 communication networks and its related network components and may in some cases amend those standards to obtain RTE features. NOTE 3 Some CPs of CPF 19 are specified in IEC 61784-1-19.

Keel: en
Alusdokumendid: IEC 61784-2-19:202X; prEN IEC 61784-2-19:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 61784-2-X:2021

Industrial networks - Profiles - Part 2-X: Additional real-time fieldbus profiles based on ISO/IEC/IEEE 8802-3

IEC 61784-2 (all parts) defines additional Communication Profiles (CPs) for the existing Communication Profile Families (CPFs) of IEC 61784-1 (all parts) and additional CPFs with one or more CPs. These additional CPs are based on the IEC 61158 series, IEC 61784-1 (all parts) and use provisions from ISO/IEC/IEEE 8802-3 (commonly known as Ethernet) for the lower communication stack layers. These Real-Time Ethernet (RTE) communication profiles provide Real-Time Ethernet communication solutions able to coexist with ISO/IEC/IEEE 8802-3 based applications. NOTE 1 All CPs are based on standards or draft standards or International Standards published by the IEC or from standards or International Standards established by other standards bodies or open standards processes. NOTE 2 The RTE communication profiles use ISO/IEC/IEEE 8802-3 communication networks and its related network components or IEC 61588 and may in some cases amend those standards to obtain RTE features. This document defines: - a common terminology for all CPFs in IEC 61784-2 (all parts) (see 3.1 to 3.3); - conventions to be used in the specification of the RTE communication profiles (see 3.4); - how conformance of a device to a CPF or a CP should be stated (see Clause 4). This document also specifies: - basic principles of performance indicators expressing RTE performance of a CP (see 5.1); - how an application-dependent class could be used to find out a suitable CP to meet application requirements (see 5.2); - characteristics of RTE performance indicators (see 5.3); - the methodology of a conformance test for an RTE end device for one or more CPs (see Clause 6).

Keel: en
Alusdokumendid: IEC 61784-2-X:202X; prEN IEC 61784-2-X:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 62453-302:2021

Field device tool (FDT) interface specification - Part 302: Communication profile integration - IEC 61784 CPF 2

Communication Profile Family 2 (commonly known as CIPTM1) defines communication profiles based on IEC 61158-2 Type 2, IEC 61158-3-2, IEC 61158-4-2, IEC 61158-5-2, IEC 61158-6-2, and IEC 62026-3. The basic profiles CP 2/1 (ControlNetTM2), CP 2/2 (EtherNet/IPTM3), and CP 2/3 (DeviceNetTM1) are defined in IEC 61784-1 and IEC 61784-2. An additional communication profile (CompoNetTM1), also based on CIPTM, is defined in [15]. This part of IEC 62453 provides information for integrating the CIPTM technology into the FDT interface specification (IEC 62453-2). This part of IEC 62453 specifies communication and other services. This specification neither contains the FDT specification nor modifies it.

Keel: en
Alusdokumendid: IEC 62453-302 ED3; prEN IEC 62453-302:2021
Asendab dokumenti: EVS-EN 62453-302:2017

Arvamusküsitluse lõppkuupäev: 15.10.2021

49 LENNUNDUS JA KOSMOSETEHNIKA

prEN 3645-001

Aerospace series - Connectors, electrical, circular, scoop-proof, triple start threaded coupling, operating temperature 175 °C or 200 °C continuous - Part 001: Technical specification

This document specifies the general characteristics, the conditions for qualification, acceptance and quality assurance, as well as the test programs and groups for threaded ring coupling circular connectors, fire resistant, intended for use in a temperature range from -65 °C to 175 °C continuous or 200 °C continuous according to the classes.

Keel: en

Alusdokumendid: prEN 3645-001
Asendab dokumenti: EVS-EN 3645-001:2019

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN 4165-005

Aerospace series - Connectors, electrical, rectangular, modular - Operating temperature 175 °C continuous - Part 005 : Stackable mouting receptable 2 and 4 modules, series 3

This document defines the stackable mounting receptacle series 3, for 2 or 4 modules used in the family of rectangular electrical modular connectors, operating temperature 175 °C continuous. The plugs corresponding to those receptacles are defined in EN 4165-002. The protective cover corresponding to those receptacles are defined in EN 4165-018.

Keel: en
Alusdokumendid: prEN 4165-005
Asendab dokumenti: EVS-EN 4165-005:2007

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN 4165-006

Aerospace series - Connectors, electrical, rectangular, modular - Operating temperature 175 °C continuous - Part 006: Plug for 2 and 4 modules, series 2 - Product standard

This document defines the plug series 2, for 2 and 4 modules used in the family of rectangular electrical connectors. The receptacles corresponding to those plugs are defined in EN 4165-002.

Keel: en
Alusdokumendid: prEN 4165-006
Asendab dokumenti: EVS-EN 4165-006:2007

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN 4165-007

Aerospace series - Connectors, electrical, rectangular, modular - Operating temperature 175 °C continuous - Part 007: Plug for 2 and 4 modules, series 3 - Product standard

This document defines the plug series 2, for 2 and 4 modules used in the family of rectangular electrical connectors. The receptacles corresponding to those plugs are defined in EN 4165-002.

Keel: en
Alusdokumendid: prEN 4165-007
Asendab dokumenti: EVS-EN 4165-007:2007

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN 4165-008

Aerospace series - Connectors, electrical, rectangular, modular - Operating temperature 175 °C continuous - Part 008: Rack and panel plug for 2 and 4 modules, series 2 - Product standard

This document defines the rack and panel plug for 2 and 4 modules, series 2 used in the family of rectangular electrical connectors. The receptacles corresponding to those plugs are defined in EN 4165-002.

Keel: en
Alusdokumendid: prEN 4165-008
Asendab dokumenti: EVS-EN 4165-008:2007

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN 4165-009

Aerospace series - Connectors, electrical, rectangular, modular - Operating temperature 175 °C continuous - Part 009: Rack and panel plug for 2 and 4 modules, series 3 - Product standard

This document defines the rack and panel plug for 2 and 4 modules, series 2 used in the family of rectangular electrical connectors. The receptacles corresponding to those plugs are defined in EN 4165-002.

Keel: en
Alusdokumendid: prEN 4165-009
Asendab dokumenti: EVS-EN 4165-009:2007

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN 4165-010

Aerospace series - Connectors, electrical, rectangular, modular - Operating temperature 175 °C continuous - Part 010: Rack and panel rear mounted plug for 2 and 4 modules, series 2 - Product standard

This document defines the rack and panel rear mounted plug 2 and 4 modules, series 2 used in the family of rectangular electrical connectors. The receptacles corresponding to those plugs are defined in EN 4165-002.

Keel: en
Alusdokumendid: prEN 4165-010
Asendab dokumenti: EVS-EN 4165-010:2007

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN 4165-011

Aerospace series - Connectors, electrical, rectangular, modular - Operating temperature 175 °C continuous - Part 011: Flange mounting receptacle 2 and 4 modules, series 2 - Product standard

This document defines the flange mounting receptacle 2 and 4 modules, series 2 used in the family of rectangular electrical connectors. The plugs corresponding to those receptacles are defined in EN 4165-002. The protective covers corresponding to those receptacles are defined in EN 4165-018.

Keel: en
Alusdokumendid: prEN 4165-011
Asendab dokumenti: EVS-EN 4165-011:2007

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN 4165-012

Aerospace series - Connectors, electrical, rectangular, modular - Operating temperature 175 °C continuous - Part 012: Flange mounting receptacle 2 and 4 modules, series 3 - Product standard

This document defines the flange mounting receptacle 2 and 4 modules, series 3 used in the family of rectangular electrical connectors. The plugs corresponding to those receptacles are defined in EN 4165-002. The protective covers corresponding to those receptacles are defined in EN 4165-018.

Keel: en
Alusdokumendid: prEN 4165-012
Asendab dokumenti: EVS-EN 4165-012:2005

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN 4165-026

Aerospace Series - Connector, electrical, rectangular, modular - Operating temperatures 175°C continuous - Part 026: Shielded accessories for single module - Product standard

This document defines accessories of single modules connectors according to EN 4165-024 and EN 4165-025 used in the family of rectangular electrical connectors.

Keel: en
Alusdokumendid: prEN 4165-026
Asendab dokumenti: EVS-EN 4165-026:2018

Arvamusküsitluse lõppkuupäev: 15.10.2021

59 TEKSTIILI- JA NAHATEHNOLOOGIA

prEN 15618

Rubber- or plastic-coated fabrics - Upholstery fabrics - Classification and methods of test

This document specifies a set of properties relevant to the assessment of upholstery coated fabrics for indoor furniture and the appropriate test methods to determine these properties. It also describes a matrix system to express the material properties of an upholstery fabric. This document applies to upholstery fabrics both in domestic and public use, except when used for the seats of road or railway vehicles, boats or aeroplanes. This document applies to upholstery fabrics with a coating on the wear face. This document does not apply to textile upholstery fabrics covered by EN 14465.

Keel: en
Alusdokumendid: prEN 15618
Asendab dokumenti: EVS-EN 15618:2009+A1:2012

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN ISO 14087

Leather - Physical and mechanical tests - Determination of bending force (ISO/DIS 14087:2021)

This International Standard describes a test method for the determination of the bending force of leather.

Keel: en
Alusdokumendid: ISO/DIS 14087; prEN ISO 14087
Asendab dokumenti: EVS-EN ISO 14087:2011

Arvamusküsitluse lõppkuupäev: 15.10.2021

65 PÕLLUMAJANDUS

prEN 17697

Animal feeding stuffs: Methods of analysis - PFGE typing of Lactobacilli, Pediococci, Enterococci and Bacilli in animal feeds

This document defines a Pulsed Field Gel Electrophoresis (PFGE) methodology for the identification of authorized probiotic Lactobacillus, Pediococcus, Enterococcus and Bacillus strains. The method can be applied to purified colonies obtained from cultured premixtures and feeds, in order to verify the presence of strains used as feed additives in declared concentrations, even against eventual microbial background resulting from nonsterile matrices.

Keel: en
Alusdokumendid: prEN 17697

Arvamusküsitluse lõppkuupäev: 15.10.2021

67 TOIDUAINETE TEHNOLOOGIA

prEVS-ISO 23776

Liha ja lihatooted. Üldfosfori sisalduse määramine
Meat and meat products - Determination of total phosphorus content (ISO 23776:2021, identical)

Käesolev dokument kirjeldab kolme meetodit üldfosfori sisalduse määramiseks igat liiki lihas ja lihatoodetes, sealhulgas linnu- ja kariloomade lihas: — induktiivsidestatud plasma optilise emissiooni spektromeetria (ICP-OES) meetod; — spetromeetriline meetod; — gravimeetriline meetod. ICP-OES meetodi puhul on avastamispiiriks (LOD) 1,0 mg/kg ja määramispiiriks (LOQ) 3,0 mg/kg, kui proovi kaalutis on 0,5 g ja lõppruumala 50 ml.

Keel: en
Alusdokumendid: ISO 23776:2021
Asendab dokumenti: EVS-ISO 2294:2000

Arvamusküsitluse lõppkuupäev: 15.10.2021

75 NAFTA JA NAFTATEHNOLOOGIA

EN ISO 8222:2020/prA1

Petroleum measurement systems - Calibration - Volumetric measures, proving tanks and field measures (including formulae for properties of liquids and materials) - Amendment 1: Correction of two typographical errors (ISO 8222:2020/DAmd 1:2021)

Amendment to EN ISO 8222:2020

Keel: en
Alusdokumendid: ISO 8222:2020/DAmd 1; EN ISO 8222:2020/prA1
Muudab dokumenti: EVS-EN ISO 8222:2020

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN ISO 20675

Biogas - Biogas production, conditioning, upgrading and utilization - Terms, definitions and classification scheme (ISO 20675:2018)

This document defines terms and describes classifications related to biogas production by anaerobic digestion, gasification from biomass and power to gas from biomass sources, biogas conditioning, biogas upgrading and biogas utilization from a safety, environmental, performance and functionality perspective, during the design, manufacturing, installation, construction, testing, commissioning, acceptance, operation, regular inspection and maintenance phases. Biogas installations are, among others, applied at industrial plants like food and beverage industries, waste water treatment plants, waste plants, landfill sites, small scale plants next to agricultural companies and small scale household installations. The following topics are excluded from this document: — boilers, burners, furnaces and lightening, in case these are not specifically applied for locally produced biogas; — gas-fuelled engines for vehicles and ships; — the public gas grid; — specifications to determine biomethane quality; — transportation of compressed or liquefied biogas; — transportation of biomass or digestate; — assessment and determination whether biomass is sourced sustainably or not. This document describes the following for information purposes as well: — the parameters to determine the size (e.g. small, medium-sized, or large scale); — the parameters to determine the type of installation (e.g. domestic, industrial); — the parameters to describe the type of technique; — terms and processes in order to develop health, safety and environmental protection guidelines for biogas installations. NOTE For an explanation of the Scope, see Annex A.

Keel: en
Alusdokumendid: ISO 20675:2018; prEN ISO 20675

Arvamusküsitluse lõppkuupäev: 15.10.2021

87 VÄRVIDE JA VÄRVAINETE TÖÖSTUS

prEN ISO 19403-1

Paints and varnishes - Wettability - Part 1: Terminology and general principles (ISO/DIS 19403-1:2021)

The ISO 19403 series specifies optical test methods — for the measurement of the contact angle, — for the determination of the free surface energy of a solid surface, including the polar and dispersive fractions, — for the determination of the surface tension of liquids, including the polar and dispersive fractions, and — for the checking of the measurement arrangement with reference materials. It can be applied for the characterization of substrates, coatings and coating materials. The applicability can be restricted for liquids with non-Newtonian rheology1). This document specifies terms and definitions and defines the general principles.

Keel: en
Alusdokumendid: ISO/DIS 19403-1; prEN ISO 19403-1
Asendab dokumenti: EVS-EN ISO 19403-1:2020

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN ISO 8130-4

Coating powders - Part 4: Calculation of lower explosion limit (ISO/DIS 8130-4:2021)

This document specifies a method for the calculation of the lower explosion limit of a coating powder, i.e. the minimum concentration of the coating powder in air which will form an explosive mixture. It is based on the measurement of the gross calorific value of the product, as determined by the method described in ISO 1928. Reliable methods for the measurement of the lower explosion limit or the gross calorific value require the use of special apparatus which may not be readily available. A method for determining the explosion indices of combustible dusts in air is given in ISO 6184-1. This method is, however, very intricate and requires considerable expertise. The lower explosion limit can also be estimated by summation of the gross calorific value of the individual constituents of the coating powder. It is an estimation since the gross calorific value of the constituent may not be known or available. The calculation method leads to lower explosion limits which have been proved in practice to be satisfactory when applied to coating application plants. NOTE A comparison with a direct method e.g. EN 14034-3 for determining the lower explosion limit is encouraged.

Keel: en
Alusdokumendid: ISO/DIS 8130-4; prEN ISO 8130-4
Asendab dokumenti: EVS-EN ISO 8130-4:2010

Arvamusküsitluse lõppkuupäev: 15.10.2021

91 EHITUSMATERJALID JA EHITUS

prEN 14908-6

Open Data Communication in Building Automation, Controls and Building Management - Control Network Protocol - Part 6: Application elements

This document provides mechanisms through which various vendors of building automation, control, and building management systems may exchange information in a standardized way. This document provides specifications for the Application Elements of Control Network Protocol packets as follows: - definitions of standardized packet (network-variable) data types; - definitions of device-interface files; - definitions of standardized configuration-property types; - definitions of standardized enumeration types; - definitions of standardized functional profiles; - definition of the standardized method of file transfer between devices. The purpose of this specification is to ensure interoperability between various CNP implementations. This document contains all the information necessary to read and interpret the format of data and control information that is used by EN 14908-5. It also defines the device interface for a device as specified, which is necessary to exchange data between various devices from different manufacturers.

Keel: en
Alusdokumendid: prEN 14908-6
Asendab dokumenti: EVS-EN 14908-6:2015

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN 15502-2-1

Gas-fired central heating boilers - Part 2-1: Specific standard for type C appliances and type B2, B3 and B5 appliances of a nominal heat input not exceeding 1 000 kW

EN 15502-1:2020, Clause 1 is replaced by the following: This document specifies, the requirements and test methods concerning, as well as the classification and marking of gas-fired central heating boilers that are fitted with atmospheric burners, fan assisted atmospheric burners or fully premixed burners, and are hereafter referred to as "boilers". This document is to be used in conjunction with FprEN 15502-1:2020. This document covers certain gas-fired central heating boilers from the types C1 up to C(11) and the types B2, B3 and B5: NOTE 1 For further background information on appliance types see EN 1749:2020. a) that have a nominal heat input (on the basis of net calorific value) not exceeding 1 000 kW; b) that use one or more combustible gases of the three gas families at the pressures stated in EN 437:2018; c) where the temperature of the heat transfer fluid does not exceed 105 °C during normal operation; d) where the maximum operating pressure in the water circuit does not exceed 6 bar; e) which can give rise to condensation under certain circumstances; f) which are declared in the instructions for installation to be either a "condensing" boiler or a "low temperature boiler" or a "standard boiler"; if no declaration is given the boiler is to be considered a "standard boiler"; g) which are intended to be installed inside a building or in a partially protected place; h) which

are intended to produce also hot water either by the instantaneous or storage principle as a single unit; i) which are designed for either sealed water systems or for open water systems; j) which are either modular boilers, or non modular boilers. k) which are from the types C(10) that are equipped with a gas-air ratio control and that have a Δpmax, saf(min) of 25 Pa, and C(11) that have condensing boiler modules that are equipped with a gas-air ratio control and that have a Δpmax, saf(min) of 25 Pa. NOTE 2 This document provides requirements for boilers with known constructions. For boilers with any alternative constructions, which might not fully be covered by this standard, the risk associated with this alternative construction needs to be assessed. An example of an assessment methodology, based upon risk assessment, is given in Clause 11. This document does not cover all the requirements for: aa) appliances above 1 000 kW; ab) appliances that are intended to be connected to gas grids where the quality of the distributed gas is likely to vary to a large extent over the lifetime of the appliance (see Annex AB); ac) appliances using flue dampers; ad) appliances of the types B21, B31, B51, C21, C41, C51, C61, C71, C81, C(12) and C(13); ae) C7 appliances that have a nominal heat input (on the basis of net calorific value) exceeding 70 kW; af) appliances incorporating flexible plastic flue liners; ag) C(10) boilers: 1) without a gas-air ratio control, or 2) which are non-condensing appliances, or 3) which have a maximum safety pressure difference at minimum heat input not equal to 25 Pa (Δpmax, saf(min)); ah) C(11) boilers that have boiler modules: 1) without a gas-air ratio control, or 2) which are non-condensing appliances, or 3) which have a maximum safety pressure difference at minimum heat input not equal to 25 Pa (Δpmax, saf(min)); ai) appliances intended to be connected to a flue having mechanical extraction; aj) surface temperatures of external parts particular to children and elderly people; ak) appliances that are intended to burn natural gases of the second family where hydrogen is added to the natural gas; al) appliances equipped with an adaptive combustion control function (ACCF); am) boilers intended to be installed in areas accessible to elderly people and children.

Keel: en
Alusdokumendid: prEN 15502-2-1
Asendab dokumenti: EVS-EN 15502-2-1:2012+A1:2016

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN IEC 62052-41-ED1:2021

Electricity metering equipment - General requirements, tests and test conditions - Part 41: Energy registration methods and requirements for multi-energy and multi-rate meters

This part of IEC 62052 applies only to newly manufactured multi-energy and/or multi-rate static meters and it applies to their type tests only. Note 1: For other general requirements, such as electrical, mechanical, safety, marking, dependability etc., see the relevant IEC 62052 or IEC 62059 standards. For accuracy requirements and other requirements specific to class indices, see the relevant IEC 62053 standards. This International Standard applies to newly manufactured electricity metering equipment designed to: • measure and control electrical energy on networks with voltage up to 1,000 V a.c, or 1,500 V d.c; Note 2: The voltage mentioned above is the line-to-neutral voltage derived from nominal voltages. See IEC 62052-31:2015 table 7. • have all functional elements, including add-on modules, enclosed in, or forming a single meter case with exception of indicating displays; • operate with integrated or detached indicating displays, or without an indicating display. • be installed in a specified matching sockets or racks; • provide additional functions other than those for measurement of electrical energy; Note 3: Modern electricity meters typically contain additional functions such as measurement of voltage magnitude, current magnitude, power, frequency, power factor, etc.; measurement of power quality parameters; load control functions; delivery, time, test, accounting, recording functions; data communication interfaces and associated data security functions. The relevant standards for these functions may apply in addition to the requirements of this standard. However, the requirements for such functions are outside the scope of this standard. Note 4: Product requirements for power monitoring devices and measurement functions such as voltage magnitude, current magnitude, power, frequency, etc. are covered in IEC 61557-12. However, devices compliant with IEC 61557-12 are not intended to be used as billing meters unless they are also compliant with the IEC 62052-11 and a relevant IEC 62053-xx accuracy class standards. Note 5: Product requirements for power quality monitoring instruments are covered in IEC 62586-1. Requirements for power quality measurement techniques (functions) are covered in IEC 61000-4-30. Requirements for testing of the power quality measurement functions are covered in IEC 62586-2.

Keel: en
Alusdokumendid: IEC 62052-41-ED1:202X; prEN IEC 62052-41-ED1:2021

Arvamusküsitluse lõppkuupäev: 15.10.2021

97 OLME. MEELELAHUTUS. SPORT

prEN 14908-6

Open Data Communication in Building Automation, Controls and Building Management - Control Network Protocol - Part 6: Application elements

This document provides mechanisms through which various vendors of building automation, control, and building management systems may exchange information in a standardized way. This document provides specifications for the Application Elements of Control Network Protocol packets as follows: - definitions of standardized packet (network-variable) data types; - definitions of device-interface files; - definitions of standardized configuration-property types; - definitions of standardized enumeration types; - definitions of standardized functional profiles; - definition of the standardized method of file transfer between devices. The purpose of this specification is to ensure interoperability between various CNP implementations. This document contains all the information necessary to read and interpret the format of data and control information that is used by EN 14908-5. It also defines the device interface for a device as specified, which is necessary to exchange data between various devices from different manufacturers.

Keel: en
Alusdokumendid: prEN 14908-6
Asendab dokumenti: EVS-EN 14908-6:2015

Arvamusküsitluse lõppkuupäev: 15.10.2021

prEN 15618

Rubber- or plastic-coated fabrics - Upholstery fabrics - Classification and methods of test

This document specifies a set of properties relevant to the assessment of upholstery coated fabrics for indoor furniture and the appropriate test methods to determine these properties. It also describes a matrix system to express the material properties of an upholstery fabric. This document applies to upholstery fabrics both in domestic and public use, except when used for the seats of road or railway vehicles, boats or aeroplanes. This document applies to upholstery fabrics with a coating on the wear face. This document does not apply to textile upholstery fabrics covered by EN 14465.

Keel: en
Alusdokumendid: prEN 15618
Asendab dokumenti: EVS-EN 15618:2009+A1:2012

Arvamusküsitluse lõppkuupäev: 15.10.2021

TÕLKED KOMMENTEERIMISEL

Allpool on toodud teave kommenteerimisetappi jõudnud eesti keelde tõlgitavate Euroopa või rahvusvaheliste standardite ja standardilaadsete dokumentide kohta ja inglise keelde tõlgitavate algupäraste Eesti standardite ja dokumentide kohta.

Tõlkekavanditega saab tutvuda ja kommentaare esitada Eesti Standardimis- ja Akrediteerimiskeskuse veebilehel asuvas kommenteerimisportaalis: https://www.evs.ee/kommenteerimisportaal/

Igal kuul uuendatav teave eestikeelsena avaldatavate Eesti standardite kohta, sh eeldatavad kommenteerimise ja avaldamise tähtpäevad, on leitav Eesti Standardimis- ja Akrediteerimiskeskuse veebilehel avaldatavast standardimisprogrammist.

EVS-EN 50155:2021

Raudteealased rakendused. Raudteeveerem. Elektroonikaseadmed

See Euroopa standard kehtib kõigile raudteeveeremile paigaldatud juhtimis-, reguleerimis-, kaitse-, diagnostika-, elektritoite- jms süsteemide elektroonikaseadmetele. Selle dokumendi tähenduses on elektroonikaseadmed määratletud kui seadmed, mis koosnevad elektroonikakomponentidest (nt takistid, kondensaatorid, transistorid, dioodid, integraallülitused, hübriidid, rakenduse spetsiifilised integraallülitused, mähitud komponendid ja releed) ja tunnustatud seotud komponentidest (nt pistikud, mehaanilised osad). Need komponendid on paigaldatud peamiselt trükkplaatidele. Jõuelektroonika seadmete andurid (nt vool, pinge, kiirus) ja pooljuhtseadised on samuti selle standardiga kaetud. Terviklikke pooljuhtseadmeid ja muundureid käsitletakse standardis EN 61287-1. See dokument hõlmab elektroonikaseadmete töötingimuste, projekteerimise, dokumenteerimise, katsetamise ja integreerimise nõudeid, samuti ühilduvate ja usaldusväärsete seadmete jaoks vajalikuks peetavaid riist- ja tarkvaranõudeid. Konkreetseid nõudeid praktikatele, mis on vajalikud ohutuse terviklikkuse taseme või funktsionaalse ohutuse tagamiseks, pole käesolevas dokumendis käsitletud. Sellest hoolimata kehtib see dokument kõigi veeremi elektroonikaseadmete või -süsteemide, millega täidetakse ohutusega seotud funktsioone riistvarale. Nõuded rongi siseste raudteeseadmete tarkvarale on määratletud standardis EN 50657.

Keel: et
Alusdokumendid: EN 50155:2021

Kommenteerimise lõppkuupäev: 15.09.2021

EVS-EN ISO 12004-2:2021

Metallmaterjalid. Deformeeritavusgraafikute määramine lehele ja ribale. Osa 2: Deformeeritavusgraafikute määramine laboratooriumis

See dokument määratleb kasutatavad katsetingimused kui deformeeritavusgraafik (FLC) konstrueeritakse keskkonnatemperatuuril ja kasutatakse lineaarset deformatsiooni. Vaadeldav materjal on tasane, metall ja paksusvahemikus 0,3 mm kuni 4 mm. MÄRKUS Paksuse piiramine kuni 4 mm-ni on soovitatav, andes maksimaalse lubatava paksuse torni diameetri suhtes.

Keel: et
Alusdokumendid: ISO 12004-2:2021; EN ISO 12004-2:2021

Kommenteerimise lõppkuupäev: 15.09.2021

EVS-EN ISO 12354-4:2017

Ehitusakustika. Hoonete akustilise toimivuse hindamine elementide akustilise toime põhjal. Osa 4: Siseheli kandumine väljapoole ruumi

See dokument määratleb arvutusmudeli, mida kohaldatakse hoonesisese õhumüra tõttu hoonekarbi poolt kiiratava helivõimsustaseme hindamiseks, võttes aluseks eeskätt hoone sees mõõdetud helirõhutasemed ja mõõtmistulemused, mis iseloomustavad heli edastamist asjakohaste elementide ja hoonekarbis olevate avade kaudu. Need helivõimsustasemed koos hoonekarbi sees või selle ees asuvate teiste heliallikatega moodustavad andmebaasi, mille alusel valitud kaugusel hoonest toimub helirõhutaseme arvutamine hoone akustilise toimivuse määramiseks. Siseruumi helirõhutaseme prognoos siseste heliallikate andmete põhjal ei kuulu käesoleva dokumendi käsitlusalasse. Välisheli levi prognoos on väljaspool käesoleva dokumendi käsitlusala. MÄRKUS Meetod helirõhutaseme prognoosiks lihtsate levimistingimuste korral on antud lisas E. See dokument kirjeldab arvutusmudeli põhimõtteid, loetleb asjakohased suurused ning määratleb nende rakendsvõimalused ja –piirangud.

Keel: et
Alusdokumendid: ISO 12354-4:2017; EN ISO 12354-4:2017

Kommenteerimise lõppkuupäev: 15.09.2021

EVS-EN ISO/IEC 17029:2019

Vastavushindamine. Üldised põhimõtted ja nõuded valideerimis- ja tõendusasutustele

See dokument sisaldab üldisi põhimõtteid ja nõudeid valideerimist/tõendamist vastavushindamistegevustena teostavate asutuste kompetentsusele, järjekindlale toimimisele ja erapooletusele. Selle dokumendi järgi tegutsevad asutused saavad pakkuda valideerimist/tõendamist kui esimese osapoole, teise osapoole või kolmanda osapoole tegevust. Asutus võib olla ainult valideerimisasutus, ainult tõendamisasutus või pakkuda mõlemaid tegevusi. See dokument kohaldub valideerimis-/tõendamisasutustele kõigis sektorites, andes kinnituse, et väited määratletud tulevase kasutuse suhtes on kas usaldusväärsed (valideerimine) või tõeselt avaldatud (tõendamine). Selle dokumendi järgi ei loeta teiste vastavushindamistegevuste (nt katsetamise, inspekteerimise ja sertifitseerimise) tulemusi siiski valideerimisele/tõendamisele teemadeks. Samuti ei loeta ka olukordi, kus valideerimis-/tõendamistegevusi teostatakse muu vastavushindamistegevuse protsessi etappidena. Seda dokumenti saab kohaldada igale sektorile koos sektoripõhiste programmidega, mis sisaldavad valideerimis-

/tõendamisprotsesside ja protseduuride nõudeid. Seda dokumenti võivad aluseks kasutada akrediteerimisasutused akrediteerimiseks, vastastikuse hindamise grupid vastastikusel hindamisel, või muul viisil valideerimis-/tõendamisasutuste tunnustamisel rahvusvahelised või piirkondlikud organisatsioonid, valitsused, seaduses sätestatud ametkonnad, programmi omanikud, valdkondlikud asutused, ettevõtted, kliendid ja tarbijad. MÄRKUS See dokument sisaldab üldisi nõudeid ja on rakendatavate valideeerimis-/tõendamisprogrammide suhtes neutraalne. Kohaldatavate programmide nõuded on lisaks selle dokumendi nõuetele.

Keel: et
Alusdokumendid: ISO/IEC 17029:2019; EN ISO/IEC 17029:2019

Kommenteerimise lõppkuupäev: 15.09.2021

prEN 60898-2

Elektriseadmed. Liigvoolukaitselülitid majapidamis- ja muudele taolistele paigaldistele. Osa 2: Vahelduv- ja alalisvoolul kasutatavad kaitselülitid

Kohaldatakse standardi 1. osa jaotist 1, välja arvatud järgmine täiendus: Esimese lõigu lõpus olev lisa: Käesolev standard esitab lisanõudeid ühe- ja kahepooluselistele kaitselülititele, mis lisaks ülaltoodud omadustele sobivad kasutamiseks alalisvoolul kui ühepooluseliste kaitselülitite nimipinge ei ületa 220 V ja kahepooluseliste korral nimipinge ei ületa 440 V, kaitselülitite nimivool ei ületa 125 A ja alalisvoolu lahutusvõime lühisel ei ületa 10 000 A. MÄRKUS See standard kehtib kaitselülitite kohta, mis suudavad sisse- ja välja lülitada nii vahelduvvoolu kui ka alalisvoolu. Kustutada kaks viimast lõiku.

Keel: et
Alusdokumendid: IEC 60898-2:2016; prEN 60898-2

Kommenteerimise lõppkuupäev: 15.09.2021

prEN IEC 61936-1:2020

Tugevvoolupaigaldised nimivahelduvpingega üle 1 kV. Osa 1: Üldnõuded

See standardisarja IEC 61936 osa esitab üle 1 kV nimivahelduvpingega ja kuni 60 Hz nimisagedusega võrkude tugevvoolupaigaldiste projekteerimise ja ehitamise üldnõuded, tagamaks nende kasutamise ettenähtud ohutus ja nõuetekohane toimivus. Selles standardis mõistetakse tugevvoolupaigaldisi alljärgnevalt: a) alajaamad, sealhulgas elektriraudtee toitealajaamad; b) elektripaigaldised postidel, mastidel ja tornides, väljaspool suletud elektrikäiduala paiknevad jaotlad ja/või trafod; c) ühessamas paigas asuv(ad) üks (või mitu) elektrijaamaplokki, paigaldis sisaldab generaatoreid ja trafosid koos kõigi nende juurde kuuluvate jaotlate ja abivooluahelatega. Eri paikades asuvate elektrijaamaplokkide vahelised ühendused siia hulka ei kuulu; d) tehaste, tootmisettevõtete või muude tööstuslike, põllumajanduslike, kaubanduslike või avalike asutuste elektrivõrgud; e) rannikumere platvormide elektripaigaldised elektrienergia tootmiseks, ülekandmiseks, jaotamiseks ja/või salvestamiseks. f) lõpu-/üleminekumastid (õhuliinide ja maa-aluste liinide vahel). Tugevvoolupaigaldisse kuuluvad muude kõrval järgmised seadmed ja seadmekompleksid: — pöörlevad elektrimasinad; — lülitus- ja juhtimisseadmed; — trafod ja reaktorid; — muundurid; — kaablid; — juhistikud; — akupatareid; — kondensaatorid; — maanduspaigaldised; — suletud elektrikäiduala koostisse kuuluvad hooned ja tarad; — liidetud kaitse-, juhtimise- ja abisüsteemid; — suuremõõtmeline õhksüdamikreaktor. MÄRKUS 1 Üldjuhul on seadmestandard selle standardi suhtes ülimuslik. Seda standardit ei rakendata järgmiste paigaldiste ja rajatiste projekteerimisel ja ehitamisel: — eri paigaldiste vahelised õhu- ja maa-alused liinid; — elektriraudteed ja veerem; — kaevandusseadmed ja -paigaldised; — luminofoorlamppaigaldised; — paigaldised laevadel standardisarja IEC 60092 (kõik osad) kohaselt ja rannikumere paigaldised standardisarja IEC 61892 (kõik osad) kohaselt, mida kasutatakse rannikumere naftatööstuses puurimiseks, töötlemiseks ja ladustamiseks. — elektrostaatilised seadmed (nt elektrostaatilised sadestid, värvipihustid); — katsetamispaigad; — meditsiiniseadmed, nt meditsiinilised röntgenseadmed Standardit ei rakendata tehasetootelistele tüübikatsetatud jaotusseadmetele ja tehasetootelistele kõrgepinge/madalpinge-alajaamadele, mille kohta on olemas eraldi IEC standardid. MÄRKUS 2 Standardit ei rakendata pingealustele töödele esitatud nõuetele elektripaigaldistes. MÄRKUS 3 See standard käsitab kõrgepingepaigaldiste ohutusnõudeid ja kõrgpingepaigaldiste mõju madalpingepaigaldistele. Kuni 1 kV elektripaigaldiste kohta rakendub standardisari IEC 60364 (kõik osad).

Keel: et
Alusdokumendid: prEN IEC 61936-1:2020; IEC 61936-1:202X

Kommenteerimise lõppkuupäev: 15.09.2021

prEVS-ISO 21502

Projekti- , programmi ja portfellijuhtimine. Projektijuhtimise alused

See dokument annab juhised projektijuhtimiseks. See on rakendatav kõigi organisatsioonide jaoks, sealhulgas avalik-õiguslik, era- ja heategevusorganisatsioonide jaoks, samuti mis tahes tüüpi projektide jaoks, olenemata eesmärgist, teostusviisidest, kasutatud elutsükli mudelist, keerukusest, suurusest, maksumusest või kestusest. MÄRKUS Edastusmeetod võib olla mis tahes meetod või protsess, mis sobib väljunditüübiga, näiteks ennustav, inkrementaalne, iteratiivne, adaptiivne või hübriidne, sealhulgas ka agiilsed lähenemisviisid. Selles dokumendis on kõrgel tasemel kirjeldused tavadest, mis loetakse projektijuhtimise kontekstis hästi toimivaks ja headeks tulemusteks. See dokument ei anna juhiseid programmide ega portfellide haldamiseks. Üldise juhtimisega seotud teemasid käsitletakse ainult projektijuhtimise kontekstis.

Keel: et
Alusdokumendid: ISO 21502:2021

Kommenteerimise lõppkuupäev: 15.09.2021

STANDARDITE JA STANDARDILAADSETE DOKUMENTIDE ÜLEVAATUS

Algupärase Eesti standardi ülevaatus toimub üldjuhul iga viie aasta järel ning selle eesmärk on kontrollida standardi tehnilist taset, vastavust aja nõuetele, vastavust kehtivatele õigusaktidele, kooskõla rahvusvaheliste või Euroopa standarditega jne.

Ülevaatuse tulemusena jäetakse standard kehtima, algatatakse standardi muudatuse või uustöötluse koostamine, tühistatakse standard või asendatakse see ülevõetava Euroopa või rahvusvahelise standardiga.

ÜLEVAATUSKÜSITLUS

EVS-ISO 8210:2001

Saagikoristusmasinad. Teraviljakombainid. Katsetamise üldjuhend
Equipment for harvesting. Combine harvesters. Test procedure

Käesolev standard spetsifitseerib igat tüüpi teraviljakombainide katsetamise toimingud. Selles standardis spetsifitseeritud katsetamise protsess käsitleb mõlemat tüüpi teraviljakombainide - nii liikur- kui ka veetavmasinate mõõtmist ja katsetamist mitmesuguste teraviljakultuuride otse- ning ka vaalust lahuskoristusel. See kehtestab kombainide oluliste karakteristikute kindlaksmääramiseks (mõõtmiseks) kasutatava terminoloogia ja meetodid, hõlmates nii talitluse (funktsioneerimise) kui ka tootlikkuse määramist. Sellest standardist võib juhinduda ka kombaini kasutusomaduste (juhtimise ja reguleerimise hõlpsus, töökiirus jm) hindamisel. Vajaduse korral tehakse neid katseid terakao ja tootlikkuse näitajate määramisel.

Ülevaatusküsitluse lõppkuupäev: 15.09.2021

PIKENDAMISKÜSITLUS

EVS 909:2011

Eesti avalikud ratsarajad
Estonian Public Riding Trails

Standard käsitleb kõiki avalikuks kasutamiseks mõeldud ratsaradu ja rajatisi, mis sinna juurde kuuluvad, määrates ära nõuded radade keskkonnale ning nende loomiseks koostatavatele projektidele.

Pikendamisküsitluse lõppkuupäev: 15.09.2021

TÜHISTAMISKÜSITLUS

Selles rubriigis avaldame teavet Euroopa standardimisorganisatsioonides algatatud Euroopa standardite tühistamisküsitluste kohta ning rahvusvahelise alusstandardiga Eesti standardite ja Eesti algupäraste dokumentide tühistamisküsitluste kohta. Küsitluse eesmärk on välja selgitada, kas allpool nimetatud standardite ja standardilaadsete dokumentide jätkuv kehtimine Eesti ja/või Euroopa standardina/dokumendina on vajalik.

Allviidatud standardite ja dokumentide kehtivana hoidmise vajalikkusest palume teavitada EVS-i standardiosakonda (standardiosakond@evs.ee).

EVS-EN 16174:2012

Sludge, treated biowaste and soil - Digestion of aqua regia soluble fractions of elements

This European Standard specifies two methods for digestion of sludge, treated biowaste and soil by the use of aqua regia as digestion solution. This European Standard is applicable for the following elements: Aluminium (Al), antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), bismuth (Bi), boron (B), cadmium (Cd), calcium (Ca), cerium (Ce), cesium (Cs), chromium (Cr), cobalt (Co), copper (Cu), dysprosium (Dy), erbium (Er), europium (Eu), gadolinium (Gd), gallium (Ga), germanium (Ge), gold (Au), hafnium (Hf), holmium (Ho), indium (In), iridium (Ir), iron (Fe), lanthanum (La), lead (Pb), lithium (Li), lutetium (Lu), magnesium (Mg), manganese (Mn), mercury (Hg), molybdenum (Mo), neodymium (Nd), nickel (Ni), palladium (Pd), phosphorus (P), platinum (Pt), potassium (K), praseodymium (Pr), rubidium (Rb), rhenium (Re), rhodium (Rh), ruthenium (Ru), samarium (Sm), scandium (Sc), selenium (Se), silicon (Si), silver (Ag), sodium (Na), strontium (Sr), sulphur (S), tellurium (Te), terbium (Tb), thallium (Tl), thorium (Th), thulium (Tm), tin (Sn), titanium (Ti), tungsten (W), uranium (U), vanadium (V), ytterbium (Yb), yttrium (Y), zinc (Zn), and zirconium (Zr). This European Standard may also be applicable for the digestion of other elements. Digestion with aqua regia will not necessarily accomplish total decomposition of the sample. The extracted analyte concentrations may not necessarily reflect the total content in the sample.

Keel: en
Alusdokumendid: EN 16174:2012
Tühistamisküsitluse lõppkuupäev: 15.09.2021

TEADE EUROOPA STANDARDI OLEMASOLUST

Selles rubriigis avaldame teavet Euroopa standardite ja CENELEC-i harmoneerimisdokumentide kohta, mille on Eesti Standardimis- ja Akrediteerimiskeskusele kättesaadavaks teinud Euroopa standardimisorganisatsioonid, ja mille Eesti standardina avaldamiseks on vajalik täiendav ettevalmistusaeg. Selliste teadete avaldamine võib olla vajalik, et tagada Euroopa standardite jõustumine Eesti standardina samal ajal nii eesti- kui ka ingliskeelsena.

Igal kuul uuendatav teave eestikeelsena avaldatavate Eesti standardite kohta, sh eeldatavad kommenteerimise ja avaldamise tähtpäevad, on leitav Eesti Standardimis- ja Akrediteerimiskeskuse veebilehel avaldatavast standardimisprogrammist. Lisateave standardiosakonnast: standardiosakond@evs.ee.

EN ISO 14021:2016/A1:2021

Environmental labels and declarations - Self-declared environmental claims (Type II environmental labelling) - Amendment 1: Carbon footprint, carbon neutral (ISO 14021:2016/Amd 1:2021)

Eeldatav avaldamise aeg Eesti standardina 01.2022

EN ISO 10052:2021

Acoustics - Field measurements of airborne and impact sound insulation and of service equipment sound - Survey method (ISO 10052:2021)

Eeldatav avaldamise aeg Eesti standardina 10.2021

EN ISO 22854:2021

Liquid petroleum products - Determination of hydrocarbon types and oxygenates in automotive-motor gasoline and in ethanol (E85) automotive fuel - Multidimensional gas chromatography method (ISO 22854:2021)

Eeldatav avaldamise aeg Eesti standardina 12.2021

EN 60335-1:2012/A15:2021

Majapidamis- ja muud taolised elektriseadmed. Ohutus. Osa 1: Üldnõuded

Eeldatav avaldamise aeg Eesti standardina 09.2021

UUED EESTIKEELSED STANDARDID JA STANDARDILAADSED DOKUMENDID

Igal kuul uuendatav teave eestikeelsena avaldatavate Eesti standardite kohta, sh eeldatavad kommenteerimise ja avaldamise tähtpäevad, on leitav Eesti Standardimis- ja Akrediteerimiskeskuse veebilehel avaldatavast standardimisprogrammist.

EVS JUHEND 4:2021

Eesti standardi ja standardilaadse dokumendi ülesehitus, sõnastus ja vormistus
Structure, formulation and presentation of an Estonian Standard and publication

See juhend kirjeldab Eesti standardite, standardilaadsete dokumentide ja nende kavandite ülesehituse, sõnastuse ning vormistamise nõudeid. Esitatud on ka nõuded dokumentide muudatuste ja paranduste kohta.

EVS-EN 12390-1:2021

Kivistunud betooni katsetamine. Osa 1: Kuju, mõõtmed ja muud katsekehadele ja vormidele esitatavad nõuded
Testing hardened concrete - Part 1: Shape, dimensions and other requirements for specimens and moulds

See dokument esitab betoonist vormitud kuubi-, silindri- ja prismakujuliste katsekehade ja nende valmistamisel kasutatavate vormide kujud, mõõtmed ja tolerantsid. MÄRKUS Selles dokumendis kindlaks määratud tolerantsid tulenevad tugevuskatse vajadustest, kuid neid võib kasutada ka teiste omaduste katsetamisel.

EVS-EN 1264-3:2021

Veepõhised piirdesisesed kütte- ja jahutussüsteemid. Osa 3: Dimensioneerimine
Water based surface embedded heating and cooling systems - Part 3: Dimensioning

EN 1264 sari annab juhised hoonetesse, elamud ja mitteelamud (nt kontorid, avalikud, kommerts- ja tööstushooned), soojusmugavuse eesmärgil paigaldatud piirdesisestele kütte- ja jahutussüsteemidele. EN 1264 sari annab juhised köetava või jahutatava ruumi välispiirdesse paigaldatud veepõhiste kütte- ja jahutussüsteemide jaoks. Samuti määratleb see teiste soojuskandjate kasutuse vee asemel, nagu asjakohane. EN 1264 sari määratleb standardiseeritud toote omadused arvutuste ja küttekoormuse katsete kaudu tehniliste spetsifikatsioonide ja sertifikaatide jaoks. Arvutusteks, nende süsteemide rajamise ja kasutamise jaoks vaata standardid EN 1264-3 ja EN 1264-4 tüüpidele A, B, C, D, H, I ja J. Tüüpide E, F ja G jaoks vaata EN ISO 11855 sarja. EN 1264 sarjas määratletud süsteemid külgnevad hoone välispiirde konstruktsiooniga, paigaldatud otse või kinnituskanduritega. EN 1264 sari ei määratle ripplagedesse paigaldatud laesüsteeme, kus süsteemi ja ehituskonstruktsiooni vahel on kavandatud avatud õhuvahe, mis võimaldab õhu termilist ringlust. Nende süsteemide soojuskoormust saab määrata standardisarja EN 14037 ja standardi EN 14240 kohaselt. EN 1264-3 täpsustab EN 1264-2 ja EN 1264-5 tulemuste kasutamist praktikas. Küttesüsteemide puhul võetakse pinnatemperatuuride määramisel arvesse füsioloogilisi piiranguid. Põrandküttesüsteemide korral realiseeritakse piirangud standardi EN 1264-2 kohaselt määratud tunnusköveratele ja piirköveratele. Jahutussüsteemide puhul võetakse arvesse ainult kastepunkti piiranguid. Valdavas praktikas tähendab see, et kaasatud on ka füsioloogilised piirangud.

EVS-EN 14654-3:2021

Äravoolu- ja kanalisatsioonisüsteemid väljaspool hooneid. Käitustegevuste haldamine ja kontroll. Osa 3: Äravoolutoru ja kollektori puhastamine
Drain and sewer systems outside buildings - Management and control of activities - Part 3: Drain and sewer cleaning

Selle dokumendiga kehtestatakse nõuded väljaspool hooneid asuvate äravoolu- ja kanalisatsioonisüsteemide tegevuse haldamisele ja kontrollile ning täpsustatakse tööprogrammide väljatöötamise ja rakendamise ning tehnikate valiku nõudeid. See dokument hõlmab äravoolu ja kanalisatsiooni puhastamise haldamist ja kontrolli. Seda kohaldatakse äravoolu- ja kanalisatsioonisüsteemide suhtes alates punktist, kus reovesi väljub hoonest, katuse äravoolusüsteemist või sillutatud alalt, kuni punktini, kus see juhitakse reoveepuhastisse või suublasse. Siia kuuluvad hoonete all asuvad äravoolutorud ja kollektorid, tingimusel, et need ei kuulu hoone drenaažisüsteemi.

EVS-EN 17278:2021

Maagaasisõidukid. Sõidukite tankimisseadmed
Natural gas vehicles - Vehicle fuelling appliances

See dokument käsitleb sõidukite tankimisseadmete (vehicle fuelling appliances, VFA-d) projekteerimist ja tootmist, paigaldamist ja katsetamist, käitamist ja hooldust. VFA-d on surveseadmete komplektid, mille — maksimaalne kompressori voolukiirus on 20 m3/h, — maksimaalne tankimisrõhk temperatuuril 15 °C on 200 bar ja mis on ette nähtud surumaagaasiga (compressed natural gas, CNG) maagaasisõidukite (natural gas vehicles, NGV-d) tankimiseks mittekaubanduslikul eesmärgil. Seda dokumenti kohaldatakse VFA-de suhtes, mida varustatakse maagaasiga, nagu on määratletud kohalikes kohaldatavates gaasikoostise määrustes või standardis EN 16723-2, või muude gaasidega, mis vastavad eelnimetatud nõuetele, sealhulgas biometaan, puhastatud kaevandusgaas (coal-bed methane, CBM) ja veeldatud maagaas (liquefied natural gas, LNG) kohapeal gaasistatuna või torustikust tuleva gaasina. Sertifitseeritud VFA koostu kombineerimisel lisaseadmetega, näiteks väliste hoiustussüsteemi ja/või tankuritega, kohaldatakse sellise uue koostu suhtes standardit EN ISO 16923. Omavahel ühendatud VFA koostude kombinatsioonide korral kohaldatakse sertifitseeritud VFA koostude kogu uue koosteüksuse suhtes standardit EN ISO 16923.

EVS-EN 17333-1:2020

Ühekomponentse vahu iseloomustamine. Osa 1: Vahu saagise näitajad
Characterisation of one component foam - Part 1: Foam yield characteristics

See dokument määratleb katsemeetodid ühest survestatud vahumahutist välja lastud niiskuse toimel kõvastuvate, aktiveeritavate isekõvastuvate või vee aurustumise kaudu kuivavate vahtude saagise näitajate hindamiseks. Selle standardi eesmärk ei ole käsitleda kõiki võimalikke nende kasutamisega seotud ohutusprobleeme. Standardi kasutaja on kohustatud enne kasutamist rakendama sobivaid ohutus- ja tervisekaitsemeetmeid ning määrama kindlaks õigusnormide kohaldatavuse. Kirjeldatakse järgmisi katsemeetodeid: — Meetod 1 — Vuuki lastud OCF-i näiva tiheduse määramine ja vahu teoreetilise saagise arvutamine jooksvates meetrites ühe täis mahuti kohta. — Meetod 2 — Kõvastunud vahu reaalse saagise määramine, võttes arvesse võimalike tühimike esinemist vahu struktuuris. — Meetod 3 — Vabalt paisunud kõvastunud OCF-i vahu tiheduse määramine ainult identifitseerimise eesmärgil. — Meetod 4 — Vahu kogusaagise määramine terve OCF-i mahuti kohta niiskuse toimel kõvastuvate ja isekõvastuvate vahtude jaoks, mida on võimalik mõõta vee väljatõrjumise kaudu.

EVS-EN ISO 15681-2:2018

Vee kvaliteet. Ortofosfaadi ja üldfosfori sisalduse määramine vooluanalüüsil (FIA ja CFA). Osa 2: Pidevvooluanalüsaatori meetod (CFA)
Water quality - Determination of orthophosphate and total phosphorus contents by flow analysis (FIA and CFA) - Part 2: Method by continuous flow analysis (CFA) (ISO 15681-2:2018)

See dokument täpsustab pidevvooluanalüüsi (CFA) meetodeid ortofosfaadi määramiseks massikontsentratsiooni vahemikus 0,01 mg/l kuni 1,00 mg/l P ja üldfosfori määramiseks massikontsentratsiooni vahemikus 0,10 mg/l kuni 10,0 mg/l P. Meetod sisaldab ka orgaanilise fosfori ühendite mineraliseerimist ja anorgaaniliste polüfosfaatühendite hüdrolüüsi, mis tehakse kas manuaalselt, nagu kirjeldatud standardis ISO 6878 ning viidetes [4], [5] ja [7], või integreeritud ultraviolettmineraliseerimis- ja hüdrolüüsiseadmega. See dokument sobib eri veeliikidele, nagu põhja-, joogi-, pinna-, nõrg- ja heitvesi. Rakendusvahemikku saab muuta, muutes läbiviimise tingimusi. See meetod sobib ka mereveele, aga muutustega tundlikkuses, rakendades kande- ja kalibreerimislahustele proovide soolsust. Samuti on see meetod on rakendatav analüüsidele, kasutades küvette 10 mm kuni 50 mm sõltuvalt sellest, mis on soovitud rakendusulatus. Eriti tundliku analüüsi jaoks saab kasutada 250 mm ja 500 mm pikkuseid kapillaar-voolurakke (long way capillary flow cells, LCFC). Ometi ei ole see meetod valideeritud nende kahe kasutusjuhu jaoks. Võib olla vaja teha muutusi tundlikkuses ja kalibreerimislahustes. Lisas A on toodud CFA süsteemi näide. Lisas B on toodud suutlikkuse andmed laboritevahelistest katsetest. Lisas C on toodud info ortofosaat-P ja üldfosfori määramise kohta, kasutades CFA-d ja tina(II)kloriidide redutseerimist.

EVS-EN ISO 17225-5:2021

Tahked biokütused. Kütuste spetsifikatsioonid ja klassid. Osa 5: Klassifitseeritud küttepuud
Solid biofuels - Fuel specifications and classes - Part 5: Graded firewood (ISO 17225-5:2021)

See dokument määrab kindlaks klassifitseeritud küttepuude kvaliteediklassid ja spetsifikatsioonid. See dokument hõlmab üksnes järgmistest toorainetest toodetud küttepuid (vt ISO 17725-1:2020, tabel 1): — 1.1.1 Terved puud ilma juurteta; — 1.1.3 Tüvepuit; — 1.1.4 Raiejäägid (jämedad oksad, ladvad jt); — 1.2.1 Keemiliselt töötlemata puidu kõrvalsaadused ja jäägid puidutöötlemistööstusest.

EVS-EN ISO 20023:2018

Tahked biokütused. Tahke biokütuse pelletite ohutus. Puitpelletite ohutu käitlemine ja hoiustamine elamutes ja muudes väikesemahulistes kasutuskohtades
Solid biofuels - Safety of solid biofuel pellets - Safe handling and storage of wood pellets in residential and other small-scale applications (ISO 20023:2018)

Selles dokumendis kirjeldatakse puitpelletite ohutu käitlemise ja hoiustamise põhimõtteid ja nõudeid elamutes ja muudes väikesemahulistes kasutuskohtades. See hõlmab tarneahelat alates veoki laadimisest, nõudeid veokitele, ühendusi lõppkasutaja hoidlaga ning tarneprotsessi. Samuti hõlmab see pelletihoiusüsteemide projekteerimist ja ehitamist. Selles dokumendis käsitletakse järgmisi riske: tulekahju, tolmuplahvatus, gaaside eraldumine, hapniku lõppemine, seadmete ja hoonete kahjustumine pelletite paisumise tõttu ja muud terviseriskid. See kohaldub standardi ISO 17225-2 kohastele puitpelletitele.

STANDARDIPEALKIRJADE MUUTMINE

Selles jaotises avaldame infot Eesti standardite eesti- ja ingliskeelsete pealkirjade muutmise kohta ja ingliskeelsete pealkirjade tõlkimise kohta.
Lisainformatsioon või ettepanekud standardipealkirjade ebatäpsustest enquiry@evs.ee.

UUED EESTIKEELSED PEALKIRJAD

Dokumendi tähis	Ingliskeelne pealkiri	Eestikeelne pealkiri
EVS-EN 14654-3:2021	Drain and sewer systems outside buildings - Management and control of activities - Part 3: Drain and sewer cleaning	Äravoolu- ja kanalisatsioonisüsteemid väljaspool hooneid. Käitustegevuste haldamine ja kontroll. Osa 3: Äravoolutoru ja kollektori puhastamine
EVS-EN 17333-1:2020	Characterisation of one component foam - Part 1: Foam yield characteristics	Ühekomponentse vahu iseloomustamine. Osa 1: Vahu saagise näitajad
EVS-EN ISO 15681-2:2018	Water quality - Determination of orthophosphate and total phosphorus contents by flow analysis (FIA and CFA) - Part 2: Method by continuous flow analysis (CFA) (ISO 15681-2:2018)	Vee kvaliteet. Ortofosfaadi ja üldfosfori sisalduse määramine vooluanalüüsil (FIA ja CFA). Osa 2: Pidevvooluanalüsaatori meetod (CFA)
EVS-EN ISO 20023:2018	Solid biofuels - Safety of solid biofuel pellets - Safe handling and storage of wood pellets in residential and other small-scale applications (ISO 20023:2018)	Tahked biokütused. Tahke biokütuse pelletite ohutus. Puitpelletite ohutu käitlemine ja hoiustamine elamutes ja muudes väikesemahulistes kasutuskohtades

UUED HARMONEERITUD STANDARDID

Toote nõuetele vastavuse seaduse kohaselt avaldab Eesti Standardimis- ja Akrediteerimiskeskus oma veebilehel ja ametlikus väljaandes teavet harmoneeritud standardeid ülevõtvate Eesti standardite kohta.

Harmoneeritud standardiks nimetatakse EL-i õigusaktide kontekstis Euroopa Komisjoni standardimisettepaneku alusel Euroopa standardimisorganisatsioonide koostatud ja vastu võetud standardit.

Harmoneeritud standardite kasutamise korral eeldatakse enamiku vastavate õigusaktide mõistes, et standardi kohaselt valmistatud toode täidab õigusakti olulisi nõudeid ning on üldjuhul kõige lihtsam viis tõendada õigusaktide oluliste nõuete täitmist. Harmoneeritud standardi täpne tähendus ja õiguslik staatus tuleneb siiski iga õigusakti tekstist eraldi ning võib õigusaktist olenevalt erineda.

Lisainfo:
https://ec.europa.eu/growth/single-market/european-standards/harmonised-standards

Eesti Standardimis- ja Akrediteerimiskeskus avaldab ametlikus väljaandes harmoneeritud standardeid ülevõtvate Eesti standardite kohta järgmist infot:

- harmoneeritud standardi staatuse saanud Eesti standardid
- harmoneeritud standardi staatuses olevate Eesti standardite kohta avaldatud märkused ja hoiatused, mida tuleb standardite järgimisel arvestada
- harmoneeritud standardi staatuse kaotanud Eesti standardid

Info esitatakse vastavate õigusaktide kaupa.

Direktiiv 2014/33/EL
Liftid

Komisjoni rakendusotsus (EL) 2021/1220,
millega muudetakse rakendusotsust (EL) 2021/76
(EL Teataja 2021/ L 267/17)

Harmoneeritud standardit ülevõtva Eesti standardi tähis ja pealkiri	Kuupäev, millest alates Eesti standardi aluseks olevat Euroopa standardit võib rakendada harmoneeritud standardina	Viide asendatavale Euroopa standardile	Kuupäev, mil asendatava standardi järgimisest tulenev vastavus-eeldus kaotab kehtivuse
EVS-EN 81-72:2020 Liftide valmistamise ja paigaldamise ohutuseeskirjad. Inimeste ja kauba transpordi liftide eriotstarbelised rakendused. Osa 72: Tuletõrjujate liftid	27.07.2021	EN 81-72:2015	27.01.2023
EVS-EN 81-73:2020 Liftide valmistamise ja paigaldamise ohutuseeskirjad. Inimeste ja kauba transpordi liftide eriotstarbelised rakendused. Osa 73: Liftide käitumine tulekahju korral	27.07.2021	EN 81-73:2016	27.01.2023

Direktiiv 2014/53/EL
Raadioseadmed

Komisjoni rakendusotsus (EL) 2021/1196,
millega muudetakse rakendusotsust (EL) 2020/167
(EL Teataja 2021/ L 258/53)

Harmoneeritud standardit ülevõtva Eesti standardi tähis ja pealkiri	Kuupäev, millest alates Eesti standardi aluseks olevat Euroopa standardit võib rakendada harmoneeritud standardina	Viide asendatavale Euroopa standardile	Kuupäev, mil asendatava standardi järgimisest tulenev vastavus-eeldus kaotab kehtivuse
EVS-EN 302 066 V2.2.1:2020 Lähitoimeseadmed (SRD); Pinnase ja seina sondeerimisradarid (GPR/WPR); Raadiospektri juurdepääsu harmoneeritud standard	20.07.2021	EN 302 066-2 V1.2.1	20.01.2023

Märkus: Selle harmoneeritud standardi järgimine ei anna alust eeldada vastavust direktiivi 2014/53/EL artikli 3 lõikes 2 sätestatud olulisele nõudele, kui kohaldatakse üht alljärgnevatest sätetest:
- selle standardi punkti 6.2.5 üheksanda lõigu lauset „Kiirguse mõõtmisel võib kogu sagedusala 30 MHz kuni 1 000MHz katmiseks kasutada ka kahekoonuseliste ja logoperioodiliste võreantennide kombinatsiooni“;
- selle standardi punkti 6.2.5 kümnendat lõiku;
- selle standardi punkti 6.2.5 üheteistkümnendat lõiku.

EVS-EN 302 208 V3.3.1:2020 Raadiosagedusalas 856 MHz kuni 868 MHz võimsusega kuni 2 W ja raadiosagedusalas 915 MHz kuni 921 MHz võimsusega kuni 4 W töötavad raadiosagedustuvastusseadmed; Raadiospektrile juurdepääsu harmoneeritud standard	20.07.2021	EN 302 208 V3.1.1	20.01.2023
Märkus: Et eeldada vastavust direktiivi 2014/53/EL artikli 3 lõikes 2 sätestatud olulisele nõudele, asendatakse käesoleva harmoneeritud standardi tabelis 2 piirnorm „692 MHz“ järgmisega: „694 MHz“.			
EVS-EN 302 609 V2.2.1:2020 Lähitoimeseadmed (SRD); Raudteesidesüsteemi Euroloop raadioseadmed; Raadiospektrile juurdepääsu harmoneeritud standard	20.07.2021	EN 302 609 V2.1.1	20.01.2023
Märkus: Direktiivi 2014/53/EL artikli 3 lõikes 2 sätestatud olulisele nõudele vastavuse eelduse täitmiseks: - loetakse selle harmoneeritud standardi tabeli 3 teises reas piirnormiks „29 090MHz“ asemel „27 090MHz“; - loetakse selle harmoneeritud standardi tabeli 3 kolmandas reas piirnormiks „29 100MHz“ asemel „27 100MHz“.			
EVS-EN 303 204 V3.1.1:2021 Andmesidevõrgu paiksed lähitoimeseadmed (SRD); Raadiosagedusalas 870 MHz kuni 876 MHz töötavad raadioseadmed võimsusega kuni 500 mW e.r.p.; Raadiospektrile juurdepääsu harmoneeritud standard	20.07.2021	EN 303 204 V2.1.2	20.01.2023
EVS-EN 303 258 V1.1.1:2020 Juhtmevabad tööstuslikud rakendused (WIA); Sagedusalas 5725 MHz - 5875 MHz töötavad seadmed võimsusega kuni 400 mW; Raadiospektrile juurdepääsu harmoneeritud standard	20.07.2021		
Märkus: Selle harmoneeritud standardi järgimine ei anna alust eeldada vastavust direktiivi 2014/53/EL artikli 3 lõikes 2 sätestatud olulisele nõudele, kui ei kasutata asjakohaseid katsemeetodeid, et tõendada seadmete vastavust selle harmoneeritud standardi punktidele 4.2.8.2, 4.2.9.3 ja 4.2.10.3.“			
EVS-EN 303 276 V1.2.1:2021 Raadiosagedusalas 5852 MHz kuni 5872 MHz ja/või 5880 MHz kuni 5900 MHz töötavad mereside lairiba raadiolingid laevadele ja avamere ehitistele; Raadiospektrile juurdepääsu harmoneeritud standard	20.07.2021	EN 303 276 V1.1.1	20.01.2023

Direktiiv 2016/2102
Avaliku sektori asutuste veebisaitide ja mobiilirakenduste juurdepääsetavus

Komisjoni rakendusotsus (EL) 2021/1339,
millega muudetakse rakendusotsust (EL) 2018/2048
(EL Teataja 2021/ L 289/53)

Harmoneeritud standardit ülevõtva Eesti standardi tähis ja pealkiri	Kuupäev, millest alates Eesti standardi aluseks olevat Euroopa standardit võib rakendada harmoneeritud standardina	Viide asendatavale Euroopa standardile	Kuupäev, mil asendatava standardi järgimisest tulenev vastavus-eeldus kaotab kehtivuse
EVS-EN 301 549 V3.2.1:2021 IKT toodete ja teenuste juurdepääsu nõuded	12.08.2021	EN 301 549 V2.1.2	12.02.2022

Euroopa Parlamendi ja nõukogu määrus (EL) 2016/425
Isikukaitsevahendid
Komisjoni rakendusotsus (EL) 2021/1201,
millega muudetakse rakendusotsust (EL) 2020/668
(EL Teataja 2021/ L 259/8)

Harmoneeritud standardit ülevõtva Eesti standardi tähis ja pealkiri	Kuupäev, millest alates Eesti standardi aluseks olevat Euroopa standardit võib rakendada harmoneeritud standardina	Viide asendatavale Euroopa standardile	Kuupäev, mil asendatava standardi järgimisest tulenev vastavus-eeldus kaotab kehtivuse
EVS-EN 352-1:2020 Kuulmiskaitsevahendid. Üldnõuded. Osa 1: Kõrvaklapid	21.07.2021	EN 352-1:2002	21.01.2023
Märkus: Selle standardiga ei nõuta tootel märgist, mis näitaks selle mürasummutusvõimet. Seega ei anna selle standardi järgimine alust eeldada vastavust määruse (EL) 2016/425 II lisa punkti 3.5 teisele lõigule			
EVS-EN 352-2:2020 Kuulmiskaitsevahendid. Üldnõuded. Osa 2: Kõrvatropid	21.07.2021	EN 352-2:2002	21.01.2023
Märkus: Selle standardiga ei nõuta tootel märgist, mis näitaks selle mürasummutusvõimet. Seega ei anna selle standardi järgimine alust eeldada vastavust määruse (EL) 2016/425 II lisa punkti 3.5 teisele lõigule			
EVS-EN 352-3:2020 Kuulmiskaitsevahendid. Üldnõuded. Osa 3: Pea- ja/või näokaitsevahendite külge kinnitatavad kõrvaklapid	21.07.2021	EN 352-3:2002	21.01.2023
Märkus: Selle standardiga ei nõuta tootel märgist, mis näitaks selle mürasummutusvõimet. Seega ei anna selle standardi järgimine alust eeldada vastavust määruse (EL) 2016/425 II lisa punkti 3.5 teisele lõigule.			
EVS-EN 352-4:2020 Kuulmiskaitsevahendid. Ohutusnõuded. Osa 4: Helitaseme filtriga kõrvaklapid	21.07.2021	EN 352-4:2001; EN 352-4:2001/A1:2005	21.01.2023
EVS-EN 352-5:2020 Kuulmiskaitsevahendid. Ohutusnõuded. Osa 5: Aktiivse mürasummutusega kõrvaklapid	21.07.2021	EN 352-5:2002; EN 352-5:2002/A1:2005	21.01.2023
EVS-EN 352-6:2020 Kuulmiskaitsevahendid. Ohutusnõuded. Osa 6: Ohutusalase audiosidega kõrvaklapid	21.07.2021	EN 352-6:2002	21.01.2023
EVS-EN 352-7:2020 Kuulmiskaitsevahendid. Ohutusnõuded. Osa 7: Helitaseme filtriga kõrvatropid	21.07.2021	EN 352-7:2002	21.01.2023
EVS-EN 352-8:2020 Kuulmiskaitsevahendid. Ohutusnõuded. Osa 8: Meelelahutuslikud audiosisendiga kõrvaklapid	21.07.2021	EN 352-8:2008	21.01.2023
EVS-EN 352-9:2020 Kuulmiskaitsevahendid. Ohutusnõuded. Osa 9: Ohutusalase audiosidega kõrvatropid	21.07.2021		
EVS-EN 352-10:2020 Kuulmiskaitsevahendid. Ohutusnõuded. Osa 10: Meelelahutusliku audiosisendiga kõrvatropid	21.07.2021		