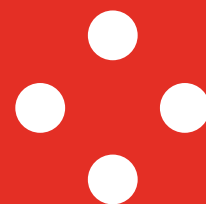


# IZVLEČKI V ANGLEŠČINI



**Objave SIST • Announcements SIST**

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# Izveščki iz novih slovenskih nacionalnih standardov v angleškem jeziku

## SIST/TC AVM Avdio, video in večpredstavitveni sistemi ter njihova oprema

**SIST EN IEC 62623:2023**

SIST EN 62623:2013

**2023-03 (po) (en;fr;de)**

**46 str. (I)**

Namizni in prenosni računalniki - Merjenje porabe energije (IEC 62623:2022)

*Desktop and notebook computers - Measurement of energy consumption (IEC 62623:2022)*

Osnova: EN IEC 62623:2022

ICS: 35.160

This International Standard covers personal computing products. It applies to desktop and notebook computers as defined in 4.1 that are marketed as final products and that are hereafter referred to as the equipment under test (EUT) or product.

This standard specifies:

- a test procedure to enable the measurement of the power and/or energy consumption in each of the EUT's power modes;
- formulas for calculating the typical energy consumption (TEC) for a given period (normally annual);
- a majority profile that should be used with this standard which enables conversion of average power into energy within the TEC formulas;
- a pre-defined format for the presentation of results.

This standard does not set any pass/fail criteria for the EUTs. Users of the test results should define such criteria.

**SIST EN IEC 62680-1-2:2023**

SIST EN IEC 62680-1-2:2021

**2023-03 (po) (en;fr;de)**

**710 str. (2F)**

Vmesniki univerzalnega serijskega vodila za prenos podatkov in napajanje - 1-2. del: Skupne komponente - Specifikacija za zagotavljanje napajanja prek USB (IEC 62680-1-2:2022)

*Universal serial bus interfaces for data and power - Part 1-2: Common components - USB Power Delivery specification (IEC 62680-1-2:2022)*

Osnova: EN IEC 62680-1-2:2022

ICS: 35.200

IEC 62680-1-2:2022 specification defines a power delivery system covering all elements of a USB system including: Hosts, Devices, Hubs, Chargers and cable assemblies. This specification describes the architecture, protocols, power supply behavior, connectors and cabling necessary for managing power delivery over USB at up to 100W. This specification is intended to be fully compatible and extend the existing USB infrastructure. It is intended that this specification will allow system OEMs, power supply and peripheral developers adequate flexibility for product versatility and market differentiation without losing backwards compatibility. This sixth edition cancels and replaces the fifth edition published in 2021 and constitutes a technical revision. Extended Power Range (EPR) including Adjustable Voltage Supply (AVS) has been added. This document is the USB-IF publication Universal Serial Bus Power Delivery Specification Revision 3.1, Version 1.1.

**SIST EN IEC 62680-1-3:2023**

SIST EN IEC 62680-1-3:2021

**2023-03 (po) (en;fr;de) 392 str. (Z)**

Vmesniki univerzalnega serijskega vodila za prenos podatkov in napajanje - 1-3. del: Skupne komponente - Specifikacija za kable in priključke univerzalnega serijskega vodila tipa C® (IEC 62680-1-3:2022)

*Universal serial bus interfaces for data and power - Part 1-3: Common components - USB Type-C(r) cable and connector specification (IEC 62680-1-3:2022)*

Osnova: EN IEC 62680-1-3:2022

ICS: 35.200

IEC 62680-1-3:2022 defines the USB Type-C® receptacles, plug and cables. The USB Type-C Cable and Connector Specification is guided by the following principles:

- Enable new and exciting host and device form-factors where size, industrial design and style are important parameters
- Work seamlessly with existing USB host and device silicon solutions
- Enhance ease of use for connecting USB devices with a focus on minimizing user confusion for plug and cable orientation

The USB Type-C Cable and Connector Specification defines a new receptacle, plug, cable and detection mechanisms that are compatible with existing USB interface electrical and functional specifications. This specification covers the following aspects that are needed to produce and use this new USB cable/connector solution in newer platforms and devices, and that interoperate with existing platforms and devices:

- USB Type-C receptacles, including electro-mechanical definition and performance requirements
- USB Type-C plugs and cable assemblies, including electro-mechanical definition and performance requirements
- USB Type-C to legacy cable assemblies and adapters
- USB Type-C-based device detection and interface configuration, including support for legacy connections
- USB Power Delivery optimized for the USB Type-C connector

The USB Type-C Cable and Connector Specification defines a standardized mechanism that supports Alternate Modes, such as repurposing the connector for docking-specific applications. IEC 62680-1-3:2022 cancels and replaces the fourth edition published in 2021 and constitutes a technical revision. This standard is the USB-IF publication Universal Serial Bus Type-C Cable and Connector Specification Revision 2.0. New release primarily for enabling Extended Power Range (EPR) and defining EPR cables aligning with USB Power Delivery Specification R3.1 V1.0. Also includes incorporation of all approved ECNs as the revision date plus editorial clean-up.

**SIST EN IEC 62680-4-1:2023****2023-03 (po) (en;fr;de) 606 str. (2D)**

Vmesniki univerzalnega serijskega vodila za prenos podatkov in napajanje - 4-1. del: Specifikacija univerzalnega serijskega vodila 4 (tm) (IEC 62680-4-1:2022)

*Universal Serial Bus interfaces for data and power - Part 4-1: Universal Serial Bus 4 (tm) Specification (IEC 62680-4-1:2022)*

Osnova: EN IEC 62680-4-1:2022

ICS: 35.200

The specification is primarily targeted at peripheral developers and platform/adaptor developers, but provides valuable information for platform operating system/BIOS/device driver, adapter independent hardware vendors/independent software vendors, and system OEMs. This specification can be used for developing new products and associated software.

**SIST EN IEC 63207:2023**

**2023-03** (po) (en;fr;de) **16 str. (D)**

Metode merjenja značilnosti modre svetlobe in s tem povezanih optičnih zmogljivosti za slikovno zaslonko opremo (IEC 63207:2022)

*Measurement methods of blue light characteristics and related optical performance for visual display terminals (IEC 63207:2022)*

Osnova: EN IEC 63207:2022

ICS: 17.180.20, 31.120

IEC 63207:2022 specifies measurement methods for optical performance (luminance) and blue light characteristics (BLCs) of visual display terminals (VDTs), excluding displays for outdoor use only.

**SIST EN IEC 63254:2023**

**2023-03** (po) (en;fr;de) **32 str. (G)**

Upravljanje in vmesniki za WPT - Brezžično polnjenje med napravami (D2DWC) za mobilne naprave z brezžično napajalno močjo modula TX/RX (IEC 63254:2022)

*Management and interfaces for WPT - Device-to-device wireless charging (D2DWC) for mobile devices with wireless power TX/RX module (IEC 63254:2022)*

Osnova: EN IEC 63254:2022

ICS: 33.160.01, 29.200

This standard defines specification and control protocol of D2DWC module for using wireless power TX and RX functions by only one single device. And the related antenna physical design examples are presented in Annex A for sharing information. This standard propose D2DWC module circuit requirement which are consisted with the D2DWC main AP, D2DWC IC, EMT/WPT Antenna Unit and PMIC unit. In the Chapter 5, 'Specifications and control protocol of D2DWC', the register information and message protocols for WPT control are defined in order to implement the WPT TX function. In this standard, the interface and protocol in the wireless power process of the mobile device can be used in accordance with the corresponding wireless power transfer standard. Any wireless power transfer standard working inside 100 - 350 kHz frequency range can be included from the scope of this standard. This standard can be used to mobile wireless power transfer in mobile phones and other mobile devices, IoT, and micro-sensor industries and related application fields.

## **SIST/TC BBB Beton, armirani beton in prednapeti beton**

**SIST 1026:2016/A101:2023**

**2023-03** **4 str. (SA)**

Beton - Specifikacija, lastnosti, proizvodnja in skladnost - Pravila za uporabo SIST EN 206 - Dopolnilo A101

*Concrete - Part 1: Specification, performance, production and conformity – Rules for the implementation of SIST EN 206 - Amendment A101*

Osnova:

ICS: 91.100.30

Amandma A101:2023 je dodatek k standardu SIST 1026:2016.

This European Standard defines the test method to be used to determine the air permeability of completely assembled windows and doorsets of any material, when submitted to positive or negative test pressures. This test method is designed to take account of conditions in use, when the window or doorset is installed in accordance with the manufacturer's specification and the requirements of relevant European Standards and codes of practice.

This European Standard does not apply to the joints between the window or doorset frame and the building construction.

## SIST/TC ELI Nizkonapetostne in komunikacijske električne inštalacije

### SIST EN 50600-4-8:2023

2023-03 (po) (en;fr) 24 str. (F)

Informacijska tehnologija - Naprave in infrastruktura podatkovnega centra - 4-8. del: Učinkovitost porabe ogljika

*Information technology - Data centre facilities and infrastructures - Part 4-8: Carbon usage effectiveness*

Osnova: EN 50600-4-8:2022

ICS: 13.020.99, 35.160, 35.110

This document specifies the Carbon Usage Effectiveness (CUE) as a KPI to qualify the CO<sub>2</sub> emissions of a data centre during use phase of the data centre life cycle. By reporting CO<sub>2</sub> emissions, it is possible to present the data centres contribution to climate change (enhanced greenhouse effect).

### SIST EN 50600-4-9:2023

2023-03 (po) (en) 26 str. (F)

Informacijska tehnologija - Naprave in infrastruktura podatkovnega centra - 4-9. del: Učinkovitost porabe vode

*Information technology - Data centre facilities and infrastructures - Part 4-9: Water Usage Effectiveness*

Osnova: EN 50600-4-9:2022

ICS: 35.160, 35.110

This document specifies the Water Usage Effectiveness (WUE) as a KPI to qualify the water consumption of a data centre during use phase of the data centre life cycle. By reporting water consumption, it is possible to present the data centres resource efficiency.

## SIST/TC FGA Funkcionalnost gospodinjskih aparatov

### SIST EN IEC 63237-1:2023

2023-03 (po) (en) 22 str. (F)

Gospodinjski in podobni električni aparati - Lastnosti informacij o proizvodni - 1. del: Osnove (IEC 63237-1:2022)

*Household and similar electrical appliances - Product information properties - Part 1: Fundamentals (IEC 63237-1:2022)*

Osnova: EN IEC 63237-1:2022

ICS: 97.030

This part of IEC 63237 provides a method of standardizing the descriptions of household electrical appliances.

The aims of this standard are

- to define a common language for customers and suppliers through the publication of classes, represented by properties and their attributes;
- enable electronic data exchange by machines (including information technology systems, see M2M communication);
- to optimize workflows between customers and suppliers as well as in processes such as engineering, development and purchasing within their own organizations;
- to offer also a dictionary to legislators and
- to reduce transaction costs.

The standard describes household electrical appliances using properties and makes the associated properties available in the IEC Common Data Dictionary (IEC CDD).

Furthermore, this document provides rules, methods and the generic data structure for product specific classification standards and on how to produce a reference dictionary based on IEC 61360 Series. This in turn creates a descriptive basis of company internal and external descriptions of household electrical appliances based on structured classes and lists of properties.

NOTE The terms "class", "properties" and "attributes" are defined in Clause 3 following the established definitions in IEC and ISO documents.

## SIST/TC IEMO Električna oprema v medicinski praksi

### SIST EN IEC 60601-2-43:2023

2023-03 (po) (en) 65 str. (K)

Medicinska električna oprema - 2-43. del: Posebne zahteve za osnovno varnost in bistvene lastnosti rentgenske opreme za interventne postopke (IEC 60601-2-43:2022)

*Medical electrical equipment - Part 2-43: Particular requirements for the basic safety and essential performance of X-ray equipment for interventional procedures (IEC 60601-2-43:2022)*

Osnova: EN IEC 60601-2-43:2023

ICS: 13.280, 11.040.50

This International Standard applies to the BASIC SAFETY and ESSENTIAL PERFORMANCE of both FIXED and MOBILE X-RAY EQUIPMENT declared by the MANUFACTURER to be suitable for RADIOSCOPICALLY GUIDED INTERVENTIONAL PROCEDURES, hereafter referred to as INTERVENTIONAL X-RAY EQUIPMENT. Its scope excludes, in particular:

- equipment for RADIOTHERAPY;
- equipment for COMPUTED TOMOGRAPHY;
- ACCESSORIES intended to be introduced into the PATIENT;
- mammographic X-RAY EQUIPMENT;
- dental X-RAY EQUIPMENT.

NOTE 1 Examples of RADIOSCOPICALLY GUIDED INTERVENTIONAL PROCEDURES, for which the use of INTERVENTIONAL X-RAY EQUIPMENT complying with this standard is recommended, are given in Annex AA.

NOTE 2 Specific requirements for magnetic navigation devices, and for the use of INTERVENTIONAL X-RAY EQUIPMENT in an operating room environment were not considered in this particular standard; therefore no specific requirements have been developed for these devices or uses. In any case, such devices or uses remain under the general clause requirements.

NOTE 3 INTERVENTIONAL X-RAY EQUIPMENT, when used for cone-beam CT mode, is covered by this standard and not by IEC 60601-2-44 [2]. No additional requirements for operation in cone-beam CT mode were identified for this standard (see also Note 4 in 203.6.4.5).

INTERVENTIONAL X-RAY EQUIPMENT declared by the MANUFACTURER to be suitable for RADIOSCOPICALLY GUIDED INTERVENTIONAL PROCEDURES, which does not include a PATIENT SUPPORT as part of the system, is exempt from the PATIENT SUPPORT provisions of this standard.

If a clause or subclause is specifically intended to be applicable to INTERVENTIONAL X-RAY 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 INTERVENTIONAL X-RAY EQUIPMENT and to ME SYSTEMS, as relevant.

NOTE 4 See also 4.2 of the general standard.

The subclauses of this standard supersede IEC 60601-2-54 subclauses. IEC 60601-2-54 applies only with regards to the cited subclauses; non-cited subclauses of IEC 60601-2-54 do not apply.

### SIST EN IEC 60806:2023

2023-03 (po) (en) 14 str. (D)

Določanje maksimuma simetričnega sevalnega polja rentgenskih cevi in rentgenskih žarkov za medicinsko diagnostiko (IEC 60806:2022)

*Determination of the maximum symmetrical radiation field of X-ray tube assemblies and X-ray source assemblies for medical diagnosis (IEC 60806:2022)*

Osnova: EN IEC 60806:2023

ICS: 11.040.50

This International Standard is applicable to X-RAY SOURCE ASSEMBLIES and X-RAY TUBE ASSEMBLIES, for use in MEDICAL DIAGNOSTIC RADIOLOGY for techniques in which the X-RAY PATTERN will be received simultaneously in all points of the IMAGE RECEPTION AREA.

This standard specifies a method for the determination of the greatest geometrically symmetrical RADIATION FIELD at a specified distance from the FOCAL SPOT for which the percentage AIR KERMA RATE along the major axes of the RADIATION FIELD does not fall below a permitted value.

NOTE 1 AIR KERMA or AIR KERMA RATE are the only practical verifiable physical quantities for X-RAY SOURCES. X-RAY SOURCES must be tested independently from MEDICAL ELECTRICAL SYSTEMS. Conversion to the characteristics of the X-RAY IMAGE RECEPTOR used in a MEDICAL ELECTRICAL SYSTEM may be done in addition.

In case multiple FOCAL SPOTS are not super-imposed, each focal spot has its own REFERENCE AXIS. Then the maximum RADIATION FIELD may be given for each FOCAL SPOT separately

NOTE 2 The maximum symmetrical RADIATION FIELD may change from its initial value as the X-RAY TUBE ages through use.

NOTE 3 If, for certain MEDICAL ELECTRICAL SYSTEMs the scope of IEC 60806 does not fit, then the special RADIATION FIELD requirements could be incorporated in the MEDICAL ELECTRICAL SYSTEM particular standard. However, a statement on the RADIATION FIELD while referring IEC 60806 is then no longer possible.

## SIST/TC IFEK Železne kovine

**SIST EN 10025-4:2019+A1:2023**

SIST EN 10025-4:2019

SIST EN 10025-4:2019/oprA1:2022

**2023-03 (po) (en;fr;de) 30 str. (G)**

Vročje valjani izdelki iz konstrukcijskih jekel - 4. del: Tehnični dobavni pogoji za termomehansko obdelana valjana variva drobnozrnata konstrukcijska jekla (vključno z dopolnilom A1)

*Hot rolled products of structural steels - Part 4: Technical delivery conditions for thermomechanical rolled weldable fine grain structural steels*

Osnova: EN 10025-4:2019+A1:2022

ICS: 77.140.50, 77.140.10

This document specifies technical delivery conditions for flat and long products of hot rolled weldable fine grain structural steels in the thermomechanical rolled condition in the grades and qualities given in Tables 1 to 3 (chemical composition) and Tables 4 to 6 (mechanical properties) in thickness  $\leq 150$  mm.

The steels specified in this document are especially intended for use in heavily loaded parts of welded structures such as, bridges, flood gates, storage tanks, water supply tanks, etc., for service at ambient and low temperatures.

## SIST/TC IIZS Izolacijski materiali in sistemi

**SIST EN IEC 60216-6:2023**

**2023-03 (po) (en) 57 str. (J)**

Elektroizolacijski materiali - Lastnosti v zvezi s toplotno vzdržljivostjo - 6. del: Ugotavljanje indeksov toplotne vzdržljivosti (TI in RTI) izolacijskega materiala z uporabo metode fiksnih časovnih okvirov (IEC 60216-6:2022)

*Electrical insulating materials - Thermal endurance properties - Part 6: Determination of thermal endurance indices (TI and RTI) of an insulating material using the fixed time frame method (IEC 60216-6:2022)*

Osnova: EN IEC 60216-6:2023

ICS: 29.035.01

This part of IEC 60216 specifies the experimental and calculation procedures for deriving the thermal endurance characteristics, temperature index (TI) and relative temperature index (RTI) of an electrical insulating material (EIM) using the "fixed time frame method (FTFM)".

In this protocol, the ageing takes place for a small number of fixed times, using the appropriate number of ageing temperatures throughout each time, the properties of the specimens being measured at the end of the relevant time interval. This differs from the procedure of IEC 60216-1, where ageing is conducted at a small number of fixed temperatures, property measurement taking place after ageing times dependent on the progress of ageing.

The diagnostic tests employed in the fixed time frame method are restricted to destructive tests. The method has not yet been applied to non-destructive or proof test procedures.

Both the TI and the RTI determined according to the FTFM protocol are derived from experimental data obtained in accordance with the instructions of IEC 60216-1 and IEC 60216-2 as modified in this part of IEC 60216. The calculation procedures and statistical tests are modified from those of IEC 60216-3 and IEC 60216-5.

## SIST/TC IMIN Merilni instrumenti

### SIST EN ISO 25377:2023

**2023-03** (po) (en;fr;de) **80 str. (L)**

Navodila za določanje merilne negotovosti v hidrometriji (HUG) (ISO 25377:2020)

*Hydrometric uncertainty guidance (HUG) (ISO 25377:2020)*

Osnova: EN ISO 25377:2022

ICS: 17.120.20

This document provides an understanding of the nature of measurement uncertainty and its significance in estimating the "quality" of a measurement or a determination in hydrometry.

This document is applicable to flow measurements in natural and man-made channels. Rainfall measurements are not covered.

### SIST EN ISO 4064-1:2017/A11:2023

**2023-03** (po) (en;fr;de) **8 str. (B)**

Vodomeri za merjenje hladne pitne vode in vroče vode - 1. del: Metrološke in tehnične zahteve - Dopolnilo A11 (ISO 4064-1:2014)

*Water meters for cold potable water and hot water - Part 1: Metrological and technical requirements (ISO 4064-1:2014)*

Osnova: EN ISO 4064-1:2017/A11:2022

ICS: 17.120.10, 91.140.60

Amandma A101:2023 je dodatek k standardu SIST EN ISO 4064-1:2017.

This part of ISO 4064|OIML R 49 specifies the metrological and technical requirements for water meters for cold potable water and hot water flowing through a fully charged, closed conduit. These water meters incorporate devices which indicate the integrated volume.

In addition to water meters based on mechanical principles, this part of ISO 4064|OIML R 49 applies to devices based on electrical or electronic principles, and mechanical principles incorporating electronic devices, used to measure the volume of cold potable water and hot water.

This part of ISO 4064|OIML R 49 also applies to electronic ancillary devices. Ancillary devices are optional. However, it is possible for national or regional regulations to render some ancillary devices mandatory in relation to the utilization of water meters.

NOTE Any national regulations apply in the country of use.

### SIST EN ISO 4064-2:2017/A11:2023

**2023-03** (po) (en;fr;de) **10 str. (C)**

Vodomeri za merjenje hladne pitne vode in vroče vode - 2. del: Preskusne metode - Dopolnilo A11 (ISO 4064-2:2014)

*Water meters for cold potable water and hot water - Part 2: Test methods (ISO 4064-2:2014)*

Osnova: EN ISO 4064-2:2017/A11:2022

ICS: 17.120.10, 91.140.60

Amandma A11:2023 je dodatek k standardu SIST EN ISO 4064-2:2017.

This part of ISO 4064|OIML R 49 is applicable to the type evaluation and initial verification testing of water meters for cold potable water and hot water as defined in ISO 4064-1:2014|OIML R 49-1:2013.

OIML Certificates of Conformity can be issued for water meters under the scope of the OIML Certificate System, provided that this part of ISO 4064|OIML R 49, ISO 4064-1:2014|OIML R 49-1:2013 and ISO 4064-3:2014|OIML R 49-3:2013 are used in accordance with the rules of the System.



This part of ISO 4064|OIML R 49 sets out details of the test programme, principles, equipment and procedures to be used for the type evaluation, and initial verification of a meter type.

The provisions of this part of ISO 4064|OIML R 49 also apply to ancillary devices, if required by national regulations.

The provisions include requirements for testing the complete water meter and for testing the measurement transducer (including the flow or volume sensor) and the calculator (including the indicating device) of a water meter as separate units.

### **SIST EN ISO 4064-5:2017/A11:2023**

**2023-03** (po) (en;fr;de) **7 str. (B)**

Vodomeri za merjenje hladne pitne vode in vroče vode - 5. del: Zahteve za vgradnjo - Dopolnilo A11 (ISO 4064-5:2014)

*Water meters for cold potable water and hot water - Part 5: Installation requirements (ISO 4064-5:2014)*

Osnova: EN ISO 4064-5:2017/A11:2022

ICS: 17.120.10, 91.140.60

Amandma A11:2023 je dodatek k standardu SIST EN ISO 4064-5:2017.

This part of ISO 4064 applies to water meters used to meter the volume of cold potable water and hot water flowing through a fully charged, closed conduit. These water meters incorporate devices which indicate the integrated volume.

This part of ISO 4064 specifies criteria for the selection of single, combination and concentric water meters, associated fittings, installation, special requirements for meters, and the first operation of new or repaired meters to ensure accurate constant measurement and reliable reading of the meter.

In addition to meters based on mechanical principles, this part of ISO 4064 also applies to water meters based on electrical or electronic principles, and to water meters based on mechanical principles incorporating electronic devices, used to measure the volume of cold potable water and hot water. It also applies to electronic ancillary devices. Ancillary devices are optional. However, national or international regulations may make some ancillary devices mandatory in relation to the utilization of the water meter.

The recommendations of this part of ISO 4064 apply to water meters, irrespective of technology, defined as integrating measuring instruments continuously determining the volume of water flowing through them.

NOTE Any national regulations apply in the country of use.

## **SIST/TC INEK Neželezne kovine**

### **SIST EN 12020-2:2023**

SIST EN 12020-2:2017

SIST EN 12020-2:2017/AC:2017

**2023-03** (po) (en;fr;de) **18 str. (E)**

Aluminij in aluminijeve zlitine - Precizni iztiskani profili v zlitinah EN AW-6060 in EN AW-6063 - 2. del: Tolerance mer in oblike

*Aluminium and aluminium alloys - Extruded precision profiles in alloys EN AW-6060 and EN AW-6063 - Part 2: Tolerances on dimensions and form*

Osnova: EN 12020-2:2022

ICS: 77.150.10

This document specifies tolerances on dimensions and form of extruded precision profiles in alloys EN AW-6060 and EN AW-6063, manufactured with and without a thermal barrier (see Figures 1 and 2). It applies to extruded products supplied without further surface treatment. Precision profiles covered in this document are distinguished from extruded profiles for general applications covered in EN 755-9 by the following characteristics:

- they are mainly for architectural applications designed with mostly uniformly wall-thicknesses;
- they are mainly used for architecture, mechanical engineering and automotive applications (except structural-parts and crash-elements);
- the maximum weight per metre of 10 kg/m;
- the max. wall-thickness proportion ( $S_{max}/S_{min}$ ) of 3,5 mm.

In the case of profiles which, due to the complexity of their design, are difficult to manufacture and specify, then special agreements between supplier and purchaser may need to be reached.

NOTE The effect of the thermal barrier material on the dimensional tolerances is covered by this document although the actual thermal barrier material itself is not (see EN 14024).

## SIST/TC IPMA Polimerni materiali in izdelki

**SIST EN ISO 1675:2023**

SIST EN ISO 1675:1999

**2023-03 (po) (en;fr;de) 11 str. (C)**

Polimerni materiali - Tekoče smole - Določanje gostote s piknometrom (ISO 1675:2022)

*Plastics - Liquid resins - Determination of density by the pycnometer method (ISO 1675:2022)*

Osnova: EN ISO 1675:2022

ICS: 83.080.01

This document specifies a method for the determination of the density of liquid resins using a pycnometer.

**SIST EN ISO 6401:2023**

SIST EN ISO 6401:2009

**2023-03 (po) (en;fr;de) 15 str. (D)**

Polimerni materiali - Polivinilklorid - Določevanje preostanka vinilklorida s plinsko kromatografsko metodo (ISO 6401:2022)

*Plastics - Poly(vinyl chloride) - Determination of residual vinyl chloride monomer using gas-chromatographic method (ISO 6401:2022)*

Osnova: EN ISO 6401:2022

ICS: 83.080.20

ISO 6401:2008 specifies a method for the determination of vinyl chloride monomer in homopolymer and copolymer resins of vinyl chloride and compounded materials. The method is based on sample dissolution and headspace gas chromatography. Concentrations of vinyl chloride in the range 0,1 mg/kg to 3,0 mg/kg can be determined.

A "dry method", suitable for PVC resins but not compounded materials, is widely used within the industry for in-house determinations. A separate International Standard based on this methodology is under development.

**SIST-TP CEN/TR 17910:2023**

**2023-03 (po) (en;fr;de) 43 str. (I)**

Biorazgradljivi polimerni materiali - Stanje standardizacije in nove možnosti

*Biodegradable plastics - Status of standardization and new prospects*

Osnova: CEN/TR 17910:2022

ICS: 01.120, 83.080.01, 13.020.20

This document summarizes the state of standardization in the field of biodegradable plastics and plastics products at CEN and ISO level. It explains the underlying scientific principles of biodegradation that provide the foundations for relevant test methods and enters into the merits of the individual tests to explain and clarify the reasons for the adoption of specific solutions and criteria.

In a second part, this document highlights areas where standardisation in this field is currently lacking and where future developments may be anticipated and useful.

## SIST/TC ISEL Strojni elementi

**SIST EN ISO 14581:2023**

SIST EN ISO 14581:2014

**2023-03 (po) (en;fr;de)**

**19 str. (E)**

Vezni elementi - Notranji šestrogeljni v ugrezni ploski glavi vijaka (običajna oblika glave) z manjšo obremenljivostjo (ISO 14581:2022)

*Fasteners - Hexalobular socket countersunk flat head screws (common head style) with reduced loadability (ISO 14581:2022)*

Osnova: EN ISO 14581:2023

ICS: 21.060.10

This document specifies the characteristics of hexalobular socket countersunk flat head screws with reduced loadability due to head design, in steel and stainless steel, with metric coarse pitch threads M2 to M10, and with product grade A.

If in certain cases other specifications are requested, stainless steel grades can be selected from ISO 3506-1, and dimensional options from ISO 888 or ISO 4753.

NOTE 1 The reduced loadability (related to the countersunk head dimensions in combination with penetration of the hexalobular socket specified in this document) implies a limitation of ultimate tensile load shown by a specific marking (property class preceded by a zero). The loadability in the head is assumed to be 80 % of that in the thread for all sizes and all property classes; see Table 3.

NOTE 2 Hexalobular socket countersunk head screws (high head), with full loadability are specified in ISO 14582, but these products are not interchangeable, because of different head heights.

NOTE 3 Particular attention is needed to ensure alignment of the countersunk head with the bearing surface of the countersink in the assembly.

**SIST EN ISO 25178-700:2023**

**2023-03 (po) (en;fr;de)**

**35 str. (H)**

Specifikacija geometrijskih veličin izdelka (GPS) - Tekstura površine: ploskovna - 700. del: Umerjanje, nastavitve in preverjanje merilnih instrumentov za površinsko topografijo (ISO 25178-700:2022)

*Geometrical product specifications (GPS) - Surface texture: Areal - Part 700: Calibration, adjustment and verification of areal topography measuring instruments (ISO 25178-700:2022)*

Osnova: EN ISO 25178-700:2023

ICS: 17.040.40, 17.040.20

This part of ISO 25178 specifies generic procedures for the calibration, adjustment and verification of areal topography measuring instruments with planar rather than full 3D measurement behaviour and for the determination of measurement uncertainty components associated with effects on the metrological characteristics. It considers, what all areal instruments have in common, including. point sensing instruments with lateral scanning devices. For instrument specific principles, other parts may be developed in the 700 series of ISO standard 25178. In particular, the calibration of contacting systems with additional arcuate motion is not covered by this standard and may be described in a future revision of the ISO 25178-701.

**SIST EN ISO 2702:2023**

SIST EN ISO 2702:2011

**2023-03 (po) (en;fr;de)**

**18 str. (E)**

Vezni elementi - Toplotno obdelani pločevinski vijaki - Mehanske in fizikalne lastnosti (ISO 2702:2022)

*Fasteners - Heat treated tapping screws - Mechanical and physical properties (ISO 2702:2022)*

Osnova: EN ISO 2702:2022

ICS: 21.060.10

This document specifies the mechanical and physical properties of heat treated tapping screws made of steel, with thread sizes ST2,2 to ST9,5 in accordance with ISO 1478, when tested at the ambient temperature range of 10 °C to 35 °C, and the related test methods.

Tapping screws are designed to form mating threads in sheet metals, without their own threads being deformed. Tapping screws are not intended to be pretensioned by design, even though they can experience varying degrees of low-level tensile stress after installation.

**SIST EN ISO 7380-1:2023**

SIST EN ISO 7380-1:2011

**2023-03 (po) (en;fr;de) 17 str. (E)**

Vezni elementi - Vijaki s sploščeno polkrožno glavo z manjšo obremenljivostjo - 1. del: Sploščena polkrožna glava z notranjim šestkotnikom (ISO 7380-1:2022)

*Fasteners - Button head screws with reduced loadability - Part 1: Hexagon socket button head screws (ISO 7380-1:2022)*

Osnova: EN ISO 7380-1:2023

ICS: 21.060.10

This document specifies the characteristics of hexagon socket button head screws with reduced loadability due to head design, in steel and stainless steel, with metric coarse pitch threads M3 to M16, and with product grade A.

If, in certain cases, other specifications are requested, stainless steel grades can be selected from ISO 3506-1, and the dimensional options from ISO 888 or ISO 4753.

NOTE The reduced loadability (related to the head dimensions in combination with penetration of the hexagon socket specified in this document) implies a limitation of ultimate tensile load shown by a specific marking (property class preceded by a zero). The loadability in the head is assumed to be 80 % of that in the thread for all sizes and all property classes, see Table 4.

**SIST EN ISO 7380-2:2023**

SIST EN ISO 7380-2:2011

**2023-03 (po) (en;fr;de) 16 str. (D)**

Vezni elementi - Vijaki s sploščeno polkrožno glavo z manjšo obremenljivostjo - 2. del: Sploščena polkrožna glava z robom in notranjim šestkotnikom (ISO 7380-2:2022)

*Fasteners - Button head screws with reduced loadability - Part 2: Hexagon socket button head screws with collar (ISO 7380-2:2022)*

Osnova: EN ISO 7380-2:2023

ICS: 21.060.10

This document specifies the characteristics of hexagon socket button head screws with collar, with reduced loadability due to head design, in steel, with metric coarse pitch threads M3 to M16, and with product grade A.

If in certain cases other specifications are requested, dimensional options can be selected from ISO 888 or ISO 4753.

NOTE The reduced loadability (related to the head dimensions in combination with penetration of the hexagon socket specified in this document) implies a limitation of ultimate tensile load shown by a specific marking (property class preceded by a zero). The loadability in the head is assumed to be 80 % of that in the thread for all sizes and all property classes, see Table 4.

**SIST ISO 1328-2:2023**

SIST ISO 1328-2:1998

**2023-03 (po) (en;fr) 26 str. (F)**

Cilindrični zobniki - Sistem klasifikacije bočnih toleranc po ISO - 2. del: Definicije in dovoljene vrednosti radialnih kompozitnih odstopanj dvojnega boka

*Cylindrical gears - ISO system of flank tolerance classification - Part 2: Definitions and allowable values of double flank radial composite deviations*

Osnova: ISO 1328-2:2020

ICS: 21.200

This document establishes a gear tooth classification system relevant to double flank radial composite deviations of individual cylindrical involute gears and sector gears. It specifies the appropriate definitions of gear tooth deviations, the structure of the gear tooth flank classification system, and the allowable values of the gear tooth deviations. It provides formulae to calculate tolerances for individual product gears when mated in double flank contact with a master gear. Tolerance tables are not included.

This document is applicable to gears with three or more teeth that have reference diameters of up to 600 mm.

This document does not provide guidance on gear design nor does it recommend tolerances.

## SIST/TC ITEK Tekstil in tekstilni izdelki

**SIST EN 15618:2023**

SIST EN 15618:2009+A1:2012

**2023-03** (po) (en;fr;de) **11 str. (C)**

Gumirane ali plastificirane tekstilije - Dekorativni in tapetniški materiali - Klasifikacija in preskusne metode

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

Osnova: EN 15618:2022

ICS: 59.080.40

This European Standard 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 European Standard 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 European Standard applies to upholstery fabrics with a coating on the wear face.

This European Standard does not apply to textile upholstery fabrics covered by EN 14465.

## SIST/TC IŽNP Železniške naprave

**SIST EN 13103-1:2018+A1:2023**

SIST EN 13103-1:2018

SIST EN 13103-1:2018/kFprA1:2022

**2023-03** (po) (en;fr;de) **48 str. (I)**

Železniške naprave - Kolesne dvojice in osnovni vozički - 1. del: Metoda za načrtovanje gredi z zunanjim uležanjem (vključuje dopolnilo A1)

*Railway applications - Wheelsets and bogies - Part 1: Design method for axles with external journals*

Osnova: EN 13103-1:2017+A1:2022

ICS: 45.040

This European Standard:

- defines the forces and moments to be taken into account with reference to masses, traction and braking conditions;
- gives the stress calculation method for axles with outside axle journals;
- specifies the maximum permissible stresses to be assumed in calculations for steel grade EA1N, EA1T and EA4T defined in EN 13261;
- describes the method for determination of the maximum permissible stresses for other steel grades;
- determines the diameters for the various sections of the axle and recommends the preferred shapes and transitions to ensure adequate service performance.

This European Standard is applicable for:

- axles defined in EN 13261
- powered and non-powered axles and
- all track gauges<sup>3</sup>.

The powered axle design method of this European Standard applies to:

- solid and hollow powered axles for railway rolling stock;
- solid and hollow non-powered axles of motor bogies;
- solid and hollow non-powered axles of locomotives.

The non-powered axle design method of this standard applies to solid and hollow axles of railway rolling stock used for the transportation of passengers and freight that are not considered in the list above.

This European Standard is applicable to axles fitted to rolling stock intended to run under normal European conditions. Before using this European Standard, if there is any doubt as to whether the railway operating conditions are normal, it is necessary to determine whether an additional design factor has to be applied to the maximum permissible stresses. The calculation of wheelset axles for special applications (e.g. tamping/lining/levelling machines) may be made according to this European Standard only for the load cases of free-rolling and rolling in train formation. This European Standard does not apply to the loads induced by the vehicles in their working mode. They are calculated separately. This method can be used for light rail and tramway applications.

**SIST EN 14067-5:2022/AC:2023**

**2023-03** (po) (en;fr;de) **3 str. (AC)**

Železniške naprave - Aerodinamika - 5. del: Zahteve in ugotavljanje skladnosti pri aerodinamiki v predorih - Popravek AC

*Railway applications - Aerodynamics - Part 5: Requirements and assessment procedures for aerodynamics in tunnels*

Osnova: EN 14067-5:2021/AC:2023

ICS: 93.060, 45.060.01

Popravek k standardu SIST EN 14067-5:2022.

This document establishes aerodynamic requirements, test procedures, assessment methods and acceptance criteria for operating rolling stock in tunnels. Aerodynamic pressure variations, loads, micro pressure wave generation and further aerodynamic aspects to be expected in tunnel operation are addressed in this document. Requirements for the aerodynamic design of rolling stock and tunnels of the heavy rail system are provided. The requirements apply to heavy rail systems only.

**SIST EN 15437-1:2009+A1:2023**

SIST EN 15437-1:2009

SIST EN 15437-1:2009/kFprA1:2022

**2023-03** (po) (en;fr;de) **27 str. (G)**

Železniške naprave - Nadzor ohišja ležajev kolesnih dvojic - Mesto meritev in zahteve pri načrtovanju - 1. del: Progovna oprema in ohišja ležajev železniških vozil (vključno z dopolnilom A1)

*Railway applications - Axlebox condition monitoring - Interface and design requirements - Part 1: Track side equipment and rolling stock axlebox*

Osnova: EN 15437-1:2009+A1:2022

ICS: 45.040

This part of EN 15437 defines the minimum characteristics for the interface between a trackside Hot Axlebox Detector (HABD) and Rolling Stock (RST) that comply with the European Directives for Interoperability to ensure that the minimum functional requirement of the interface is achieved.

The minimum requirements of the interface apply to:

a) Rolling stock conforming to standard European railway gauge, that is 1 435 mm;

b) Rolling stock axles fitted with outboard bearings;

NOTE 1 The design of rolling stock axles fitted with inboard bearings should respect the requirements set out in Note 2 of 5.2.

c) Rolling stock with a maximum design speed lower than 250 km/h;

NOTE 2 Interoperable rolling stock with a maximum design speed higher than or equal to 250 km/h are mandated to have on-board equipment for axlebox condition monitoring. The requirements for on-board equipment are described in IEN 15437-2:2012+A1:2022.

NOTE 3 Interoperable rolling stock with a maximum design speed higher than or equal to 250 km/h are outside the scope of this Part of the standard. However, if such rolling stock are required to be monitored by HABDs their target area should comply with the requirements specified in this standard, except where stated otherwise.

d) Trackside HABDs that are required to monitor rolling stock with a maximum design speed higher than or equal to 250 km/h.

The rolling stock requirements of the interface are described in Clause 5 and for the HABD requirements of the interface are described in Clause 6.

The scope of this part (part 1) of the standard does not include:

- Hot Wheel (Hot Disc) Detectors (HWDs). However, HWD are often installed in combination with trackside HABD to provide a dual monitoring system. This standard does not prevent the use of such a combination;

- how a HABD measures the temperature and identifies axle box position. This is part of an individual equipment design and not part of the functional requirements of this standard;

- operational requirements for acting on the information reported by the HABD system;

- maintenance requirements for HABD systems.

**SIST EN 15437-2:2014+A1:2023**

SIST EN 15437-2:2014

SIST EN 15437-2:2014/kFprA1:2022

**2023-03 (po) (en;fr;de) 15 str. (D)**

Železniške naprave - Nadzor ohišja ležajev kolesnih dvojic - Mesto meritev in zahteve za načrtovanje - 2. del: Zahteve za načrtovanje naprav na vozilu za nadzor temperature (vključuje dopolnilo A1)

*Railway applications - Axlebox condition monitoring - Interface and design requirements - Part 2: Performance and design requirements of on-board systems for temperature monitoring*

Osnova: EN 15437-2:2012+A1:2022

ICS: 45.060.01

This European Standard defines the minimum performance requirements of on-board monitoring systems for axlebox condition monitoring by means of temperature measurements.

This European Standard refers to temperature monitoring of the axlebox. However, the design may be such that the rolling bearing itself is monitored directly.

The requirements of this European Standard are intended to apply equally to basic monitoring systems for monitoring the axlebox temperature through to more technically complex systems that may employ a combination of mechatronics.

To ensure the compatibility of monitoring systems and the effective monitoring functions, this European Standard defines the requirements in the following areas:

- equipment and characteristics;
- monitoring performance;
- operation and interface.

This part of EN 15437 does not include:

- systems that do not give an indication to the driver;
- how an on-board monitoring system is structured and how it measures the temperature and identifies axlebox position. This is considered part of equipment design and not part of the functional requirements set out in this standard;
- operational requirements for acting on the information reported by the on-board monitoring system;
- operational requirements for conflict of information between trackside monitoring systems and on-board monitoring systems;
- maintenance requirements for on-board temperature monitoring systems.

**SIST EN 17682:2023****2023-03 (po) (en;fr;de) 40 str. (H)**

Železniške naprave - Infrastruktura - Elastični element za sistem plavajočih plošč

*Railway applications - Infrastructure - Resilient element for floating slab system*

Osnova: EN 17682:2022

ICS: 93.100

This European Standard is applicable to Resilient Element for Floating Slab system (REFS) – Elements used in floating slab and defines the test procedures and their acceptance criteria.

The standard covers not only those parameters related to the effectiveness of a track structure in mitigating vibrations, that is, to reduce the emission of vibrations and structure-borne noise, but also the parameters that are needed for the static analysis and for the verification of track safety.

Floating slab track systems in the form of track base plates and track troughs are individual solutions in which there is considerable variation in the engineering design and the types of resilient elements used. For this reason, a floating slab track system is always an individual engineering solution and therefore, it is not possible to define all specific conditions for the resilient elements in the present standard

The most typical types of resilient elements are:

- Full surface bearings,
- Strip bearings,
- Discrete bearings (including the helical steel spring element),
- Vertical bearings.

This standard provides particular information in the following areas:

- tests methods, tests arrangements and evaluation criteria of Resilient Element for Floating Slab system,

- data supplied by the purchaser and by the supplier,
- definition of general process of homologation,
- definition of routine tests.

This standard defines the specific test procedures for REFS:

- stiffness tests,
- fatigue tests,
- severe environmental condition test.

This standard also sets out procedures for testing fitness for purpose and provides information on quality monitoring as part of quality assurance procedures. This standard does not, however, contain requirements pertaining to the functions of Resilient Element for Floating Slab system. It is the responsibility of the purchaser to define these requirements and to choose the optional tests.

This standard is not applicable for fastening system and for booted concrete block and sleeper completed with boots covered by EN 13481-5.

## SIST/TC KAT Karakterizacija tal, odpadkov in blata

**SIST EN 12580:2023**

SIST EN 12580:2013

**2023-03**

**(po)**

**(en;fr;de)**

**15 str. (D)**

Izboljševalci tal in rastni substrati - Določanje količine

*Soil improvers and growing media - Determination of a quantity*

Osnova: EN 12580:2022

ICS: 65.080

This European Standard specifies methods for the determination of a quantity of soil improvers and growing media in bulk and in packages. This is a reference method, which is designed with an appropriate precision level so that it can be used to validate any quantity declaration made.

This standard is applicable to material that is in solid form, reconstituted if necessary, but not to blocks sold as such by dimension; for these, see EN 15761. This method is not applicable for material with more than 10 % (V/V) of particles greater than 60 mm in size; for these, see EN 15238.

The requirements of this standard may differ from the national legal requirements for the declaration of the products concerned.

Where there is no legal requirement to use this method, for example in quantity control of packaged product, then it is permissible for any other methods to be used so long as these other methods can be demonstrated to be comparable with this standard method in giving the same quantity with the same precision.

Material which has become excessively wet and which cannot be easily broken down into a flowable material will not be suitable for the determination of quantity and may not give a representative result. However, because of the diverse nature and bulk density of these materials, it is not possible to quantify what is 'excessive'.

This standard is intended to be used by manufacturers, buyers and enforcement agencies in verifying claims made for these products. It is not intended that it should necessarily be used for the purpose of manufacturing control.

**SIST EN 15238:2023**

SIST EN 15238:2007

SIST EN 15238:2007/AC:2009

**2023-03**

**(po)**

**(en;fr;de)**

**15 str. (D)**

Izboljševalci tal in rastni substrati - Določanje količine za materiale z velikostjo delcev, večjo od 60 mm  
*Soil improvers and growing media - Determination of quantity for materials with particle size greater than 60 mm*

Osnova: EN 15238:2022

ICS: 65.080

This European Standard specifies a method for the determination of quantity of soil improvers, excluding liming materials and growing media in bulk and in packages. This document applies to material that is in solid form, but not in block form to be sold by dimension, and which exceeds the particle size restriction in EN 12580 and where the declared nominal particle size is greater than 60 mm.



**SIST EN 15749:2023**

SIST EN 15749:2010

**2023-03 (po) (en;fr;de) 28 str. (G)**

Gnojila - Določevanje sulfatov s tremi različnimi metodami

*Fertilizers - Determination of sulfates content using three different methods*

Osnova: EN 15749:2022

ICS: 65.080

This European Standard specifies a method for the determination of quantity of soil improvers, excluding liming materials and growing media in bulk and in packages. This document applies to material that is in solid form, but not in block form to be sold by dimension, and which exceeds the particle size restriction in EN 12580 and where the declared nominal particle size is greater than 60 mm.

**SIST EN 17503:2023**

SIST EN 15527:2009

SIST EN 16181:2018

SIST ISO 13877:1999

**2023-03 (po) (en;fr;de) 53 str. (J)**

Tla, blato, obdelani biološki odpadki in odpadki - Določevanje policikličnih aromatskih ogljikovodikov (PAH) s plinsko kromatografijo (GC) in s tekočinsko kromatografijo visoke ločljivosti (HPLC)

*Soil, sludge, treated biowaste and waste - Determination of polycyclic aromatic hydrocarbons (PAH) by gas chromatography (GC) and high performance liquid chromatography (HPLC)*

Osnova: EN 17503:2022

ICS: 71.040.50, 13.080.10, 13.030.01

This European Standard specifies a method for quantitative determination of 16 polycyclic aromatic hydrocarbons (PAH) (see Table ) in soil, sludge, sediment, treated biowaste, and waste, using GC-MS and HPLC-UV-DAD/FLD covering a wide range of PAH contamination levels (see Table 2).

When using fluorescence detection, acenaphthylene cannot be measured.

Table –Target analytes of this European Standard

Target analyte	CAS-RN <sup>a</sup>
Naphthalene	91–20–3
Acenaphthene	83–32–9
Acenaphthylene	208–96–8
Fluorene	86–73–7
Anthracene	120–12–7
Phenanthrene	85–01–8
Fluoranthene	206–44–0
Pyrene	129–00–0
Benz[a]anthracene	56–55–3
Chrysene	218–01–9
Benzo[b]fluoranthene	205–99–2
Benzo[k]fluoranthene	207–08–9
Benzo[a]pyrene	50–32–8
Indeno[1,2,3-cd]pyrene	193–39–5
Dibenz[a,h]anthracene	53–70–3
Benzo[ghi]perylene	191–24–2

a CAS-RN Chemical Abstracts Service Registry Number.

The limit of detection depends on the determinants, the equipment used, the quality of chemicals used for the extraction of the sample and the clean-up of the extract

Under the conditions specified in this European Standard, lower limit of application from 10 µg/kg (expressed as dry matter) for soils, sludge and biowaste to 100 µg/kg (expressed as dry matter) for solid waste can be achieved. For some specific samples (e.g. bitumen) the limit of 100 µg/kg cannot be reached.

Sludge, waste and treated biowaste may differ in properties as well as in the expected contamination levels of PAH and presence of interfering substances. These differences make it impossible to describe one general procedure. This European Standard contains decision tables based on the properties of the sample and the extraction and clean-up procedure to be used.

The method may be applied to the analysis of other PAH not specified in the scope, provided suitability is proven by proper in-house validation experiments.

**SIST EN ISO 15799:2023**

SIST ISO 15799:2006

**2023-03 (po) (en;fr)**

**58 str. (J)**

Kakovost tal - Navodilo za ekotoksikološko karakterizacijo tal in talnih materialov (ISO 15799:2019)  
*Soil quality - Guidance on the ecotoxicological characterization of soils and soil materials (ISO 15799:2019)*

Osnova: EN ISO 15799:2022

ICS: 13.080.99

This document is one of a family of International Standards providing guidance on soils and soil materials in relation to certain functions and uses including conservation of biodiversity. It applies in conjunction with these other standards. It provides guidance on the selection of experimental methods for the assessment of the ecotoxic potential of soils and soil materials (e.g. excavated and remediated soils, refills, embankments) with respect to their intended use and possible adverse effects on aquatic and soil dwelling organisms.

NOTE This is a reflection of the maintenance of the habitat and retention function of the soil. In fact, the methods listed in this document are suitable for usage in a TRIAD approach, i.e. for an ecological assessment of potentially contaminated soils (see ISO 19204).

This document does not cover tests for bioaccumulation.

The ecological assessment of uncontaminated soils with a view to natural, agricultural or horticultural use is not within the scope of this document. Such soils can be of interest if they can serve as a reference for the assessment of soils from contaminated sites.

The interpretation of results gained by applying the proposed methods is not in the scope of this document.

**SIST EN ISO 17616:2023**

**2023-03 (po) (en;fr;de)**

**21 str. (F)**

Kakovost tal - Navodilo za izbiro in vrednotenje bioloških preskusov za ekotoksikološko karakterizacijo tal in talnih materialov (ISO 17616:2019)

*Soil quality - Guidance on the choice and evaluation of bioassays for ecotoxicological characterization of soils and soil materials (ISO 17616:2019)*

Osnova: EN ISO 17616:2022

ICS: 13.080.05

This document is one of the family of standards (ISO 15799, ISO 19204) providing guidance on the characterization of soils and soil materials in relation to their retention and habitat functions and uses. It is appropriate to use it in conjunction with the two other standards in this family. It provides guidance on the choice and evaluation of tests applied for ecotoxicological characterization of soils and soil materials. Recommendations for test strategies with respect to the protection of ground and surface waters and the maintenance of the habitat function of soil are included. The tests recommended represent a minimum test battery that can be complemented by additional tests, or even be replaced by others, according to the intended uses or protection goals envisaged. The effect values indicated in this document do not refer to regulation but represent the lowest level at which an adverse effect is considered likely to occur.

**SIST EN ISO 19204:2023**

**2023-03 (po) (en;fr;de)**

**35 str. (H)**

Kakovost tal - Postopek za oceno ekološkega tveganja onesnaženosti tal za posamezno lokacijo (pristop TRIAD za kakovost tal) (ISO 19204:2017)

*Soil quality - Procedure for site-specific ecological risk assessment of soil contamination (soil quality TRIAD approach) (ISO 19204:2017)*

Osnova: EN ISO 19204:2022

ICS: 13.080.01

ISO 19204:2017 describes in a general way the application of the soil quality TRIAD approach for the site-specific ecological risk assessment of contaminated soils. In detail, it presents in a transparent

way three lines of evidence (chemistry, ecotoxicology and ecology) which together allow an efficient, ecologically robust but also practical risk assessment of contaminated soils. This procedure can also be applicable to other stress factors, such as acidification, soil compaction, salinization, loss of soil organic substance, and erosion. However, so far, no experience has been gained with these other applications. Therefore, this document focuses on soils contaminated by chemicals.

NOTE 1 This document focuses on ecological risk assessment. Thus, it does not cover human health end points.

In view of the nature of this document, the investigation procedure is described on a general level. It does not contain details of technical procedures for the actual assessment. However, this document includes references relating to technical standards (e.g. ISO 15799, ISO 17616) which are useful for the actual performance of the three lines of evidence.

In ecological risk assessment, the effects of soil contamination on the ecosystem are related to the intended land use and the requirements that this use sets for properly functioning soil. This document describes the basic steps relating to a coherent tool for a site-specific risk assessment with opportunities to work out site-specific details.

ISO 19204:2017 can also be used for the evaluation of clean-up operations, remediation processes or management measures (i.e. for the evaluation of the environmental quality after having performed such actions).

NOTE 2 This document starts when it has already been decided that an ecological risk assessment at a given site needs to be performed. In other words, the practical performance of the soil quality TRIAD and the evaluation of the individual test results will be described. Thus, nothing will be said about decisions whether (and if yes, how) the results of the assessment are included in soil management measures or not.

NOTE 3 The TRIAD approach can be used for different parts of the environment, but this document focuses mostly on the soil compartment. Comparable documents for other environmental compartments are intended to be prepared in addition (e.g. the terrestrial aboveground compartment) in order to perform a complete site assessment, based on the same principles and processes.

**SIST EN ISO 23611-4:2023**

SIST EN ISO 23611-4:2012

**2023-03 (po) (en;fr;de) 35 str. (H)**

Kakovost tal - Vzorceenje nevretenčarjev v tleh - 4. del: Vzorceenje, ekstrakcija in identifikacija nematod iz tal (ISO 23611-4:2022)

*Soil quality - Sampling of soil invertebrates - Part 4: Sampling, extraction and identification of soil-inhabiting nematodes (ISO 23611-4:2022)*

Osnova: EN ISO 23611-4:2022

ICS: 13.080.30

This document specifies a method for sampling and handling free-living nematodes from terrestrial field soils as a prerequisite for using them as bio-indicators (e.g. to assess the quality of a soil as a habitat for organisms).

This document applies to all terrestrial biotopes in which nematodes occur. The sampling design of field studies in general is specified in ISO 18400-101.

This document is not applicable to aquatic nematodes because of differences in the sample matrix (e.g. water column). Methods for some other soil organism groups such as earthworms, collembolans, enchytraeids or macro-invertebrates are covered in ISO 23611-1, ISO 23611-2, ISO 23611-3 and ISO 23611-5.

This document does not cover the pedological characterization of the site which is highly recommendable when sampling soil invertebrates. ISO 10390, ISO 10694, ISO 11272, ISO 11274, ISO 11277, ISO 11461 and ISO 11465 include suitable procedures for measuring pH, particle size distribution, C/N ratio, organic carbon content and water-holding capacity.

**SIST-TS CEN/TS 17758:2023**

**2023-03 (po) (en;fr;de) 8 str. (B)**

Gnojila in sredstva za apnjenje - Določevanje klorida s potenciometrijsko titracijo

*Fertilizers and liming materials - Determination of the chloride content by potentiometric titration*

Osnova: CEN/TS 17758:2022

ICS: 65.080

This document specifies a method for the determination of the chloride content in organic fertilizers, organo-mineral fertilizers, inorganic fertilizers and liming materials by potentiometric titration.

**SIST-TS CEN/TS 17847:2023**

**2023-03** (po) (en;fr;de) **14 str. (D)**

Karakterizacija odpadkov - Določevanje izbranih alkoholov z nizkim vreliščem s plinsko kromatografijo s statično "headspace" tehniko in s plamensko ionizacijskim detektorjem (HS-GC-FID)

*Characterization of waste - Determination of selected low boiling point alcohols using gas chromatography with flame ionization detection after static head-space extraction (HS-GC-FID)*

Osnova: CEN/TS 17847:2022

ICS: 71.040.50, 13.030.01

This document specifies a method for quantitative determination of the concentration of selected alcohols with low boiling point in liquid waste and pasty waste by gas chromatography with flame ionization detection after static headspace extraction.

Under the conditions specified in this document, a limit of application of 20 mg/kg, expressed on dry matter for pasty waste and expressed on raw waste for liquid waste, can be achieved.

**SIST-TS CEN/TS 17883:2023**

**2023-03** (po) (en;fr) **23 str. (F)**

Okoljska karakterizacija izcednih voda iz odpadkov in tal z reproduktivno in toksikološko ekspresijo genov pri *Daphnia magna*

*Environmental characterization of leachates from waste and soil using reproductive and toxicological gene expression in *Daphnia magna**

Osnova: CEN/TS 17883:2022

ICS: 13.080.99, 13.060.70, 13.030.01

This document specifies the crucial steps of a quantitative real-time polymerase chain reaction (qPCR) method to quantify the abundance of specific mRNA molecules extracted from *Daphnia magna*.

The method allows the identification of molecular responses to exposures for potentially toxic substances through the analysis of the abundance of specific mRNA molecules. In this document, the central genes involved in reproductive and toxic responses are included.

NOTE The selection of genes can be adapted to specific exposure conditions, for example, exposure to known toxic substances, by adding genes known to respond to a specific insult.

The present method allows for rapid, robust and sensitive detection of molecular responses and can be used to analyse the toxic effects of water leachates from soil and waste. The method gives information of the concentration of a substance or test-liquid at which toxic effects begin to occur prior to observations of reproductive or toxic effects at higher levels of organization, which reduces the need for the use of safety factors in toxicity assessment.

The method is useful in several types of risk assessment. In this document, the genes studied are appropriate for the assessment of the risks when recycling materials and for the classification of waste, but the method can be adapted to other types of risk assessment by including other genes.

## **SIST/TC KAZ Kakovost zraka**

**SIST EN 14884:2023**

SIST EN 14884:2006

**2023-03** (po) (en;fr;de) **25 str. (F)**

Emisije nepremičnih virov - Določevanje celotnega živega srebra - Avtomatski merilni sistemi

*Stationary source emissions - Determination of total mercury - Automated measuring systems*

Osnova: EN 14884:2022

ICS: 13.040.40

This European Standard specifies requirements for the calibration and validation (QAL2), the ongoing quality assurance during operation (QAL3) and the annual surveillance test (AST) of automated measuring systems (AMS) used for monitoring total mercury emissions from stationary sources to

demonstrate compliance with an emission limit value (ELV). This document is derived from EN 14181 and is only applicable in conjunction with EN 14181. This document is applicable by direct correlation with the standard reference method (SRM) described in EN 13211.

## SIST/TC LLZ Les, lesni izdelki in zaščita lesa

**SIST EN 12037:2023**

SIST-TS CEN/TS 12037:2005

**2023-03 (po) (en;fr;de) 29 str. (G)**

Zaščitna sredstva za les - Terenska preskusna metoda za ugotavljanje relativne preventivne učinkovitosti biocidnega proizvoda za zaščito lesa nad zemljo - Metoda z vodoravnim preklopnim spojem

*Wood preservatives - Field test method for determining the relative protective effectiveness of a wood preservative exposed out of ground contact - Horizontal lap-joint method*

Osnova: EN 12037:2022

ICS: 71.100.50

This document describes a method of test for wood preservatives that are intended for use in wood to be exposed to the weather out of contact with the ground without the additional protection of a surface coating.

The method is applicable to the testing of commercial or experimental preservatives applied by techniques appropriate to commercial practice. The method is applicable to chemical products used individually or in combination to prevent the development of decay and/or - optional - the development of disfiguring organisms in wood and, where suitable, in wood-based products.

NOTE 1 The method can also be used to test other treated wood species and naturally durable timbers. It can be adapted for testing the field performance of other wood based systems and treatments designed to enhance durability, for example treated or untreated wood based composites, timber treated with non-biocidal systems, chemically modified or heat treated timber.

NOTE 2 Although the test is used to assess decay, it is possible to use the method to additionally assess stain or each separately when relevant.

**SIST EN 14734:2022/AC:2023**

**2023-03 (po) (en;fr;de) 3 str. (AC)**

Trajnost lesa in lesnih proizvodov - Ugotavljanje možnosti za impregnacijo lesnih vrst z biocidnimi proizvodi za zaščito lesa - Laboratorijska metoda - Popravek AC

*Durability of wood and wood-based products - Determination of treatability of timber species to be impregnated with wood preservatives - Laboratory method*

Osnova: EN 14734:2022/AC:2023

ICS: 71.100.50, 79.040

Popravek k standardu SIST EN 14734:2022.

This document describes a laboratory method for the determination of the treatability of wood in order to determine the likely reaction of different wood species to impregnation with wood preservatives. It can also be used to investigate variation between samples of the same species but of different origin.

## SIST/TC MEE Oprema za merjenje električne energije in krmiljenje obremenitve

### SIST EN IEC 62052-41:2023

2023-03 (po) (en) 26 str. (F)

Oprema za merjenje električne energije - Splošne zahteve, preskusi in preskuševalni pogoji - 41. del: Metode beleženja energije in zahteve za večenergijske in večtarifne števec (IEC 62052-41:2022)

*Electricity metering equipment - General requirements, tests and test conditions - Part 41: Energy registration methods and requirements for multi-energy and multi-rate meters (IEC 62052-41:2022)*

Osnova: EN IEC 62052-41:2022

ICS: 91.140.50, 17.220.20

IEC 62052-41:2022 applies only to newly manufactured multi-energy and/or multi-rate static meters and it applies to their type tests only.

This document applies to electricity metering equipment designed to:

- measure and control electrical energy on networks with voltage up to 1 000 V AC, or 1 500 V DC;
- have all functional elements, including add-on modules, enclosed in, or forming a single meter case with exception of indicating displays;
- operate with integrated displays;
- operate with detached indicating displays, or without an indicating display;
- be installed in a specified matching socket or rack;
- optionally, provide additional functions other than those for measurement of electrical energy.

Meters designed for operation with Low Power Instrument Transformers (LPITs as defined in the IEC 61869 series) may be tested for compliance with this document and the relevant IEC 62053 series documents only if such meters and their LPITs are tested together as directly connected meters.

This document does not apply to:

- meters for which the voltage line-to-neutral derived from nominal voltages exceeds 1 000 V AC, or 1 500 V DC;
- meters intended for connection with low power instrument transformers (LPITs as defined in the IEC 61869 series of standards) when tested without such transformers;
- metering systems comprising multiple devices (except for LPITs) physically remote from one another;
- portable meters;
- meters used in rolling stock, vehicles, ships and airplanes;
- laboratory and meter test equipment;
- reference standard meters;
- data interfaces to the register of the meter;
- matching sockets or racks used for installation of electricity metering equipment.

This document does not cover measures for the detection and prevention of fraudulent attempts to compromise a meter's performance (tampering).

## SIST/TC MOC Mobilne komunikacije

### SIST EN 301 908-1 V15.2.1:2023

2023-03 (po) (en) 32 str. (G)

Celična omrežja IMT - Harmonizirani standard za dostop do radijskega spektra - 1. del: Uvod in splošne zahteve, izdaja 15

*IMT cellular networks - Harmonised Standard for access to radio spectrum - Part 1: Introduction and common requirements - Release 15*

Osnova: ETSI EN 301 908-1 V15.2.1 (2023-01)

ICS: 33.070.99, 33.060.99

The present document applies to user equipment, repeaters and base stations for IMT, falling within the scope of one of the other parts of ETSI EN 301 908 [i.8], except for IMT-2000 FDMA/TDMA (DECT). The present document also covers the corresponding ancillary equipment. NOTE 1: ETSI EN 301 908-10 [i.7] contains in particular requirements for radiated spurious emissions and control and monitoring functions applicable to IMT-2000 FDMA/TDMA (DECT) equipment. The present document includes

technical requirements which are common to equipment falling within the scope of several of the other parts. It should be used in conjunction with at least another part of ETSI EN 301 908 [i.8]. NOTE 2: The other parts of ETSI EN 301 908 [i.8], which are listed in the foreword of the present document, specify technical requirements in respect of a particular type of IMT equipment. NOTE 3: Recommendations ITU-R M.1457-15 [i.4], M.2012-4 [i.5] and M.2150.0 [i.10] define the characteristics of the members of the IMT-2000 family and IMT-Advanced respectively by means of references to technical specifications developed by Standards Development organizations. The present document applies to equipment designed to meet any version of the terrestrial specifications referenced in Recommendations ITU-R M.1457-15 [i.4] and M.2012-4 [i.5]. 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 4: The relationship between the present document and essential requirements of article 3.2 of Directive 2014/53/EU [i.1] is given in annex A.

### **SIST EN IEC 62496-2-5:2023**

**2023-03** (po) (en) **23 str. (F)**

Plošče z optičnimi vezji - Osnovni preskusni in merilni postopki - 2-5. del: Preskušanje upogljivosti za zvižava optoelektrična vezja (IEC 62496-2-5:2022)

*Optical circuit boards - Basic test and measurement procedures - Part 2-5: Flexibility test for flexible optoelectric circuits (IEC 62496-2-5:2022)*

Osnova: EN IEC 62496-2-5:2023

ICS: 33.180.01, 31.180

This part of IEC 62496-2 defines a test method for folding flexibility inspection of flexible opto-electric circuits with a MIT folding endurance tester and presents a guideline for a step stress test method for finding the predetermined minimum mechanical folding radii below which the flexible opto-electric circuits can be damaged by intended folding distortion. Here, test samples are used instead of products for the flexibility test of their flexible opto-electric circuits, and the test samples have the same layer structure as the products.

### **SIST ES 201 468 V1.7.1:2023**

**2023-03** (po) (en) **34 str. (H)**

Dodatne zahteve za elektromagnetno združljivost (EMC) in odpornost telekomunikacijske opreme za povečano razpoložljivost storitve v posebnih oblikah uporabe

*Additional ElectroMagnetic Compatibility (EMC) requirements and resistibility requirements for telecommunications equipment for enhanced availability of service in specific applications*

Osnova: ETSI ES 201 468 V1.7.1 (2023-01)

ICS: 33.100.01, 33.060.99

The present document covers the emission, immunity and resistibility requirements for telecommunications equipment where higher performance is required by operators to guarantee enhanced availability of service in specific applications. The environments considered in the present document are defined in ETSI TR 101 651 [i.5] and are: • telecommunication centres (classes 1 and 2 of ETSI TR 101 651 [i.5]); • locations other than telecommunication centres (classes 3 and 4 of ETSI TR 101 651 [i.5]). Data centres and similar facilities are also considered telecommunication centres, where they are within a dedicated room with servers, storage devices and associated telecommunication equipment. Considering that all kinds of equipment are not equally important, two equipment categories and associated EMC requirements are introduced and are designated as: • level 1 (see tables in clauses 9.1.1.1 to 9.1.1.5 and 9.2.1.1 to 9.2.1.5); • level 2 (see tables in clauses 9.1.2.1 to 9.1.2.5 and 9.2.2.1 to 9.2.2.5); the latter containing the more demanding requirements. The appropriate level should be chosen by the operator considering the consequences of failure of the equipment which may lead to impaired function, loss of service, failure to meet contractual obligations or bad publicity and loss of reputation. The present document is applicable to all equipment types, examples of which are listed below: • switching equipment which includes trunk and local telephone exchanges, remote switching concentrators, international switches, telex switches and network packet switches, base station controllers, radio network controllers, network servers and gateways; • non-radio transmission equipment which includes multiplexers, line equipment and repeaters, Synchronous Digital Hierarchy (SDH), Digital Cross Connect (DXC), Asynchronous Transfer Mode (ATM) and network terminations, transmission equipment used in the access network like xDSL; • power supply equipment which

includes central power plant, end of suite power supplies, power management systems and other dedicated telecommunications network power supplies; • supervisory equipment and dedicated Operation And Maintenance (OAM) equipment; • tariff and billing equipment; • data centre equipment which includes: Storage, Processor, Server intended to be used within telecommunication network infrastructure.

**SIST ES 203 811-1 V1.1.1:2023**

**2023-03 (po) (en) 13 str. (D)**

Integrirana širokopasovna kablenska telekomunikacijska omrežja (CABLE) - Šesta generacija prenosnih sistemov za storitve interaktivne kablenske televizije - IP-kabelski modemi - 1. del: Splošno - DOCSIS® 4.0

*Integrated broadband cable telecommunication networks (CABLE) - Sixth generation transmission systems for interactive cable television services - IP cable modem - Part 1: General - DOCSIS® 4.0*

Osnova: ETSI ES 203 811-1 V1.1.1 (2022-09)

ICS: 33.060.40

The present document is part of a multi-part deliverable that defines the sixth generation of high-speed data-over-cable systems and is based on a set of specifications commonly referred to as DOCSIS 4.0 specifications. This generation of the DOCSIS specifications [i.1] to [i.5] builds upon the previous generations of DOCSIS specifications (commonly referred to as the DOCSIS 3.1 and earlier specifications), leveraging the existing Media Access Control (MAC) and Physical (PHY) layers. It includes backward compatibility for the existing PHY layers in order to enable a seamless migration to the new technology. Further, the DOCSIS 4.0 specifications introduce Full Duplex (FDX) DOCSIS PHY layer technology as an expansion of the OFDM PHY layer introduced in the DOCSIS 3.1 PHY specification to increase upstream capacity without significant loss of downstream capacity versus DOCSIS 3.1. The DOCSIS 4.0 specification also builds upon DOCSIS 3.1 OFDM and OFDMA technology with an extended Frequency Division Duplex (FDD) DOCSIS alternative. DOCSIS 4.0 FDD supports legacy high split and also provides extended splits up to 684 MHz in an operational band plan which is referred to as Ultra-High Split (UHS). DOCSIS 4.0 FDD also introduces expansion of usable downstream spectrum up to 1 794 MHz. Both the FDX and FDD DOCSIS 4.0 alternatives are based on OFDM PHY. The DOCSIS 4.0 specifications also define appropriate updates to the MAC and management layers to support new PHY functionality.

**SIST ES 203 811-2 V1.1.1:2023**

**2023-03 (po) (en) 8 str. (B)**

Integrirana širokopasovna kablenska telekomunikacijska omrežja (CABLE) - Šesta generacija prenosnih sistemov za storitve interaktivne kablenske televizije - IP-kabelski modemi - 2. del: Fizična plast - DOCSIS® 4.0 [ANSI/SCTE 262-1 2020]

*Integrated broadband cable telecommunication networks (CABLE) - Sixth generation transmission systems for interactive cable television services - IP cable modem - Part 2: Physical layer - DOCSIS® 4.0 [ANSI/SCTE 262-1 2020]*

Osnova: ETSI ES 203 811-2 V1.1.1 (2022-09)

ICS: 33.060.40

The present document provides the ETSI endorsement of ANSI/SCTE standard ANSI/SCTE 262-1 [1]. ANSI/SCTE 262-1 [1] is part of a series of standards that defines the sixth generation of high-speed data-over-cable systems and is based on a set of specifications commonly referred to as DOCSIS 4.0 specifications. This generation of the DOCSIS specifications builds upon the previous generations of DOCSIS specifications (commonly referred to as the DOCSIS 3.1 and earlier specifications), leveraging the existing Media Access Control (MAC) and Physical (PHY) layers. It includes backward compatibility for the existing PHY layers in order to enable a seamless migration to the new technology. Further, the DOCSIS 4.0 specifications introduce Full Duplex (FDX) DOCSIS PHY layer technology as an expansion of the OFDM PHY layer introduced in the DOCSIS 3.1 PHY specification to increase upstream capacity without significant loss of downstream capacity versus DOCSIS 3.1. The DOCSIS 4.0 specification also builds upon DOCSIS 3.1 OFDM and OFDMA technology with an extended Frequency Division Duplex (FDD) DOCSIS alternative. DOCSIS 4.0 FDD supports legacy high split and also provides extended splits up to 684 MHz in an operational band plan which is referred to as Ultra-High Split (UHS). DOCSIS 4.0 FDD also introduces expansion of usable downstream spectrum up to 1 794 MHz. Both the FDX and



FDD DOCSIS 4.0 alternatives are based on OFDM PHY. There are differences in the cable spectrum planning practices adopted for different networks in the world. For the OFDM PHY layer defined in the present document, there is flexibility to deploy the technology in any spectrum plan; therefore, no special accommodation for different regions of the world is required for this PHY layer. However, due to the inclusion of the DOCSIS 3.0 PHY layers for backward compatibility purposes, there is still a need for different region-specific physical layer technologies. Therefore, three options for physical layer technologies are included in the present document, which have equal priority and are not required to be interoperable. One technology option is based on the downstream channel identification plan that is deployed in North America using 6 MHz spacing. The second technology option is based on the corresponding European multi-program television distribution. The third technology option is based on the corresponding Chinese multi-program television distribution. All three options have the same status, notwithstanding that the document structure does not reflect this equal priority. The first of these options is defined in clauses 5 and 6 of [i.1], whereas the second is defined by replacing the content of those clauses with the content of Annex C of [i.2]. The third is defined by replacing the content of those clauses with the content of Annex D of [i.2]. Correspondingly, [13] and [i.3] apply only to the first option, and [4] applies to the second and third. Compliance with the present document requires compliance with one of these implementations, but not with all three. It is not required that equipment built to one option interoperates with equipment built to the other. Compliance with frequency planning and EMC requirements is not covered by the present document and remains the operators' responsibility. In this respect, [10] and [11] are relevant to the USA; [3] and [i.4] to Canada; [i.6], [5], [6], [7], [8] and [9] are relevant to the European Union; [12] and [i.5] are relevant to China. ANSI/SCTE 262-1 [1] defines the interface for the physical layer, and corresponds to the CableLabs specification CM-SP-PHYv4.0-I02-200429 [i.1].

**SIST ES 203 811-3 V1.1.1:2023**

**2023-03** (po) (en) **7 str. (B)**

Integrirana širokopasovna kablenska telekomunikacijska omrežja (CABLE) - Šesta generacija prenosnih sistemov za storitve interaktivne kablenske televizije - IP-kablenski modemi - 3. del: MAC in vmesnik protokola zgornje plasti - DOCSIS® 4.0 [ANSI/SCTE 262-2 2020]

*Integrated broadband cable telecommunication networks (CABLE) - Sixth generation transmission systems for interactive cable television services - IP cable modem - Part 3: MAC and upper layer protocol interfaces - DOCSIS® 4.0 [ANSI/SCTE 262-2 2020]*

Osnova: ETSI ES 203 811-3 V1.1.1 (2022-09)

ICS: 33.060.40

The present document provides the ETSI endorsement of ANSI/SCTE standard ANSI/SCTE 262-2 [1]. ANSI/SCTE 262-2 [1] is part of a series of standards that defines the sixth generation of high-speed data-over-cable systems and is based on a set of specifications commonly referred to as DOCSIS 4.0 specifications. This generation of the DOCSIS specifications builds upon the previous generations of DOCSIS specifications (commonly referred to as the DOCSIS 3.1 and earlier specifications), leveraging the existing Media Access Control (MAC) and Physical (PHY) layers with the addition of appropriate updates to the MAC and management layers to support new PHY functionality. It includes backward compatibility for the existing PHY layers in order to enable a seamless migration to the new technology. ANSI/SCTE 262-2 [1] defines the interface for the MAC and upper layer protocols, and corresponds to the CableLabs specification CM-SP-MULPIv4.0-I01-190815 [i.1].

**SIST ES 203 811-4 V1.1.1:2023**

**2023-03** (po) (en) **7 str. (B)**

Integrirana širokopasovna kablenska telekomunikacijska omrežja (CABLE) - Šesta generacija prenosnih sistemov za storitve interaktivne kablenske televizije - IP-kablenski modemi - 4. del: Sistemski vmesnik za podporo delovanju kablenskih modemov - DOCSIS® 4.0 [ANSI/SCTE 262-3 2020]

*Integrated broadband cable telecommunication networks (CABLE) - Sixth generation transmission systems for interactive cable television services - IP cable modem - Part 4: Cable modem operations support system interface - DOCSIS® 4.0 [ANSI/SCTE 262-3 2020]*

Osnova: ETSI ES 203 811-4 V1.1.1 (2022-09)

ICS: 33.060.40

The present document provides the ETSI endorsement of ANSI/SCTE standard ANSI/SCTE 262-3 [1]. ANSI/SCTE 262-3 [1] is part of a series of standards that defines the sixth generation of high-speed

data-over-cable systems and is based on a set of specifications commonly referred to as DOCSIS 4.0 specifications. This generation of the DOCSIS specifications builds upon the previous generations of DOCSIS specifications (commonly referred to as the DOCSIS 3.1 and earlier specifications), leveraging the existing Media Access Control (MAC) and Physical (PHY) layers with the addition of appropriate updates to the MAC and management layers to support new PHY functionality. It includes backward compatibility for the existing PHY layers in order to enable a seamless migration to the new technology. ANSI/SCTE 262-3 [1] defines the interface of the operations support system for the cable modem, and corresponds to the CableLabs specification CM-SP-CM-OSSiv4.0-I02-200311 [i.1].

**SIST ES 203 811-5 V1.1.1:2023**

**2023-03 (po) (en) 7 str. (B)**

Integrirana širokopasovna kablenska telekomunikacijska omrežja (CABLE) - Šesta generacija prenosnih sistemov za storitve interaktivne kablenske televizije - IP-kablanski modemi - 5. del: Sistemski vmesnik za podporo delovanju platforme za združen kablanski dostop (CCAP) - DOCSIS® 4.0 [ANSI/SCTE 262-4 2020]

*Integrated broadband cable telecommunication networks (CABLE) - Sixth generation transmission systems for interactive cable television services - IP cable modem - Part 5: Converged Cable Access Platform (CCAP) operations support system interface - DOCSIS® 4.0 [ANSI/SCTE 262-4 2020]*

Osnova: ETSI ES 203 811-5 V1.1.1 (2022-09)

ICS: 33.060.40

The present document provides the ETSI endorsement of ANSI/SCTE standard ANSI/SCTE 262-4 [1]. ANSI/SCTE 262-4 [1] is part of a series of standards that defines the sixth generation of high-speed data-over-cable systems and is based on a set of specifications commonly referred to as DOCSIS 4.0 specifications. This generation of the DOCSIS specifications builds upon the previous generations of DOCSIS specifications (commonly referred to as the DOCSIS 3.1 and earlier specifications), leveraging the existing Media Access Control (MAC) and Physical (PHY) layers with the addition of appropriate updates to the MAC and management layer to support new PHY functionality. It includes backward compatibility for the existing PHY layers in order to enable a seamless migration to the new technology. ANSI/SCTE 262-4 [1] defines the requirements necessary for the configuration, fault management and performance management of Cable Modem Termination Systems (CMTS) and the Converged Cable Access Platform (CCAP) system. The intent of the standard is to define a common, cross-vendor set of functionality for the configuration and management of CMTSs and CCAPs. The present document defines a standard configuration information model for the configuration of the CCAP. The present document also defines the SNMP management requirements for a CCAP. These SNMP requirements include both protocol conformance and management object definitions, based largely upon existing industry standard management objects found in DOCSIS CMTSs and universal EQAMs. In addition, The present document defines the standard event messaging requirements of a CCAP system. ANSI/SCTE 262-4 [1] corresponds to the CableLabs specification CM-SP-CCAP-OSSiv4.0-I02-200311 [i.1].

**SIST ES 203 811-6 V1.1.1:2023**

**2023-03 (po) (en) 7 str. (B)**

Integrirana širokopasovna kablenska telekomunikacijska omrežja (CABLE) - Šesta generacija prenosnih sistemov za storitve interaktivne kablenske televizije - IP-kablanski modemi - 6. del: Varnost - DOCSIS® 4.0 [ANSI/SCTE 262-5 2020]

*Integrated broadband cable telecommunication networks (CABLE) - Sixth generation transmission systems for interactive cable television services - IP cable modem - Part 6: Security - DOCSIS® 4.0 [ANSI/SCTE 262-5 2020]*

Osnova: ETSI ES 203 811-6 V1.1.1 (2022-09)

ICS: 33.060.40

The present document provides the ETSI endorsement of ANSI/SCTE standard ANSI/SCTE 262-5 [1]. ANSI/SCTE 262-5 [1] is part of a series of standards that defines the sixth generation of high-speed data-over-cable systems and is based on a set of specifications commonly referred to as DOCSIS 4.0 specifications. This generation of the DOCSIS specifications builds upon the previous generations of DOCSIS specifications (commonly referred to as the DOCSIS 3.1 and earlier specifications), leveraging the existing Media Access Control (MAC) and Physical (PHY) layers with the addition of appropriate updates to the MAC and management layer to support new PHY functionality. It includes backward

compatibility for the existing PHY layers in order to enable a seamless migration to the new technology. ANSI/SCTE 262-5 [1] defines the security requirements, and corresponds to the CableLabs specification CM-SP-SECv4.0-I01-190815 [i.1].

## SIST/TC NES Nevarne snovi

### SIST-TS CEN/TS 17459:2023

**2023-03** (po) (en;fr;de) **22 str. (F)**

Gradbeni proizvodi - Ocenjevanje sproščanja nevarnih snovi - Določanje ekotoksičnosti izlužkov gradbenih proizvodov

*Construction products - Assessment of release of dangerous substances - Determination of ecotoxicity of construction product eluates*

Osnova: CEN/TS 17459:2022

ICS: 13.020.99, 91.100.01

(1) This document specifies a test procedure that combines horizontal leaching tests with ecotoxicity tests for the assessment of eluates of the construction products specified in this scope subjected to wet conditions in outdoor use.

(2) The method specified in this document is intended for the determination of the potential ecotoxicity of eluates extracted out of construction products containing constitutional organic components of main categories of product matrices P (plastics and rubbers), A (sealants and adhesives) or C (paints and coatings) according to CEN/TR 16045.

(3) Construction products mainly made of inorganic materials: main categories of product matrices S (silica-based and calcareous products) and M (metals) according to CEN/TR 16045 are excluded, unless

- the liquid or paste product hardens in direct contact with soil or groundwater and

- the used binder contains > 50 % organics by mass.

NOTE 1 This exception mainly refers to products used for soil injection and stabilization, e.g. grouts.

Also, the method is not intended for construction products made of treated or untreated solid wood in main category of product matrix W (wood-based products) according to CEN/TR 16045. For engineered bio-based products the test procedure can be of interest.

(4) This document is not applicable for the assessment of terrestrial ecotoxicity of construction products.

NOTE 2 Terrestrial ecotoxicity tests for construction products are described in CEN/TR 17105.

## SIST/TC NTF Oskrba z električno energijo

### SIST EN 50160:2023

SIST EN 50160:2011

SIST EN 50160:2011/A1:2015

SIST EN 50160:2011/A2:2019

SIST EN 50160:2011/A3:2019

SIST EN 50160:2011/AC:2013

**2023-03** (po) (en) **53 str. (J)**

Značilnosti napetosti v javnih razdelilnih omrežjih

*Voltage characteristics of electricity supplied by public distribution networks*

Osnova: EN 50160:2022

ICS: 29.240.01

#### 1.1 Scope

This document specifies the main characteristics of the voltage at a network user's supply terminals in public low voltage, medium, high, and extra-high voltage AC electricity networks under normal operating conditions. This document specifies the limits or values within which the voltage characteristics can be expected to remain at any supply terminal in public European electricity networks, only.

NOTE 1 If non-public networks (e.g. residential quarters, energy communities, office centres, shopping centres) have similar end-users as public networks, it is strongly advised to apply the same requirements as for public networks.

NOTE 2 Industrial networks are excluded from the scope of EN 50160, only the connection to the supply terminals of the public network is relevant, here.

This document does not apply under abnormal operating conditions, including the following:

- a) a temporary supply arrangement to keep network users supplied during conditions arising as a result of a fault, maintenance and construction work, or to minimize the extent and duration of a loss of supply.
- b) in the case of non-compliance of a network user's installation or equipment with the relevant standards or with the technical requirements for connection, established either by the public authorities or the network operator, including the limits for the emission of conducted disturbances.

NOTE 4 A network user's installation can include load and generation.

- c) in exceptional situations, in particular:
  - 1) exceptional weather conditions and other natural disasters;
  - 2) third party interference;
  - 3) acts by public authorities,
  - 4) industrial actions (subject to legal requirements);
  - 5) force majeure;
  - 6) power shortages resulting from external events.

The voltage characteristics given in this document refer to conducted disturbances in public electric power networks. They are not intended to be used as electromagnetic compatibility (EMC) levels or product emission limits.

Power quality is related to EMC in several ways – especially because compliance with power quality requirements depends on the control of cumulative effect of electromagnetic emissions from all/multiple equipment and/or installations. Therefore, the voltage characteristics given in this document gives guidance for specifying requirements in equipment product standards and in installation standards.

NOTE 5 The performance of equipment might be impaired if it is subjected to supply conditions which are not specified in the equipment product standard.

NOTE 6 This document can be superseded in total or in part by the terms of a contract between the individual network user and the network operator.

NOTE 7 The sharing of complaint management and problem mitigation costs between the involved parties is outside the scope of EN 50160.

Measurement methods to be applied in this document are described in EN 61000 4 30.

## 1.2 Object

The object of this document is to define, describe and specify the characteristics of the supply voltage concerning:

- a) Frequency;
- b) Magnitude;
- c) Waveform;
- d) Symmetry of the line voltages.

This document also covers the continuous characteristics of the supply voltage and other foreseeable phenomena which may influence the voltage characteristics, such as e.g. operational communication, monitoring or measurement signals which are transmitted via power lines.

These characteristics are subject to variations during the normal operation of a supply system due to changes of load, disturbances generated by certain equipment and the occurrence of faults which are mainly caused by external events.

The characteristics vary in a manner which is random in time, with reference to any specific supply terminal, and random in location, with reference to any given instant of time. Because of these variations, the values given in this document for the characteristics can be expected to be exceeded on a small number of occasions.

[...]

## SIST/TC OGS Ogrevanje, hlajenje in prezračevanje stavb

**SIST EN 15218:2023**

SIST EN 15218:2014

**2023-03**

**(po)**

**(en;fr;de)**

**18 str. (E)**

Klimatske naprave in enote za tekočinsko hlajenje s kondenzatorjem, ohlajenim z izhlapevanjem, in električnimi kompresorji za hlajenje prostora - Izrazi, definicije, preskusni pogoji, preskusne metode in zahteve

*Air conditioners and liquid chilling packages with evaporatively cooled condenser and with electrically driven compressors for space cooling - Terms, definitions, test conditions, test methods and requirements*

Osnova: EN 15218:2022

ICS: 23.120, 91.140.30

This document specifies the terms, definitions, test conditions, test methods and requirements for rating the performance of air conditioners and liquid chilling packages, with electrically driven compressors and with evaporatively cooled condenser when used for space cooling. The evaporatively cooled condenser is cooled by air and by the evaporation of external additional water. This additional external water is fed by a specific water supply circuit or by a water tank.

This document does not apply to air-to-air and air-to-water air conditioners with a condenser cooled by air and by the evaporation of water condensed on their evaporator.

This document applies to units equipped with a water tank or with a continuous water circuit supply that can also operate without water feeding. However, this document only concerns the testing of these units with water feeding.

This document applies to factory-made units which can be ducted.

This document applies to factory-made units of either fixed capacity or variable capacity by any means. Packaged units, single split and multisplit systems are covered by this document.

With regard to units consisting of several parts, this document applies only to those designed and supplied as a complete package.

For evaporatively cooled condenser units that can also operate in heating mode, their performance in this mode is determined according to EN 14511 (all parts).

Installations used for industrial processes cooling are not within the scope of this document.

This document specifies the conditions for which performance data will be declared for compliance to the Ecodesign Regulation 206/2012 and to the Energy Labelling Regulation 626/2011 of air conditioners with evaporatively cooled condenser in cooling mode.

NOTE All the symbols given in this text can be used regardless of language.

**SIST EN 16147:2017+A1:2023**

SIST EN 16147:2017

SIST EN 16147:2017/kFprA1:2021

**2023-03**

**(po)**

**(en;fr;de)**

**57 str. (J)**

Toplotne črpalke z električnimi kompresorji - Preskušanje, vrednotenje lastnosti in zahteve za označevanje naprav za pripravo tople sanitarne vode (vključuje dopolnilo A1)

*Heat pumps with electrically driven compressors - Testing, performance rating and requirements for marking of domestic hot water units*

Osnova: EN 16147:2017+A1:2022

ICS: 91.140.65, 23.140, 27.080

This European Standard specifies methods for testing, rating of performance and calculation of water heating energy efficiency of air/water, brine/water, water/water and direct exchange/water heat pump water heaters and heat pump combination heaters with electrically driven compressors and connected to or including a domestic hot water storage tank for domestic hot water production.

This European Standard comprises only the testing procedure for the domestic hot water production of the heat pump system.

NOTE 1 Testing procedures for simultaneous operation for domestic hot water production and space heating are not treated in this standard. Simultaneous means that domestic hot water production and space heating generation occur at the same time and may interact.

NOTE 2 For heat pump combination heaters the seasonal efficiency of space heating is determined according to EN 14825.

This European Standard only applies to water heaters which are supplied in a package of heat pump and storage tank. In the case of water heaters consisting of several parts with refrigerant connections, this European Standard applies only to those designed and supplied as a complete package. This European Standard does not specify requirements of the quality of the used water.

**SIST EN 16510-1:2023**

SIST EN 12809:2003/A1:2005  
 SIST EN 12809:2003/A1:2005/AC:2006  
 SIST EN 12809:2003/A1:2005/AC:2008  
 SIST EN 12809:2003/AC:2004  
 SIST EN 12809:2003/AC:2006  
 SIST EN 12815:2003/A1:2005  
 SIST EN 12815:2003/A1:2005/AC:2006  
 SIST EN 12815:2003/A1:2005/AC:2008  
 SIST EN 12815:2003/AC:2004  
 SIST EN 12815:2003/AC:2006  
 SIST EN 13229:2003/A1:2004  
 SIST EN 13229:2003/A2:2005  
 SIST EN 13229:2003/A2:2005/AC:2006  
 SIST EN 13229:2003/A2:2005/AC:2008  
 SIST EN 13229:2003/AC:2004  
 SIST EN 13229:2003/AC:2006  
 SIST EN 13240:2003/A2:2005  
 SIST EN 13240:2003/A2:2005/AC:2006  
 SIST EN 13240:2003/A2:2005/AC:2008  
 SIST EN 13240:2003/AC:2004  
 SIST EN 13240:2003/AC:2006  
 SIST EN 12809:2003  
 SIST EN 12815:2003  
 SIST EN 13229:2003  
 SIST EN 13240:2003  
 SIST EN 16510-1:2018

**2023-03 (po) (en;fr;de) 164 str. (P)**

Grelne naprave na trdna goriva za stanovanjske stavbe - 1. del: Splošne zahteve in preskusne metode  
*Residential solid fuel burning appliances - Part 1: General requirements and test methods*

Osnova: EN 16510-1:2022

ICS: 97.100.30

This European Standard is applicable to residential solid fuel burning appliances.

This European Standard specifies requirements relating to the design, manufacture, construction, safety and performance (efficiency and emission) of appliances fired by solid fuel (hereafter referred to as appliance(s)) and provides instructions for them. Furthermore, it also gives provisions for the evaluation of conformity i.e. initial type testing (ITT) and factory production control (FPC) and marking of these appliances.

This European Standard also covers CO, NO<sub>x</sub>, OGC and particulate matter (PM / PME - see Annex F) emission test methods, however this European Standard does not contain any values for the limit on these emissions.

Appliances receiving combustion air through ductwork from outside the external envelope, which is not air tight, are not considered roomsealed. This European Standard is not applicable to appliances with boiler parts in contact with fire or flue gases other than when the boiler parts are manufactured from steel or cast iron.

This European Standard is not applicable to appliances with a boiler intended for water systems having  
 - water temperatures above 110 °C and/or an operating pressure of more than 3 bar;  
 - direct contact with sanitary hot water.

This European Standard does not cover appliances to be operated with ventilating systems which are intended to operate with pressure below - 15 Pa in the room of installation of the appliance in relation to the outside atmosphere.

This European Standard does not cover appliances intended to carry the load of a chimney.

**SIST EN 16510-2-1:2023**

SIST EN 13240:2003  
 SIST EN 13240:2003/A2:2005  
 SIST EN 13240:2003/A2:2005/AC:2006  
 SIST EN 13240:2003/A2:2005/AC:2008  
 SIST EN 13240:2003/AC:2004  
 SIST EN 13240:2003/AC:2006

**2023-03** (po) (en;fr;de) **29 str. (G)**

Grelne naprave na trdna goriva za stanovanjske stavbe - 2-1. del: Grelniki prostorov

*Residential solid fuel burning appliances - Part 2-1: Roomheaters*

Osnova: EN 16510-2-1:2022

ICS: 97.100.30

This Part 2-1 of EN 16510 is applicable to freestanding or inset roomheaters fired by solid fuel, without functional modification that operate with fire doors either as closed only or as closed or open.

The appliances covered by this Part 2-1 of EN 16510 provide heat into the space where they are installed. Additionally, where fitted with a boiler, they also provide domestic hot water and/or central heating. These appliances may burn one or more types of the following solid fuels in accordance with the appliance manufacturer's instructions: .

- wood logs
- compressed untreated wood
- wood pellets
- solid mineral fuels
- peat briquettes.

This Part 2-1 of EN 16510 is not applicable to appliances with fan assisted combustion air or appliances that are mechanically fed.

This Part 2-1 of EN 16510 is to be used in conjunction with EN 16510-1 of which it is an integral part.

**SIST EN 16510-2-2:2023**

SIST EN 13229:2003  
 SIST EN 13229:2003/A1:2004  
 SIST EN 13229:2003/A2:2005  
 SIST EN 13229:2003/A2:2005/AC:2006  
 SIST EN 13229:2003/A2:2005/AC:2008  
 SIST EN 13229:2003/AC:2004  
 SIST EN 13229:2003/AC:2006

**2023-03** (po) (en;fr;de) **42 str. (I)**

Grelne naprave na trdna goriva za stanovanjske stavbe - 2-2. del: Kaminski vložki, vključno odprti kamini na trdna goriva

*Residential solid fuel burning appliances - Part 2-2: Inset appliances including open fires*

Osnova: EN 16510-2-2:2022

ICS: 97.100.30

This Part 2-2 of EN 16510 is applicable to hand fed solid fuel fired inset appliances, with or without functional modification, that operate without fire doors or operate with fire doors either as closed only or as closed or open, and also includes open fires fired by solid fuel. The surround of these appliances are integrated with the building with the exception of free-standing appliances and those inset appliances which are installed into a fireplace recess or enclosure. These appliances provide heat into the space where they are installed. Additionally, where fitted with a boiler, they also provide domestic hot water and/or central heating.

These appliances may burn either solid mineral fuels, peat briquettes, natural or manufactured wood logs or be multi-fuel in accordance with the appliance manufacturer's instructions.

This Part 2-2 of EN 16510 also covers 'Kachelofen' and 'Putzofen' inset appliances, having nominal heat outputs up to 15 kW. pr EN 16510-1

This Part 2-2 of EN 16510 is not applicable to appliances with fan assisted combustion air or appliances that are mechanically fed.

Open fireplace components such as a bottom grate with associated firefront which the manufacturer supplies for installation into an existing heat resistant, insulated firebox are not covered by this Part 2-2 of EN 16510.

This Part 2-2 of EN 16510 is to be used in conjunction with EN 16510-1 of which it is an integral part.

**SIST EN 16510-2-3:2023**

SIST EN 12815:2003  
 SIST EN 12815:2003/A1:2005  
 SIST EN 12815:2003/A1:2005/AC:2006  
 SIST EN 12815:2003/A1:2005/AC:2008  
 SIST EN 12815:2003/AC:2004  
 SIST EN 12815:2003/AC:2006

**2023-03** (po) (en;fr;de) **41 str. (I)**

Grelne naprave na trdna goriva za stanovanjske stavbe - 2-3. del: Štedilniki

*Residential solid fuel burning appliances - Part 2-3: Cookers*

Osnova: EN 16510-2-3:2022

ICS: 97.100.30, 97.040.20

This Part 2-3 of EN 16510 is applicable to hand fired residential cookers whose primary function is to cook and whose secondary function is to provide heat into the space in which they are installed. Additionally, where fitted with a boiler, they also provide domestic hot water and/or central heating. These appliances may burn one or more types of the following solid fuels in accordance with the appliance manufacturer's instructions:

- wood logs
- compressed untreated wood
- wood pellets
- solid mineral fuels
- peat briquettes.

This Part 2-3 of EN 16510 is not applicable to appliances with fan assisted combustion air or appliances that are mechanically fired.

This Part 2-3 of EN 16510 is to be used in conjunction with EN 16510-1 of which it is an integral part.

**SIST EN 16510-2-4:2023**

SIST EN 12809:2003  
 SIST EN 12809:2003/A1:2005  
 SIST EN 12809:2003/A1:2005/AC:2006  
 SIST EN 12809:2003/A1:2005/AC:2008  
 SIST EN 12809:2003/AC:2004  
 SIST EN 12809:2003/AC:2006

**2023-03** (po) (en;fr;de) **33 str. (H)**

Grelne naprave na trdna goriva za stanovanjske stavbe - 2-4. del: Grelni kotli - Nazivna grelna moč do 50 kW

*Residential solid fuel burning appliances - Part 2-4: Independent boilers - Nominal heat output up to 50 kW*

Osnova: EN 16510-2-4:2022

ICS: 97.100.30

This Part 2-4 of EN 16510 is applicable to hand and automatically fired residential independent boilers having nominal heat outputs up to 50 kW, the primary function of which is to provide hot water for central heating and/or domestic use, and which are designed for use only with open vented systems at a working pressure not exceeding 2 bar. In addition to their primary function of providing hot water these appliances also provide space heating to the place of installation.

The appliances covered by this Part 2-4 of EN 16510 may burn one or more types of the following solid fuels in accordance with the appliance manufacturer's instructions: .

- ☒ wood logs
- ☒ compressed untreated wood
- ☒ wood pellets
- ☒ solid mineral fuels
- ☒ peat briquettes.

This Part 2-4 of EN 16510 is not applicable to independent boilers for hot water only production and having heat outputs of less than 5 kW.

This Part 2-4 of EN 16510 is also not applicable to the design and construction of automatic stoking devices.

This Part 2-4 of EN 16510 is to be used in conjunction with EN 16510-1 of which it is an integral part.



**SIST EN 16510-2-6:2023**

SIST EN 13240:2003  
 SIST EN 13240:2003/A2:2005  
 SIST EN 13240:2003/A2:2005/AC:2008  
 SIST EN 13240:2003/AC:2006  
 SIST EN 14785:2006

**2023-03** (po) (en;fr;de) **42 str. (I)**

Grelne naprave na trdna goriva za stanovanjske stavbe - 2-6. del: Grelniki prostorov, kaminski vložki in štedilniki z mehanskim dodajanjem lesnih peletov

*Residential solid fuel burning appliances - Part 2-6: Mechanically by wood pellets fed roomheaters, inset appliances and cookers*

Osnova: EN 16510-2-6:2022

ICS: 97.100.30

This part 2-6 of a European Standard series shall be applicable to space heaters, inset appliances and cookers fired by wood pellets, mechanically fed up to 50 kW nominal heat output. These appliances typically use auxiliary energy which is measured in this standard as well.

For inset pellet appliances and especially their testing, additional information is necessary from prEN 16510 2 2.

For pellet cookers and especially their testing, additional information is necessary from prEN 16510 2 3.

Non mechanically fed appliances burning solid mineral fuels, peat briquettes and natural or manufactured wood logs are not included in this European Standard, but are covered by prEN 16510 2 1 to prEN 16510 2 5.

NOTE These appliances may have an integral fuel hopper or be combined with an external fuel hopper.

This European Standard should be used in conjunction with prEN 16510-1.

The appliances covered by this part 2-6 provide heat into the space where they are installed. They may be operated with either natural draught or fan-assisted combustion air. Where fitted with a boiler, they can also provide domestic hot water and/or central heating. These appliances burn wood pellets only, in accordance with the appliance manufacturer's instructions. They only operate with the firedoors closed.

NOTE A fan-assisted appliance does still operate under negative pressure in the flue gas system.

This European Standard specifies requirements relating to the design, manufacture, construction, safety and performance (efficiency and emissions), instructions and marking together with associated test methods and test fuels.

This European Standard shall not be applicable to appliances:

- with boiler intended for water systems having water temperatures above 110°C and 3 bar; and
- with boiler intended for water systems having direct contact with sanitary hot water;
- intended to be used with a pure horizontal exhaust (through the building wall);
- with flue gas condensation in the appliance;
- switching on / off for part load operation.

## SIST/TC PIP Pigmenti in polnila

**SIST EN ISO 18314-2:2023**

SIST EN ISO 18314-2:2018

**2023-03** (po) (en;fr;de) **25 str. (F)**

Analizna kolorimetrija - 2. del: Saundersonova korekcija, rešitve Kubelka-Munkove enačbe, barvna jakost, globina barve in kritnost (ISO 18314-2:2023)

*Analytical colorimetry - Part 2: Saunderson correction, solutions of the Kubelka-Munk equation, tinting strength, depth of shade, hiding power (ISO 18314-2:2023)*

Osnova: EN ISO 18314-2:2023

ICS: 17.180.20, 87.060.10

This document specifies the Saunderson correction for different measurement geometries and the solutions of the Kubelka-Munk equation for hiding and transparent layers. It also specifies methods for the calculations of the tinting strength including the residual colour difference based on different criteria such as the depth of shade. Finally, methods for determining the hiding power are provided. The procedures for preparing the samples for these measurements are not part of this document. They are agreed between the contracting parties or are described in other national or international standards.

**SIST EN ISO 3262-6:2023**

SIST EN ISO 3262-6:1998

**2023-03** (po) (en;fr;de) **11 str. (C)**

Polnila - Specifikacije in metode preskušanja - 6. del: Oborjeni kalcijev karbonat (ISO 3262-6:2022)  
*Extenders - Specifications and methods of test - Part 6: Precipitated calcium carbonate (ISO 3262-6:2022)*

Osnova: EN ISO 3262-6:2022

ICS: 87.060.10

This document specifies requirements and corresponding methods of test for precipitated calcium carbonate.

## SIST/TC PLN Plinske naprave za dom

**SIST EN 16905-5:2023**

SIST EN 16905-5:2018

**2023-03** (po) (en;fr;de) **52 str. (J)**

Toplotna črpalka s plinsko gnanim motorjem z notranjim zgorevanjem - 5. del: Izračun sezonske zmogljivosti za ogrevanje in hlajenje  
*Gas-fired endothermic engine driven heat pumps - Part 5: Calculation of seasonal performances in heating and cooling mode*

Osnova: EN 16905-5:2022

ICS: 27.080

This part of the FprEN 16905 series specifies the calculation of seasonal performance factor for gas-fired endothermic engine driven heat pumps for heating and/or cooling mode including the engine heat recovery.

**SIST EN 1854:2023**

SIST EN 1854:2010

**2023-03** (po) (en) **59 str. (J)**

Varnostne in nadzorne naprave za gorilnike in aparate na plin in/ali tekoča goriva - Tlačna zaznavala za plinske gorilnike in plinske aparate  
*Safety and control devices for burners and appliances burning gaseous and/or liquid fuels – Pressure sensing devices for gas burners and gas burning appliances*

Osnova: EN 1854:2022

ICS: 27.060.20, 23.060.40

This European Standard specifies the safety, design, construction, and performance requirements and testing of pressure sensing devices for burners and appliances burning one or more gaseous fuels. It applies to pressure sensing devices for the measurement of pressures of gases according to EN 437 or air or combustion products for maximum inlet pressures up to 500 kPa (5 bar). It applies to all types of pressure sensing devices, including electronic, differential and inferential types. It also specifies requirements for pressure sensing devices which are intended to be applied to steam boilers and as such need to meet increased reliability requirements. These devices are classified as PSD-S in this European Standard.

## SIST/TC POZ Požarna varnost

**SIST EN 13501-6:2019+A1:2023**

SIST EN 13501-6:2019

SIST EN 13501-6:2019/kprA1:2022

**2023-03 (po) (en;fr;de) 31 str. (G)**

Požarna klasifikacija gradbenih proizvodov in elementov stavb - 6. del: Klasifikacija po podatkih iz preskusov odziva na ogenj na električnih, krmilnih in komunikacijskih kablji (vključno z dopolnilom A1)  
*Fire classification of construction products and building elements - Part 6: Classification using data from reaction to fire tests on power, control and communication cables*

Osnova: EN 13501-6:2018+A1:2022

ICS: 29.060.20, 13.220.50

This document provides the reaction to fire classification procedure for electric cables.

NOTE For the purpose of this document, the term "electric cables" covers all power, control and communication cables, including optical fibre cables.

## SIST/TC SKA Stikalni in krmilni aparati

**SIST EN IEC 60947-1:2021/AC:2023**

**2023-03 (po) (en,fr) 4 str. (AC)**

Nizkonapetostne stikalne in krmilne naprave - 1. del: Splošna pravila - Popravek AC (IEC 60947-1:2020/COR1:2022)

*Low-voltage switchgear and controlgear - Part 1: General rules (IEC 60947-1:2020/COR1:2022)*

Osnova: EN IEC 60947-1:2021/AC:2023-01

ICS: 29.130.20

This document applies, when required by the relevant product standard, to low-voltage switchgear and controlgear hereinafter referred to as "equipment" or "device" and intended to be connected to circuits, the rated voltage of which does not exceed 1 000 V AC or 1 500 V DC.

This document states the general rules and common safety requirements for low-voltage switchgear and controlgear, including:

- definitions;
- characteristics;
- information supplied with the equipment;
- normal service, mounting and transport conditions, decommissioning and dismantling;
- constructional and performance requirements;
- verification of characteristics and performance;
- energy efficiency aspects (see Annex V);
- environmental aspects.

This document does not apply to:

- low-voltage switchgear and controlgear assemblies which are dealt with in IEC 61439 series, as applicable;
- terminals for connection of aluminium conductors;

NOTE Terminals for aluminium conductors are under consideration for the next revision.

- use within explosive atmospheres (see IEC 60079 series);
- software and firmware requirements for functional safety application (see IEC 61508-3);
- cyber security aspects (see IEC 62443 series).

## SIST/TC SPN Storitve in protokoli v omrežjih

### SIST EN 300 132-3 V2.3.1:2023

2023-03 (po) (en) 31 str. (G)

Okoljski inženiring (EE) - Napajalni vmesnik na vhodu v opremo informacijske in komunikacijske tehnologije (IKT) - 3. del: Enosmerno napajanje (DC) do 400 V

*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)*

Osnova: ETSI EN 300 132-3 V2.3.1 (2023-01)

ICS: 19.040, 35.200

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;
- facilitate interworking of different loads;
- facilitate the standardization of power supply systems for ICT equipment;
- facilitate the installation, operation and maintenance in the same network of ICT equipment and systems from different origins;
- 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.

### SIST EN 303 808 V1.1.1:2023

2023-03 (po) (en) 13 str. (D)

Okoljski inženiring (EE) - Uporabnost metod v EN 45552 do EN 45559 za ocenjevanje o vidikih materialne učinkovitosti izdelkov omrežne infrastrukture IKT v okviru krožnega gospodarstva

*Environmental Engineering (EE) - Applicability of EN 45552 to EN 45559 methods for assessment of material efficiency aspects of ICT network infrastructure goods in the context of circular economy*

Osnova: ETSI EN 303 808 V1.1.1 (2023-01)

ICS: 35.110, 19.040

The present document defines an assessment of the direct applicability of the general material efficiency standards to ICT network infrastructure goods in the context of circular economy. The existing generic standards address durability;

ability to remanufacture; repair, reuse, and upgrade; recyclability and recoverability; assessment of recycled content and reused components; critical raw material content and information provision. The present document highlights where further work on metrics/KPI and measurement methodologies may be needed for ICT network infrastructure goods beyond each of the general standards. Specific product standards will take precedence over the present document. The present document is a product family standard and will not define specific product requirements.

**SIST-TS ETSI/TS 102 657 V1.29.1:2023****2023-03 (po) (en) 102 str. (N)**

Zakonito prestrežanje (LI) - Ravnanje z zadržanimi podatki - Izročilni vmesnik za zahtevo in izročanje zadržanih podatkov

*Lawful Interception (LI) - Retained data handling - Handover interface for the request and delivery of retained data*

Osnova: ETSI TS 102 657 V1.29.1 (2022-12)

ICS: 35.200, 33.040.40

The present document is based on requirements from ETSI TS 102 656 [2]. The present document contains handover requirements and a handover specification for the data that is identified in national legislations on Retained Data. The present document considers both the requesting of retained data and the delivery of the results. The present document defines an electronic interface. An informative annex describes how this interface may be adapted for manual techniques. Apart from in annex I, the present document does not consider manual techniques.

**SIST/TC SPO Šport****SIST EN ISO 23659:2023****2023-03 (po) (en;fr;de) 77 str. (L)**

Športni in rekreacijski pripomočki - Trampolinski parki - Varnostne zahteve (ISO 23659:2022)

*Sports and recreational facilities - Trampoline parks - Safety requirements (ISO 23659:2022)*

Osnova: EN ISO 23659:2022

ICS: 97.220.10

This European Standard applies to trampoline parks and their components.

This European Standard specifies safety requirements for the design, construction, inspection and maintenance of trampoline parks and their components.

This European Standard also specifies minimum operational requirements to ensure an appropriate level of safety and service when used for recreational, training, educational or therapeutic purposes.

This European Standard does not apply to

- trampolines defined as gymnastic equipment according to EN 13219:2001,
- trampolines for domestic use according to EN 7114:2014+A1:2017, and
- children's playgrounds (see EN 1176 all parts).

**SIST-TP CEN/TR 17842-1:2023****2023-03 (po) (en;fr;de) 42 str. (I)**

Oprema otroških igrišč - 1. del: Odgovori na zahteve za razlago EN 1176:2017 in njegovih delov (2018-2019)

*Playground equipment for children - Part 1: Replies to requests for interpretation of EN 1176:2017 and its parts (2018-2019)*

Osnova: CEN/TR 17842-1:2022

ICS: 97.200.40

The purpose of this document is to publish replies to requests for interpretations, to all parts of EN 1176, which have been drafted by the interpretation panel and confirmed by CEN/TC136/SC1.

## SIST/TC TRS Tehnično risanje, veličine, enote, simboli in grafični simboli

**SIST EN ISO 80000-1:2023**

SIST EN ISO 80000-1:2013

SIST ISO 80000-1:2013

**2023-03** (po) (en;fr;de) **30 str. (G)**

Veličine in enote - 1. del: Splošno (ISO 80000-1:2022)

*Quantities and units - Part 1: General (ISO 80000-1:2022)*

Osnova: EN ISO 80000-1:2022

ICS: 01.060

This document gives general information and definitions concerning quantities, systems of quantities, units, quantity and unit symbols, and coherent unit systems, especially the International System of Quantities (ISQ).

The principles laid down in this document are intended for general use within the various fields of science and technology, and as an introduction to other parts of this International Standard.

The ISO/IEC 80000 series does not, as yet, cover ordinal quantities and nominal properties.

## SIST/TC VAR Varjenje

**SIST EN 14700:2023**

SIST EN 14700:2014

**2023-03** (po) (en;fr;de) **20 str. (E)**

Dodajni in pomožni materiali za varjenje - Dodajni in pomožni materiali za trdo navarjanje

*Welding consumables - Welding consumables for hard-facing*

Osnova: EN 14700:2022

ICS: 25.160.20

This European Standard applies to welding consumables for hardfacing. The range of application includes surfaces of new structural components, semi-finished products as well as repair of surfaces of structural components which have to resist to mechanical, chemical, thermal or combined stress.

This European Standard specifies requirements for classification of the consumables based on their chemical composition of the all weld metal of covered electrodes, cored wires, cored rods, cored strips, sintered strips, sintered rods and metal powders and on the chemical composition of solid wires, solid rods, solid strips and cast rods.

**SIST EN ISO 10447:2023**

SIST EN ISO 10447:2015

**2023-03** (po) (en;fr;de) **15 str. (D)**

Uporovno varjenje - Preskušanje zvarnih spojev - Preskus luščenja in dletenja uporovnih točkovnih in bradavičnih zvarnih spojev (ISO 10447:2022)

*Resistance welding - Testing of welds - Peel and chisel testing of resistance spot and projection welds (ISO 10447:2022)*

Osnova: EN ISO 10447:2022

ICS: 25.160.40

This document specifies the procedures and recommended tooling to be used for peel and chisel testing of resistance spot and embossed projection welds. This document applies to welds made in two or more sheets in the thickness range of 0,5 mm to 3,0 mm.

The aim of these tests is to determine:

- weld size and failure mode when welds are destructively tested;
- verification of welds by non-destructive chisel tests.

**NOTE** The preferred method of peel testing seam welds (mechanized peel testing) is covered in ISO 14270.

**SIST EN ISO 12153:2023**

SIST EN ISO 12153:2012

**2023-03 (po) (en;fr;de) 16 str. (D)**

Dodajni in pomožni materiali za varjenje - Strženske žice za obločno varjenje niklja in nikljevih zlitin, v zaščitnih plinih in brez zaščite - Razvrstitev (ISO 12153:2022)

*Welding consumables - Tubular-cored electrodes for gas-shielded and non-gas-shielded metal arc welding of nickel and nickel alloys - Classification (ISO 12153:2022)*

Osnova: EN ISO 12153:2022

ICS: 77.120.40, 25.160.20

This document specifies requirements for the classification of tubular-cored electrodes for metal arc welding with or without a gas shield of nickel and nickel alloys. It includes those compositions in which the nickel content exceeds that of any other element.

**SIST EN ISO 15615:2023**

SIST EN ISO 15615:2013

**2023-03 (po) (en;fr;de) 24 str. (F)**

Oprema za plamensko varjenje - Baterije acetilenskih jeklenk za varjenje, rezanje in sorodne postopke - Varnostne zahteve za visokotlačne naprave (ISO 15615.2:2022)

*Gas welding equipment - Acetylene manifold systems for welding, cutting and allied processes - Safety requirements in high-pressure devices (ISO 15615:2022)*

Osnova: EN ISO 15615:2022

ICS: 25.160.30

This document establishes the general specifications, requirements and tests for devices located on the high-pressure side of acetylene manifold systems up to 2,5 MPa (25 bar) as defined in ISO 14114. It does not apply to high-pressure piping, high-pressure flexible hoses or pressure regulators.

**SIST EN ISO 17295:2023**

SIST EN ISO/ASTM 52921:2016

**2023-03 (po) (en;fr;de) 20 str. (E)**

Aditivna proizvodnja - Splošna načela - Pozicioniranje, koordinate in orientacija delov (ISO 17295:2023)  
*Additive manufacturing - General principles - Part positioning, coordinates and orientation (ISO 17295:2023)*

Osnova: EN ISO 17295:2023

ICS: 25.030

This document provides specifications and illustrations for the positioning and orientation of parts with regards with coordinate systems and testing methodologies for additive manufacturing (AM) technologies in an effort to standardize the method of representation used by AM users, producers, researchers, educators, press/media, and others, particularly when reporting results from testing of parts made on AM systems. Included specifications cover coordinate systems and the location and orientation of parts. It is intended to be in accordance with the principles of ISO 841 and to clarify the specific adaptation of those principles for additive manufacturing.

**SIST EN ISO 17636-1:2023**

SIST EN ISO 17636-1:2013

**2023-03 (po) (en;fr;de) 45 str. (I)**

Neporušitveno preskušanje zvarnih spojev - Radiografsko preskušanje - 1. del: Tehnike z rentgenskimi in gama žarki z uporabo filmov (ISO 17636-1:2022)

*Non-destructive testing of welds - Radiographic testing - Part 1: X- and gamma-ray techniques with film (ISO 17636-1:2022)*

Osnova: EN ISO 17636-1:2022

ICS: 25.160.40

This document specifies techniques of radiographic testing of fusion-welded joints in metallic materials using industrial radiographic film techniques with the object of enabling satisfactory and repeatable results. The techniques are based on generally recognized practice and fundamental theory of the subject.

It applies to the joints of plates and pipes in metallic materials. Besides its conventional meaning, "pipe" as used in this document covers other cylindrical bodies, such as tubes, penstocks, boiler drums and pressure vessels.

This document does not specify acceptance levels for any of the indications found on the radiographs. The ISO 10675 series provides information on acceptance levels for weld evaluation. If contracting parties apply lower test criteria, it is possible that the quality achieved will be significantly lower than when this document is strictly applied.

**SIST EN ISO 17636-2:2023**

SIST EN ISO 17636-2:2013

**2023-03 (po) (en;fr;de) 73 str. (L)**

Neporušitveno preskušanje zvarnih spojev - Radiografsko preiskovanje - 2. del: Tehnike z rentgenskimi in gama žarki z uporabo digitalnih detektorjev (ISO 17636-2:2022)

*Non-destructive testing of welds - Radiographic testing - Part 2: X- and gamma-ray techniques with digital detectors (ISO 17636-2:2022)*

Osnova: EN ISO 17636-2:2022

ICS: 25.160.40

This document specifies techniques of digital radiography with the object of enabling satisfactory and repeatable results. The techniques are based on generally recognized practice and fundamental theory of the subject.

This document applies to the digital radiographic testing of fusion welded joints in metallic materials. It applies to the joints of plates and pipes. Besides its conventional meaning, "pipe", as used in this document, covers other cylindrical bodies such as tubes, penstocks, boiler drums and pressure vessels. This document specifies the requirements for digital radiographic X- and gamma-ray testing by either computed radiography (CR) or radiography with digital detector arrays (DDAs) of the welded joints of metallic plates and tubes for the detection of imperfections. It includes manual and automated inspection with DDAs.

Digital detectors provide a digital grey value image which can be viewed and evaluated using a computer (Annex E). This document specifies the recommended procedure for detector selection and radiographic practice. Selection of computer, software, monitor, printer and viewing conditions are important, but are not the main focus of this document. The procedure specified in this document provides the minimum requirements for radiographic practice which permits exposure and acquisition of digital radiographs with equivalent sensitivity for the detection of imperfections as film radiography (specified in ISO 17636-1).

This document does not specify acceptance levels for any of the indications found on the digital radiographs. ISO 10675 provides information on acceptance levels for weld inspection.

If contracting parties apply lower test criteria, it is possible that the quality achieved will be significantly lower than when this document is strictly applied.

**SIST EN ISO 25901-2:2023**

**2023-03 (po) (en,fr,de) 86 str. (M)**

Varjenje in sorodni postopki - Slovar - 2. del: Zdravje in varnost (ISO 25901-2:2022)

*Welding and allied processes - Vocabulary - Part 2: Health and safety (ISO 25901-2:2022)*

Osnova: EN ISO 25901-2:2023

ICS: 13.100, 01.040.25, 25.160.10

This document contains terms and definitions applicable to health and safety in welding and allied processes. It is intended to be referenced in other documents dealing with this subject. In cases where such documents provide terms and definitions differing from those contained herein, the terms and definitions given in those documents apply.

In the main body of this document, terms are arranged in a systematic order. Annex A to C provide indexes in which all terms are listed alphabetically in English, French and German, with reference to the appropriate subclauses and translations of the terms in each and other languages.



**SIST EN ISO 4761:2023****2023-03 (po) (en;fr;de) 15 str. (D)**

Neporušitveno preskušanje zvarnih spojev - Ultrazvočno preskušanje s faznim krmiljenjem (UT-PA) tankostenskih jeklenih delov - Stopnje sprejemljivosti (ISO 4761:2022)

*Non-destructive testing of welds - Phased array ultrasonic testing (UT-PA) for thin-walled steel components - Acceptance levels (ISO 4761:2022)*

Osnova: EN ISO 4761:2022

ICS: 25.160.40

This document specifies acceptance levels for the phased array ultrasonic testing technique (UT-PA) of full-penetration welds in low-alloy and/or fine-grained steels in the wall thickness range from 3,2 mm to 8 mm which correspond to the quality levels of ISO 5817.

These acceptance levels are applicable to indications detected according to ISO 20601.

**SIST EN ISO 9455-1:2023**

SIST EN 29455-1:1998

**2023-03 (po) (en;fr;de) 11 str. (C)**

Talila za mehko spajkanje - Preskusne metode - 1. del: Določevanje nehlapnih snovi, gravimetrijska metoda (ISO 9455-1:2022)

*Soft soldering fluxes - Test methods - Part 1: Determination of non-volatile matter, gravimetric method (ISO 9455-1:2022)*

Osnova: EN ISO 9455-1:2022

ICS: 25.160.50

Specifies a gravimetric method for the determination of the content of non-volatile matter in soft soldering fluxes. Applies to liquid and paste fluxes of type 1, as defined in ISO 9454-1.

**SIST EN ISO 9455-6:2023**

SIST EN ISO 9455-6:2001

**2023-03 (po) (en;fr;de) 22 str. (F)**

Talila za mehko spajkanje - Preskusne metode - 6. del: Določevanje in detekcija halogenida (razen fluorida) (ISO 9455-6:2022)

*Soft soldering fluxes - Test methods - Part 6: Determination and detection of halide (excluding fluoride) content (ISO 9455-6:2022)*

Osnova: EN ISO 9455-6:2022

ICS: 25.160.50

This document specifies three quantitative methods for the determination of the ionic halide (excluding fluoride) content of soldering fluxes. Halides are calculated as chlorides. A useful qualitative test method for the detection of ionic halides is also described. Method A is a potentiometric titration method for the determination of halide (excluding fluoride) content and is applicable to flux classes 1 and 2, defined in ISO 9454-1. This method, which is considered the reference method for these fluxes, is suitable for halide contents generally within the range of 0,05 % mass fraction to 2 % mass fraction in the non-volatile matter of the flux. Method B is a titration method for the determination of the total halide (excluding fluoride) content of water-soluble fluxes. It is applicable to flux classes 2122 to 2124, 3112 to 3114 and 3212 to 3214, as defined in ISO 9454-1. Method C is a titration method for the determination of the halide (excluding fluoride) content of watersoluble fluxes containing phosphates and is applicable to flux class 331, as defined in ISO 9454-1. Method D is a qualitative test, using silver chromate test paper, for the presence of ionic halides. The technique can be used for all classes of flux.

**SIST EN ISO/ASTM 52909:2023****2023-03 (po) (en;fr;de) 21 str. (F)**

Aditivna proizvodnja kovin - Lastnosti končnih delov - Orientacija in lokacija v odvisnosti od mehanskih lastnosti za spajanje kovinskega prahu v postelji (ISO/ASTM 52909:2022)

*Additive manufacturing of metals - Finished part properties - Orientation and location dependence of mechanical properties for metal powder bed fusion (ISO/ASTM 52909:2022)*

Osnova: EN ISO/ASTM 52909:2022

ICS: 25.030

This standard covers supplementary guidelines for evaluation of mechanical properties including static/quasi-static and dynamic testing of metals made by additive manufacturing in an effort to standardize terminology that should be used when reporting results from testing of directly printed samples and/or those excised from printed parts made by this technique. The standards listed in the draft are currently being used for conventionally processed materials (e.g. cast, rolled, wrought) and serve as a guideline for this supplement

**SIST EN ISO/ASTM 52925:2023**

**2023-03** (po) (en;fr;de) **25 str. (F)**

Aditivna proizvodnja polimerov - Surovine - Kvalifikacija materialov za lasersko spajanje prahu v postelji (ISO/ASTM 52925:2022)

*Additive manufacturing of polymers - Feedstock materials - Qualification of materials for laser-based powder bed fusion of parts (ISO/ASTM 52925:2022)*

Osnova: EN ISO/ASTM 52925:2022

ICS: 25.030

The parameters and recommendations presented in this standard relate mainly to the material polyamide 12 (PA12). Explicit references are also made to polyamide 11 (PA11). The extent to which these parameters and recommendations can be transferred to other materials must be verified on a case-by-case basis.

**SIST-TP CEN ISO/ASTM/TR 52917:2023**

**2023-03** (po) (en;fr;de) **16 str. (D)**

Aditivna proizvodnja - Krožno preskušanje - Splošne smernice (ISO/ASTM TR 52917:2022)

*Additive manufacturing - Round robin testing - General guidelines (ISO/ASTM TR 52917:2022)*

Osnova: CEN ISO/ASTM/TR 52917:2022

ICS: 25.030

Provide guidance on the development and delivery of Round Robin studies for the determination of process variance in the production of materials using Additive Manufacturing techniques. The guidance will be limited to the variation in AM materials, not in variation in measurement tools or measurement methods which are covered by existing Inter-laboratory comparison guidance.

## SIST/TC VAZ Varovanje zdravja

**SIST EN ISO 15189:2023**

SIST EN ISO 15189:2013

SIST EN ISO 22870:2017

**2023-03** (po) (en;fr;de) **72 str. (L)**

Medicinski laboratoriji - Zahteve za kakovost in kompetentnost (ISO 15189:2022)

*Medical laboratories - Requirements for quality and competence (ISO 15189:2022)*

Osnova: EN ISO 15189:2022

ICS: 11.100.01, 03.120.10

This document specifies requirements for quality and competence in medical laboratories.

This document is applicable to medical laboratories in developing their management systems and assessing their competence. It is also applicable for confirming or recognizing the competence of medical laboratories by laboratory users, regulatory authorities and accreditation bodies.

This document is also applicable to point-of-care testing (POCT).

NOTE International, national, or regional regulations or requirements can also apply to specific topics covered in this document.

## SIST/TC VGA Varnost električnih aparatov za gospodinjstvo in podobne namene

**SIST EN IEC 60335-2-24:2023**

SIST EN 60335-2-24:2011  
SIST EN 60335-2-24:2011/A1:2019  
SIST EN 60335-2-24:2011/A11:2020  
SIST EN 60335-2-24:2011/A2:2019

**2023-03 (po) (en) 65 str. (K)**

Gospodinjški in podobni električni aparati - Varnost - 2-24. del: Posebne zahteve za hladilnike in aparate za pripravo sladoleda in ledu (IEC 60335-2-24:2020 + COR1:2021)

*Household and similar electrical appliances - Safety - Part 2-24: Particular requirements for refrigerating appliances, ice-cream appliances and ice makers (IEC 60335-2-24:2020 + COR1:2021)*

Osnova: EN IEC 60335-2-24:2022

ICS: 97.040.30

This European Standard deals with the safety of the following appliances:

- refrigerating appliances for household and similar use;
- ice-makers intended to be used in frozen food storage compartments;
- refrigerating appliances, touring caravans and boats for leisure purposes

**SIST EN IEC 60335-2-24:2023/A11:2023**

**2023-03 (po) (en) 10 str. (C)**

Gospodinjški in podobni električni aparati - Varnost - 2-24. del: Posebne zahteve za hladilnike in aparate za pripravo sladoleda in ledu - Dopolnilo A11

*Household and similar electrical appliances - Safety - Part 2-24: Particular requirements for refrigerating appliances, ice-cream appliances and ice makers*

Osnova: EN IEC 60335-2-24:2022/A11:2022

ICS: 97.040.30

Amandma A11:2023 je dodatek k standardu SIST EN IEC 60335-2-24:2023.

This European Standard deals with the safety of the following appliances:

- refrigerating appliances for household and similar use;
- ice-makers intended to be used in frozen food storage compartments;
- refrigerating appliances, touring caravans and boats for leisure purposes

## SS EIT Strokovni svet SIST za področja elektrotehnike, informacijske tehnologije in telekomunikacij

**SIST EN IEC 60286-2:2023**

SIST EN 60286-2:2015

**2023-03 (po) (en) 37 str. (H)**

Pakiranje komponent za samodejno obdelavo - 2. del: Trakanje komponent z enostranskimi izvodi na neprekinjene trakove (IEC 60286-2:2022)

*Packaging of components for automatic handling - Part 2: Tape packaging of components with unidirectional leads on continuous tapes (IEC 60286-2:2022)*

Osnova: EN IEC 60286-2:2022

ICS: 55.020, 31.020

IEC 60286-2:2022 applies to the tape packaging of components with two or more unidirectional leads for use in electronic equipment. It provides dimensions and tolerances necessary to tape components with unidirectional leads. In general, the tape is applied to the component leads.

It covers requirements for taping techniques used with equipment for automatic handling, pre-forming of leads, insertion and other operations and includes only those dimensions which are essential to the taping of components intended for the above-mentioned purposes.

This edition includes the following significant technical changes with respect to the previous edition:

- complete revision of structure;
- consolidation of essential parameters and requirements in Clause 4.

**SIST EN IEC 60318-7:2023**

**2023-03** (po) (en) **36 str. (H)**

Elektroakustika - Simulatorji človeške glave in ušes - 7. del: Simulator glave in trupa za merjenje zvočnih virov blizu ušes (IEC 60318-7:2022)

*Electroacoustics - Simulators of human head and ear - Part 7: Head and torso simulator for the measurement of sound sources close to the ear (IEC 60318-7:2022)*

Osnova: EN IEC 60318-7:2022

ICS: 17.140.50, 13.140

This part of IEC 60318 describes a head and torso simulator, or manikin, intended for the measurement of sound sources placed close to the ear in the frequency range from 100 Hz to 16 000 Hz.

The manikin described in this part of IEC 60318 is intended for airborne acoustic measurements only. It is not suitable for measurements which depend upon vibration transmission paths such as bone conduction, or for measurements requiring the simulation of bone or tissue.

This document specifies the manikin in terms of both its geometrical dimensions and its acoustical properties. For conformance with this document, a manikin shall be compliant with both sets of specifications.

**SIST EN IEC 60352-6:2023**

**2023-03** (po) (en) **38 str. (H)**

Spoji brez spajke - 6. del: Spoji, ki prebadajo izolacijo - Splošne zahteve, preskusne metode in praktični napotki (IEC 60352-6:2022)

*Solderless connections - Part 6: Insulation piercing connections - General requirements, test methods and practical guidance (IEC 60352-6:2022)*

Osnova: EN IEC 60352-6:2023

ICS: 29.120.20

This part of IEC 60352 is applicable to insulation piercing connections made with stranded wires and tinsel wires, insulated flat conductors and flat flexible circuitries for use in electrical and electronic equipment.

Information on materials and data from industrial experience is included in addition to the test procedures to provide electrically stable connections under prescribed environmental conditions.

The object of this document is to:

- determine the suitability of insulation piercing connections under specified mechanical, electrical, and atmospheric conditions;
- provide a means of comparing test results when the tools used to make the connections, if any, are of different designs or manufacture.

There are different designs and materials for insulation piercing terminations in use. For this reason, only fundamental parameters of the termination, the performance requirements of the conductor and the complete connection are specified in this document.

**SIST EN IEC 60747-16-7:2023**

**2023-03** (po) (en) **44 str. (I)**

Polprevodniški elementi - 16-7. del: Mikrovalovna integrirana vezja - Blažilniki (IEC 60747-16-7:2022)

*Semiconductor devices - Part 16-7: Microwave integrated circuits - Attenuators (IEC 60747-16-7:2022)*

Osnova: EN IEC 60747-16-7:2023

ICS: 31.200, 31.080.01

This part of IEC 60747 specifies the terminology, essential ratings and characteristics, and measuring methods of microwave integrated circuit attenuators.

**SIST EN IEC 60747-16-8:2023**

**2023-03** (po) (en) **39 str. (H)**

Polprevodniški elementi - 16-8. del: Mikrovalovna integrirana vezja - Omejilniki (IEC 60747-16-8:2022)

*Semiconductor devices - Part 16-8: Microwave integrated circuits - Limiters (IEC 60747-16-8:2022)*

Osnova: EN IEC 60747-16-8:2023

ICS: 31.200, 31.080.01

This part of IEC 60747 specifies the terminology, essential ratings and characteristics, and measuring methods of microwave integrated circuit limiters.

**SIST-TP CEN/CLC/TR 17912:2023**

**2023-03** (po) (en;fr;de) **72 str. (L)**

Sistemi Hyperloop - Popis standardov in načrt  
*Hyperloop systems - Standards Inventory and Roadmap*

Osnova: CEN/CLC/TR 17912:2023

ICS: 55.020, 03.220.99

This document lists the relevant standards from various fields and provides a standardization roadmap for hyperloop systems. The roadmap will provide guidance on the applicable standards from various fields, those that need amending and the new-to be developed standards.

## SS SPL Strokovni svet SIST za splošno področje

**SIST ISO 28000:2023**

SIST ISO 28000:2018

**2023-03** (po) (en) **27 str. (G)**

Varnost in vzdržljivost - Sistemi vodenja varnosti - Zahteve  
*Security and resilience - Security management systems - Requirements*

Osnova: ISO 28000:2022

ICS: 03.100.10, 03.100.70

This document specifies requirements for a security management system, including aspects relevant to the supply chain.

This document is applicable to all types and sizes of organizations (e.g. commercial enterprises, government or other public agencies and non-profit organizations) which intend to establish, implement, maintain and improve a security management system. It provides a holistic and common approach and is not industry or sector specific.

This document can be used throughout the life of the organization and can be applied to any activity, internal or external, at all levels.

**SIST ISO/IEC Vodilo 59:2023**

SIST ISO/IEC Vodilo 59:1997

**2023-03** (po) (en;fr) **23 str. (F)**

Priporočene prakse ISO in IEC za standardizacijo, ki jo izvajajo nacionalni organi  
*ISO and IEC recommended practices for standardization by national bodies*

Osnova: ISO/IEC Guide 59:2019

ICS: 01.120

This document provides recommended standardization practices that are intended to support the application of the following:

- the WTO TBT Committee decision on principles for the development of international standards, guides and recommendations (G/TBT/9, 13 November 2000);
- the WTO TBT Agreement's Code of Good Practice for the Preparation, Adoption and Application of Standards (Annex 3 of the 1995 WTO TBT Agreement).

This document is intended to be used by the national members of ISO and IEC, hereafter referred to as national bodies.

**SIST CWA 16926-1:2023**

**2023-03** (po) (en;fr;de) **173 str. (R)**

Specifikacija vmesnika razširitev za finančne storitve (XFS), izdaja 3.50 - 1. del: Vmesnik za programiranje aplikacij (API) - Vmesnik ponudnika storitev (SPI) - Referenca za programerje  
*Extensions for Financial Services (XFS) interface specification Release 3.50 - Part 1: Application Programming Interface (API) - Service Provider Interface (SPI) - Programmer's Reference*

Osnova: CWA 16926-1:2022

ICS: 35.240.40, 35.240.15, 35.200

A key element of the Extensions for Financial Services is the definition of a set of APIs, a corresponding set of SPIs, and supporting services, providing access to financial services for Windows-based applications. The definition of the functionality of the services, of the architecture, and of the API and SPI sets, is outlined in this section, and described in detail in Sections 5 through 10.

The specification defines a standard set of interfaces such that, for example, an application that uses the API set to communicate with a particular Service Provider can work with a Service Provider of another conformant vendor, without any changes.

Although the Extensions for Financial Services define a general architecture for access to Service Providers from Windows-based applications, the initial focus of the CEN/XFS Workshop has been on providing access to peripheral devices that are unique to financial institutions. Since these devices are often complex, difficult to manage and proprietary, the development of a standardized interface to them from Windows-based applications and Windows operating systems can offer financial institutions and their solution providers immediate enhancements to productivity and flexibility.

### **SIST CWA 16926-10:2023**

**2023-03** (po) (en;fr;de) **85 str. (M)**

Specifikacija vmesnika razširitev za finančne storitve (XFS), izdaja 3.50 - 10. del: Senzorji in kazalniki - vmesnik razreda naprave - Referenca za programerje

*Extensions for Financial Services (XFS) interface specification Release 3.50 - Part 10: Sensors and Indicators Unit Device Class Interface - Programmer's Reference*

Osnova: CWA 16926-10:2022

ICS: 35.240.40, 35.240.15, 35.200

This specification describes the functionality of the services provided by the Sensors and Indicators Unit (SIU) services under WOSA/XFS, by defining the service-specific commands that can be issued, using the WFSGetInfo, WFSAsyncGetInfo, WFSExecute and WFSAsyncExecute functions.

This section describes the functions provided by a generic Sensors and Indicators Unit service. This service allows for the operation of the following categories of ports:

- Door sensors, such as cabinet, safe or vandal shield doors.
- Alarm sensors, such as tamper, seismic or heat sensors.
- Generic sensors, such as proximity or ambient light sensors.
- Key switch sensors, such as the ATM operator switch.
- Lamp/sign indicators, such as fascia light or audio indicators.

Note that while the SIU device class provides some basic support for guidance lights, extended guidance light functionality is specified in the individual device class specifications. Therefore it is recommended that device guidance lights be supported and controlled via the individual device classes.

- Auxiliary indicators.
- Enhanced Audio Controller, for use by the partially sighted.

In self-service devices, the sensors and indicators unit is capable of dealing with external sensors, such as door switches, locks, alarms and proximity sensors, as well as external indicators, such as turning on lamps or heating.

### **SIST CWA 16926-11:2023**

**2023-03** (po) (en;fr;de) **32 str. (G)**

Specifikacija vmesnika razširitev za finančne storitve (XFS), izdaja 3.50 - 11. del: Vmesnik razreda naprave v načinu, odvisnem od dobavitelja - Referenca za programerje

*Extensions for Financial Services (XFS) interface specification Release 3.50 - Part 11: Vendor Dependent Mode Device Class Interface - Programmer's Reference*

Osnova: CWA 16926-11:2022

ICS: 35.240.40, 35.240.15, 35.200

CWA 16926-11 aims to promote a clear and unambiguous specification defining a multi-vendor software interface to financial peripheral devices. The XFS (eXtensions for Financial Services) specifications are developed within the CEN (European Committee for Standardization/Information Society Standardization System) Workshop environment. CEN Workshops aim to arrive at a European consensus on an issue that can be published as a CEN Workshop Agreement (CWA). The CEN/XFS Workshop encourages the participation of both banks and vendors in the deliberations required to

create an industry standard. The CEN/XFS Workshop achieves its goals by focused sub-groups working electronically and meeting quarterly.

### **SIST CWA 16926-12:2023**

**2023-03** (po) (en;fr;de) **36 str. (H)**

Specifikacija vmesnika razširitev za finančne storitve (XFS), izdaja 3.50 - 12. del: Vmesnik razreda naprave za kamero - Referenca za programerje

*Extensions for Financial Services (XFS) interface specification Release 3.50 - Part 12: Camera Device Class Interface - Programmer's Reference*

Osnova: CWA 16926-12:2022

ICS: 35.240.40, 35.240.15, 35.200

This specification describes the functionality of the services provided by the Camera (CAM) services under XFS, by defining the service-specific commands that can be issued, using the WFSGetInfo, WFSAsyncGetInfo, WFSExecute and WFSAsyncExecute functions.

Banking camera systems usually consist of a recorder, a video mixer and one or more cameras. If there are several cameras, each camera focuses a special place within the self-service area (e.g. the room, the customer or the cash tray). By using the video mixer it can be decided, which of the cameras should take the next photo. Furthermore data can be given to be inserted in the photo (e.g. date, time or bank code).

If there is only one camera that can switch to take photos from different positions, it is presented by the Service Provider as a set of cameras, one for each of its possible positions.

### **SIST CWA 16926-13:2023**

**2023-03** (po) (en;fr;de) **21 str. (F)**

Specifikacija vmesnika razširitev za finančne storitve (XFS), izdaja 3.50 - 13. del: Vmesnik razreda alarmnih naprav - Referenca za programerje

*Extensions for Financial Services (XFS) interface specification Release 3.50 - Part 13: Alarm Device Class Interface - Programmer's Reference*

Osnova: CWA 16926-13:2022

ICS: 35.240.40, 35.240.15, 35.200

This specification describes the functionality of the services provided by Alarms (ALM) under XFS, by defining the service-specific commands that can be issued, using the WFSGetInfo, WFSAsyncGetInfo, WFSExecute and WFSAsyncExecute functions. This section describes the functionality of an Alarm (ALM) service that applies to both attended and unattended (self-service) devices.

The Alarm device class is provided as a separate service due to the need to set or reset an Alarm when one or more logical services associated with an attended CDM or unattended (self-service) device are locked. Because logical services can be locked by the application the Alarm is implemented in a separate device class to ensure that a set (trigger) or reset operation can be performed at any time.

### **SIST CWA 16926-14:2023**

**2023-03** (po) (en;fr;de) **55 str. (J)**

Specifikacija vmesnika razširitev za finančne storitve (XFS), izdaja 3.50 - 14. del: Vmesnik razreda naprave za tiskanje kartic - Referenca za programerje

*Extensions for Financial Services (XFS) interface specification Release 3.50 - Part 14: Card Embossing Unit Device Class Interface - Programmer's Reference*

Osnova: CWA 16926-14:2022

ICS: 35.240.40, 35.240.15, 35.200

This specification describes the functions provided by a generic card embossing unit (CEU). These descriptions include definitions of the service-specific commands that can be issued, using the WFSAsyncExecute, WFSExecute, WFSGetInfo and WFSAsyncGetInfo functions.

Embossing card units are generally viewed by XFS as compound devices with the following capabilities and features:

- Embossing or printing of magnetic stripe card/ smart card.
- Reading/encoding magnetic stripe tracks 1, 2, and 3.
- Reading/writing smart card.

- LCD display/ keypad input.
- The XFS services supporting the various embossing card unit components are outlined as follows:
- Embossing or printing of magnetic stripe card/ smart card - Card Embossing Unit (CEU) service.
  - Reading/encoding magnetic stripe tracks 1, 2, and 3 - ID Card (IDC) service, however when combined encoding/ embossing is performed the CEU service class is used.
  - Reading/writing smart cards - ID Card (IDC) service, however when combined writing smart card/ embossing is performed the CEU service class is used.
  - LCD display/ keypad input - Text Terminal Unit (TTU) service.

**SIST CWA 16926-15:2023**

**2023-03 (po) (en;fr;de) 210 str. (S)**

Specifikacija vmesnika razširitev za finančne storitve (XFS), izdaja 3.50 - 15. del: Razred vmesnika naprave modula za unovčevanje - Referenca za programerje

*Extensions for Financial Services (XFS) interface specification Release 3.50 - Part 15: Cash-In Module Device Class Interface - Programmer's Reference*

Osnova: CWA 16926-15:2022

ICS: 35.240.40, 35.240.15, 35.200

This specification describes the functionality of an XFS compliant Cash-In Module (CIM) Service Provider. It defines the service-specific commands that can be issued to the Service Provider using the WFSGetInfo, WFSAsyncGetInfo, WFSExecute and WFSAsyncExecute functions.

Persistent values are maintained through power failures, open sessions, close session and system resets.

This specification covers the acceptance of items. An "item" is defined as any media that can be accepted and includes coupons, documents, bills and coins. However, if coins and bills are both to be accepted separate Service Providers must be implemented for each.

All currency parameters in this specification are expressed as a quantity of minimum dispense units, as defined in the description of the WFS\_INF\_CIM\_CURRENCY\_EXP command.

There are two types of CIM: Self-Service CIM and Teller CIM. A Self-Service CIM operates in an automated environment, while a Teller CIM has an operator present. The functionality provided by the following commands is only applicable to a Teller CIM:

WFS\_CMD\_CIM\_SET\_TELLER\_INFO

WFS\_INF\_CIM\_SET\_TELLER\_INFO

It is possible for the CIM to be part of a compound device with the Cash Dispenser Module (CDM). This CIM\CDM combination is referred to throughout this specification as a "cash recycler". For details of the CDM interface see [Ref. 3].

If the device is a cash recycler then, if cash unit exchanges are required on both interfaces, the exchanges cannot be performed concurrently. An exchange on one interface must be complete (the WFS\_CMD\_CIM\_END\_EXCHANGE must have completed) before an exchange can start on the other interface. The WFS\_ERR\_CIM\_EXCHANGEACTIVE error code will be returned if the correct sequence is not adhered to.

The CIM interface can be used for all exchange operations on cash recycle devices, and this interface should be used for cash units of multiple currencies and/or denominations (including multiple note identifiers associated with the same denomination).

The event WFS\_SRVE\_CIM\_COUNTS\_CHANGED will be posted if an operation on the CDM interface affects the recycle cash unit counts which are available through the CIM interface.

**SIST CWA 16926-16:2023**

**2023-03 (po) (en;fr;de) 38 str. (H)**

Specifikacija vmesnika razširitev za finančne storitve (XFS), izdaja 3.50 - 16. del: Vmesnik razreda naprave za izdajo kartic - Referenca za programerje

*Extensions for Financial Services (XFS) interface specification Release 3.50 - Part 16: Card Dispenser Device Class Interface - Programmer's Reference*

Osnova: CWA 16926-16:2022

ICS: 35.240.40, 35.240.15, 35.200



This specification describes the functionality of the services provided by the Card Dispenser (CRD) device class under XFS, by defining the service-specific commands that can be issued, using the WFSGetInfo, WFSAsyncGetInfo, WFSExecute and WFSAsyncExecute functions.

A Card Dispenser is used to dispense a single card to a consumer from one or more bins. Most card dispensers also have the ability to retain a card to a bin.

### **SIST CWA 16926-17:2023**

**2023-03** (po) (en;fr;de) **29 str. (G)**

Specifikacija vmesnika razširitev za finančne storitve (XFS), izdaja 3.50 - 17. del: Vmesnik razreda naprave za branje črtne kode - Referenca za programerje

*Extensions for Financial Services (XFS) interface specification Release 3.50 - Part 17: Barcode Reader Device Class Interface - Programmer's Reference*

Osnova: CWA 16926-17:2022

ICS: 35.240.40, 35.240.15, 35.200

This specification describes the functionality of a Barcode Reader (BCR) Service Provider. It defines the service-specific commands that can be issued to the Service Provider using the WFSGetInfo, WFSAsyncGetInfo, WFSExecute and WFSAsyncExecute functions.

Persistent values are maintained through power failures, open sessions, close session and system resets.

This extension to XFS specifications defines the functionality of BCR service.

A Barcode Reader scans barcodes using any scanning technology. The device logic converts light signals or image recognition into application data and transmits it to the host system.

The basic operation of the Barcode Reader is managed using WFSExecute/WFSAsyncExecute functions.

When an application wants to read a barcode, it issues a WFS\_CMD\_BCR\_READ command to prepare the scanner to read any barcode presented to it. When a document is presented to the BCR and a barcode type is recognized, a completion event is received which contains the barcode data that has been read.

### **SIST CWA 16926-18:2023**

**2023-03** (po) (en;fr;de) **125 str. (O)**

Specifikacija vmesnika razširitev za finančne storitve (XFS), izdaja 3.50 - 18. del: Vmesnik razreda naprave modula za obdelavo elementov - Referenca za programerje

*Extensions for Financial Services (XFS) interface specification Release 3.50 - Part 18: Item Processing Module Device Class Interface - Programmer's Reference*

Osnova: CWA 16926-18:2022

ICS: 35.240.40, 35.240.15, 35.200

This specification describes the XFS service class for Item Processing Modules (IPM). The specification of this service class includes definitions of the service-specific commands that can be issued, using the WFSAsyncExecute, WFSExecute, WFSGetInfo and WFSAsyncGetInfo functions.

This service class is currently defined only for self service devices.

In the U.S., checks are always encoded in magnetic ink for reading by Magnetic Ink Character Recognition (MICR), and a single font is always used. In Europe some countries use MICR and some use Optical Character Recognition (OCR) character sets, with different fonts, for their checks.

Item Processing Modules accept one or more media items (Checks, Giros, etc.) and process these items according to application requirements. The IPM class supports devices that can handle a single item as well as those devices that can handle bunches of items. The following are the three principal device types:

- Single Item: can accept and process a single item at a time.
- Multi-Item Feed with no stacker (known as an escrow in some environments): can accept a bunch of media from the customer but each item has to be processed fully (i.e. deposited in a bin or returned) before the next item can be processed.
- Multi-Item Feed with a stacker: can accept a bunch of media from the customer and all items can be processed together.

The IPM class provides applications with an interface to control the following functions (depending on the capabilities of the specific underlying device):

- Capture an image of the front of an item in multiple formats and bit depths.
- Capture an image of the back of an item in multiple formats and bit depths.
- Read the code line of an item using MICR reader.
- Read the code line of an item using OCR.
- Endorse (print text) on an item.
- Stamp an item.
- Return an item to the customer.
- Deposit an item in a bin.
- Retract items left by the customer.

The IPM device class uses the concept of a Media-In transaction to track and control a customer's interaction with the device. A Media-In transaction consists of one or more WFS\_CMD\_IPM\_MEDIA\_IN commands. The transaction is initiated by the first WFS\_CMD\_IPM\_MEDIA\_IN command and remains active until the transaction is either confirmed through WFS\_CMD\_IPM\_MEDIA\_IN\_END, or terminated by WFS\_CMD\_IPM\_MEDIA\_IN\_ROLLBACK, WFS\_CMD\_IPM\_RETRACT\_MEDIA or WFS\_CMD\_IPM\_RESET. While a transaction is active the WFS\_INF\_IPM\_TRANSACTION\_STATUS command reports the status of the current transaction. When a transaction is not active the WFS\_INF\_IPM\_TRANSACTION\_STATUS command reports the status of the last transaction as well as some current status values.

There are primarily two types of devices supported by the IPM, those devices with a stacker and those without.

In this the specification the terms "long edge" and "short edge" are used to describe the orientation of a check and length of its edges. The diagram below illustrates these definitions.

### **SIST CWA 16926-19:2023**

**2023-03** (po) (en;fr;de) **55 str. (J)**

Specifikacija vmesnika razširitev za finančne storitve (XFS), izdaja 3.50 - 19. del: Predlog vmesnika za razred biometričnih naprav - Referenca za programerje

*Extensions for Financial Services (XFS) interface specification Release 3.50 - Part 19: Biometrics Device Class Interface Proposal - Programmer's Reference*

Osnova: CWA 16926-19:2022

ICS: 35.240.40, 35.240.15, 35.200

This specification describes the XFS service class for Biometrics Device (BIO). The specification of this service class includes definitions of the service-specific commands.

Biometrics refers to metrics related to human characteristics and biology. Biometrics authentication can be used as a form of identification and/or access control. This is an overview of biometrics, as well as an introduction to the terminology used in this document. It introduces to XFS the concept of scanning a person's biometric data in raw image form (raw biometric data), then processing it into a smaller more concise form that is easier to manage (biometric template data). The first scan of a user is called ENROLLMENT as the user is effectively being enrolled into a scheme by recording their biometric data. Thereafter subsequent scans of the user can be compared to the original data in order to verify who they say they are (VERIFICATION), or alternatively used to identify them as a specific individual (IDENTIFICATION).

### **SIST CWA 16926-2:2023**

**2023-03** (po) (en;fr;de) **28 str. (G)**

Specifikacija vmesnika razširitev za finančne storitve (XFS), izdaja 3.50 - 2. del: Opredelitev razreda storitev - Referenca za programerje

*Extensions for Financial Services (XFS) interface specification Release 3.50 - Part 2: Service Class Definition - Programmer's Reference*

Osnova: CWA 16926-2:2022

ICS: 35.240.40, 35.240.15, 35.200

The service classes are defined by their service-specific commands and the associated data structures, error codes, messages, etc. These commands are used to request functions that are specific to one or more classes of Service Providers, but not all of them, and therefore are not included in the common API for basic or administration functions.

When a service-specific command is common among two or more classes of Service Providers, the syntax of the command is as similar as possible across all services, since a major objective of XFS is to standardize function codes and structures for the broadest variety of services. For example, using the WFSExecute function, the commands to read data from various services are as similar as possible to each other in their syntax and data structures.

In general, the specific command set for a service class is defined as a superset of the specific capabilities likely to be provided by the developers of the services of that class; thus any particular device will normally support only a subset of the defined command set.

There are three cases in which a Service Provider may receive a service-specific command that it does not support:

The requested capability is defined for the class of Service Providers by the XFS specification, the particular vendor implementation of that service does not support it, and the unsupported capability is not considered to be fundamental to the service. In this case, the Service Provider returns a successful completion, but does no operation. An example would be a request from an application to turn on a control indicator on a passbook printer; the Service Provider recognizes the command, but since the passbook printer it is managing does not include that indicator, the Service Provider does no operation and returns a successful completion to the application.

The requested capability is defined for the class of Service Providers by the XFS specification, the particular vendor implementation of that service does not support it, and the unsupported capability is considered to be fundamental to the service. In this case, a WFS\_ERR\_UNSUPP\_COMMAND error for Execute commands or WFS\_ERR\_UNSUPP\_CATEGORY error for Info commands is returned to the calling application. An example would be a request from an application to a cash dispenser to retract items where the dispenser hardware does not have that capability; the Service Provider recognizes the command but, since the cash dispenser it is managing is unable to fulfil the request, returns this error.

The requested capability is not defined for the class of Service Providers by the XFS specification. In this case, a WFS\_ERR\_INVALID\_COMMAND error for Execute commands or WFS\_ERR\_INVALID\_CATEGORY error for Info commands is returned to the calling application.

This design allows implementation of applications that can be used with a range of services that provide differing subsets of the functionalities that are defined for their service class. Applications may use the WFSGetInfo and WFSAsyncGetInfo commands to inquire about the capabilities of the service they are about to use, and modify their behavior accordingly, or they may use functions and then deal with error returns to make decisions as to how to use the service.

### **SIST CWA 16926-3:2023**

**2023-03** (po) (en;fr;de) **134 str. (O)**

Specifikacija vmesnika razširitev za finančne storitve (XFS), izdaja 3.50 - 3. del: Vmesnik razreda tiskalnikov in naprav za skeniranje - Referenca za programerje

*Extensions for Financial Services (XFS) interface specification Release 3.50 - Part 3: Printer and Scanning Device Class Interface - Programmer's Reference*

Osnova: CWA 16926-3:2022

ICS: 35.240.40, 35.240.15, 35.200

This specification describes the functionality of the services provided by banking printers and scanning devices under XFS, focusing on the following areas:

- application programming for printing
- print document definition
- integration with the Windows architecture
- scanning images for devices such as check scanners

These descriptions include definitions of the service-specific commands that can be issued, using the WFSAsyncExecute, WFSExecute, WFSGetInfo and WFSAsyncGetInfo functions.

The requirements for printing in banking applications are significantly different from those of the conventional PC environment, and the XFS support delivers the foundation for financial application printing, including:

- Controlled access to shared printers

The banking printers can be shared between workstations and the XFS layer provides the ability for the application to manage ownership of a print device. This allows an application to identify the operator granted control of the printer, and to ensure that a teller printing multiple documents is not interrupted by work for other applications.

- Application controlled printing

In the banking environment, it is necessary for the application to receive positive feedback on the availability of print devices, and the success or failure of individual print operations. The XFS printer support provides a standard mechanism for application retrieval of this status information.

- Management of printing peripherals

Distributed banking networks require the ability to track the availability and failure of printing peripherals on a branch and system-wide basis. Through the XFS WFSRegister function monitoring programs can collect error alerts from the banking printers.

- Vendor independent API and document definition

All of the XFS peripheral implementations are designed around a standardized family of APIs to allow application code portability across vendor hardware platforms. With printers, it is also recognized that banks invest a significant amount of resource in the authoring of print documents. The XFS printer service class is implemented around a forms model which also standardizes the basic document definition. This extends the investment protection provided by XFS compliant systems to include this additional part of the application development.

#### - Windows printing integration

It is possible for a banking printer to offer printing capabilities that can be accessed by non-banking specific applications, such as general office productivity packages. This would not, for example, be true for a receipt printer, but it could be the case for a device with document printing capabilities. A vendor may choose an XFS implementation that allows both types of applications (XFS and Windows applications using the Windows printing subsystem) to share the printing devices. The vendor should specify any impact this approach has on XFS subsystem operation, such as error reporting.

Full implementation of the above features depends on the individual vendor-supplied Service Providers. This specification outlines the functionality and requirements for applications using the XFS printer and scanning services, and for the development of those services.

### **SIST CWA 16926-4:2023**

**2023-03** (po) (en;fr;de) **97 str. (M)**

Specifikacija vmesnika razširitev za finančne storitve (XFS), izdaja 3.50 - 4. del: Vmesnik razreda naprav identifikacijskih kartic - Referenca za programerje

*Extensions for Financial Services (XFS) interface specification Release 3.50 - Part 4: Identification Card Device Class Interface - Programmer's Reference*

Osnova: CWA 16926-4:2022

ICS: 35.240.40, 35.240.15, 35.200

This CWA describes the functions provided by a generic identification card reader/writer service (IDC). These descriptions include definitions of the service-specific commands that can be issued, using the WFSAsyncExecute, WFSExecute, WFSGetInfo and WFSAsyncGetInfo functions.

This service allows for the operation of the following categories of units:

- motor driven card reader/writer
- pull through card reader (writing facilities only partially included)
- dip reader
- contactless chip card readers
- permanent chip card readers (each chip is accessed through a unique logical service)

### **SIST CWA 16926-5:2023**

**2023-03** (po) (en;fr;de) **141 str. (P)**

Specifikacija vmesnika razširitev za finančne storitve (XFS), izdaja 3.50 - 5. del: Vmesnik razreda modula blagajniškega avtomata - Referenca za programerje

*Extensions for Financial Services (XFS) interface specification Release 3.50 - Part 5: Cash Dispenser Module Class Interface - Programmer's Reference*

Osnova: CWA 16926-5:2022

ICS: 35.240.40, 35.240.15, 35.200

This specification describes the functionality of an XFS compliant Cash Dispenser Module (CDM) Service Provider. It defines the service-specific commands that can be issued to the Service Provider using the WFSGetInfo, WFSAsyncGetInfo, WFSExecute and WFSAsyncExecute functions.

Persistent values are maintained through power failures, open sessions, close session and system resets.

This specification covers the dispensing of items. An "item" is defined as any media that can be dispensed and includes coupons, documents, bills and coins. However, if coins and bills are both to be dispensed separate Service Providers must be implemented for each.

All currency parameters in this specification are expressed as a quantity of minimum dispense units, as defined in the description of the WFS\_INF\_CDM\_CURRENCY\_EXP command.

There are two types of CDM: Self-Service CDM and Teller CDM. A Self-Service CDM operates in an automated environment, while a Teller CDM has an operator present. The functionality provided by the following commands is only applicable to a Teller CDM:

WFS\_CMD\_CDM\_SET\_TELLER\_INFO

WFS\_INF\_CDM\_TELLER\_INFO

It is possible for the CDM to be part of a compound device with the Cash-In Module (CIM). This CIM\CDM combination is referred to throughout this specification as a "Cash Recycler". For details of the CIM interface see [Ref. 3].

If the device is a Cash Recycler then, if cash unit exchanges are required on both interfaces, the exchanges cannot be performed concurrently. An exchange on one interface must be complete (the WFS\_CMD\_CDM\_END\_EXCHANGE must have completed) before an exchange can start on the other interface. The WFS\_ERR\_CDM\_EXCHANGEACTIVE error code will be returned if the correct sequence is not adhered to.

The CIM interface can be used for all exchange operations on recycle devices, and the CIM interface should be used if the device has recycle units of multiple currencies and/or denominations (including multiple note identifiers associated with the same denomination).

### **SIST CWA 16926-6:2023**

**2023-03** (po) (en;fr;de) **321 str. (V)**

Specifikacija vmesnika razširitev za finančne storitve (XFS), izdaja 3.50 - 6. del: Vmesnik razreda naprave s tipkovnico PIN - Referenca za programerje

*Extensions for Financial Services (XFS) interface specification Release 3.50 - Part 6: PIN Keypad Device Class Interface - Programmer's Reference*

Osnova: CWA 16926-6:2022

ICS: 35.240.40, 35.240.15, 35.200

This section describes the application program interface for personal identification number keypads (PIN pads) and other encryption/decryption devices. This description includes definitions of the service-specific commands that can be issued, using the WFSAsyncExecute, WFSExecute, WFSGetInfo and WFSAsyncGetInfo functions.

This section describes the general interface for the following functions:

- Administration of encryption devices
- Loading of encryption keys
- Encryption / decryption
- Entering Personal Identification Numbers (PINs)
- PIN verification
- PIN block generation (encrypted PIN)
- Clear text data handling
- Function key handling
- PIN presentation to chipcard
- Read and write safety critical Terminal Data from/to HSM
- HSM and Chipcard Authentication
- EMV 4.0 PIN blocks, EMV 4.0 public key loading, static and dynamic data verification

If the PIN pad device has local display capability, display handling should be handled using the Text Terminal Unit (TTU) interface.

The adoption of this specification does not imply the adoption of a specific security standard.

Important Notes:

- This revision of this specification does not define all key management procedures; some key management is still vendor-specific.
- Key space management is customer-specific, and is therefore handled by vendor-specific mechanisms.

- Only numeric PIN pads are handled in this specification.
- This specification also supports the Hardware Security Module (HSM), which is necessary for the German ZKA Electronic Purse transactions. Furthermore, the HSM stores terminal specific data. This data will be compared against the message data fields (Sent and Received ISO8583 messages) prior to HSM-MAC generation/verification. HSM-MACs are generated/verified only if the message fields match the data stored.
- Keys used for cryptographic HSM functions are stored separate from other keys. This must be considered when importing keys.
- This version of PIN pad complies to the current ZKA specification 3.0. It supports loading and unloading against card account for both card types (Type 0 and Type 1) of the ZKA electronic purse. It also covers the necessary functionality for 'Loading against other legal tender'.
- Key values are passed to the API as binary hexadecimal values. When hex values are passed to the API within strings, the hex digits 0xA to 0xF can be represented by characters in the ranges 'a' to 'f' or 'A' to 'F'.
- The following commands and events were initially added to support the German ZKA standard, but may also be used for other national standards:
- WFS\_INF\_PIN\_HSM\_TDATA
  - WFS\_CMD\_PIN\_HSM\_SET\_TDATA
  - WFS\_CMD\_PIN\_SECURE\_MSG\_SEND
  - WFS\_CMD\_PIN\_SECURE\_MSG\_RECEIVE
  - WFS\_CMD\_PIN\_GET\_JOURNAL
  - WFS\_SRVE\_PIN\_OPT\_REQUIRED
  - WFS\_CMD\_PIN\_HSM\_INIT
  - WFS\_SRVE\_PIN\_HSM\_TDATA\_CHANGED

**SIST CWA 16926-7:2023****2023-03 (po) (en;fr;de) 58 str. (J)**

Specifikacija vmesnika razširitev za finančne storitve (XFS), izdaja 3.50 - 7. del: Vmesnik razreda naprav za preverjanje čitalnikov/skenerjev - Referenca za programerje  
*Extensions for Financial Services (XFS) interface specification Release 3.50 - Part 7: Check Reader/Scanner Device Class Interface - Programmer's Reference*

Osnova: CWA 16926-7:2022

ICS: 35.240.40, 35.240.15, 35.200

This specification describes the XFS service class of check readers and scanners. Check image scanners are treated as a special case of check readers, i.e. image-enabled instances of the latter. This class includes devices with a range of features, from small hand-held read-only devices through which checks are manually swiped one at a time, to desktop units which automatically feed the check one at a time; recording the MICR data and check image, and endorse or encode the check. The specification of this service class includes definitions of the service-specific commands that can be issued, using the WFSAsyncExecute, WFSExecute, WFSGetInfo and WFSAsyncGetInfo functions.

In the U.S., checks are always encoded in magnetic ink for reading by Magnetic Ink Character Recognition (MICR), and a single font is always used. In Europe some countries use MICR and some use Optical Character Recognition (OCR) character sets, with different fonts, for their checks.

In all countries, typical fields found encoded on a check include the bank ID number and the account number. Part of the processing done by the bank is to also encode the amount on the check, usually done by having an operator enter the handwritten or typewritten face amount on a numeric keypad.

This service class is currently defined only for attended branch service.

**SIST CWA 16926-8:2023****2023-03 (po) (en;fr;de) 47 str. (I)**

Specifikacija vmesnika razširitev za finančne storitve (XFS), izdaja 3.50 - 8. del: Razred vmesnika depozitne naprave - Referenca za programerje  
*Extensions for Financial Services (XFS) interface specification Release 3.50 - Part 8: Depository Device Class Interface - Programmer's Reference*

Osnova: CWA 16926-8:2022

ICS: 35.240.40, 35.240.15, 35.200

This specification describes the functionality of the services provided by the Depository (DEP) services under XFS, by defining the service-specific commands that can be issued, using the WFSGetInfo, WFSAsyncGetInfo, WFSExecute and WFSAsyncExecute functions.

A Depository is used for the acceptance and deposit of media into the device or terminal. There are two main types of depository: an envelope depository for the deposit of media in envelopes and a night safe depository for the deposit of bags containing bulk media.

An envelope depository accepts media, prints on the media and deposits the media into a holding container or bin. Some envelope depositories offer the capability to dispense an envelope to the customer at the start of a transaction. The customer takes this envelope, fills in the deposit media, possibly inscribes it and puts it into the deposit slot. The envelope is then accepted, printed and transported into a deposit container.

The envelope dispense mechanism may be part of the envelope depository device mechanism with the same entry/exit slot or it may be a separate mechanism with separate entry/exit slot.

Envelopes dispensed and not taken by the customer can be retracted back into the device. When the dispenser is a separate mechanism the envelope is retracted back into the dispenser container. When the dispenser is a common mechanism the envelope is retracted into the depository container.

A night safe depository normally only logs the deposit of a bag and does not print on the media.

### **SIST CWA 16926-9:2023**

**2023-03** (po) (en;fr;de) **59 str. (J)**

Specifikacija vmesnika razširitev za finančne storitve (XFS), izdaja 3.50 - 9. del: Vmesnik razreda naprave tekstovne terminalne enote - Referenca za programerje

*Extensions for Financial Services (XFS) interface specification Release 3.50 - Part 9: Text Terminal Unit Device Class Interface - Programmer's Reference*

Osnova: CWA 16926-9:2022

ICS: 35.240.40, 35.240.15, 35.200

This specification describes the functionality of the services provided by text terminal unit (TTU) services under XFS, by defining the service-specific commands that can be issued, using the WFSGetInfo, WFSAsyncGetInfo, WFSExecute and WFSAsyncExecute functions.

This section describes the functions provided by a generic Text Terminal Unit (TTU) service. A Text Terminal Unit is a text i/o device, which applies both to ATM operator panels and to displays incorporated in devices such as PIN pads and printers. This service allows for the following categories of functions:

- Forms oriented input and output
- Direct display output
- Keyboard input
- LED settings and control

All position indexes are zero based, where column zero, row zero is the top-leftmost position.

### **SIST CWA 17953:2023**

**2023-03** (po) (en;fr;de) **25 str. (F)**

Smernice za sisteme dualnega usposabljanja

*Guidelines for dual-based training systems*

Osnova: CWA 17953:2022

ICS: 03.180

This CWA defines quality criteria and guidelines for an effective dual training. The document aims at simplifying the dual training process for every kind of structure and includes examples of best practices related to different country-specific or sector-specific experiences. It also includes two annexes: the first one will target the code of conducts for enterprises and the second one will define training contract's general principles .

**SIST EN 16589-1:2023**

SIST-TP CEN/TR 16589:2014

**2023-03** (po) (en;fr;de) **29 str. (G)**

Laboratorijske lokalne odsesovalne naprave - 1. del: Splošne zahteve in metode za preskušanje tipa členkastih odsesovalnih rok

*Laboratory local exhaust devices - Part 1: General requirements and type test methods for articulated extraction arms*

Osnova: EN 16589-1:2022

ICS: 71.040.10

This document applies to an articulated extraction arm used as a local exhaust device in laboratories and comprised of a capture device (receiving, enclosing or capture hood, nozzle or flat screen) connected to an extraction arm which is articulated ducting to move air from the capture device to discharge.

This standard specifies:

- a method for type testing;
- a method to assess the three-dimensional capture zone of local exhaust devices mounted on an articulated extract arm;
- a method for assessing the emission release capture efficiency of local exhaust devices connected to an articulated extract arm and its robustness to a challenge of air disturbance directly in front of and in close proximity to the capture hood and release source;
- a method for establishing the reachable, three-dimensional workspace of local exhaust devices mounted on an articulated extract arm by measuring the possible positions of the opening of the device;
- a method for measuring the pressure drop and noise level in the type test;
- instructions for marking the device and recommended content of information for use;
- guidance for use describing the limitations of local exhaust devices with articulated extract arm for different airflow rates establishing the capture zone;
- guidance on selection, installation, commissioning, and control testing of articulated extract arms and their local exhaust ventilation systems.

The scope does not include filtration requirements and impact of fully or partly recirculation of the airflow extracted by an articulated extract arm.

**SIST EN 17735:2023**

**2023-03** (po) (en;fr;de) **46 str. (I)**

Komercialni pomivalni stroji - Higijenske zahteve in preskušanje

*Commercial dishwashing machines - Hygiene requirements and testing*

Osnova: EN 17735:2022

ICS: 97.040.40

This document specifies hygiene requirements relating to the operation of commercial dishwashing machines (hereinafter referred to as dishwashing machines). It specifies requirements for hygienic results of the articles treated in the dishwashing machines. This includes also guidelines for their hygienic and proper operation and for care and maintenance of the machinery. Furthermore, methods for testing hygienic operation are defined.

Dishwashing machines are used in a professional environment for cleaning washware that is used in contact with food.

This document applies to dishwashing machines for cleaning washware that is used in contact with food, such as crockery, glassware, cutlery, reusable boxes and similar articles.

Dishwashing machines (see 3.3) are used in kitchens e.g. in restaurants, canteens and hospitals and in commercial enterprises such as bakeries, butcher's shops, etc.

This document does not apply to domestic dishwashing machines, washer disinfectors for the treatment of medical devices and machines for industrial use (e.g. machines for cleaning proofing trays, returnable bottles, equipment of other machines like mincer, slicer, cutter, dough dividers or kneader, mixers, stirrers and all other kind of machines from which parts could be cleaned by washing out of place (WOP)).



**SIST EN 2235:2023**

SIST EN 2235:2015

**2023-03 (po) (en;fr;de) 20 str. (E)**

Aeronavtika - Eno- in večžilni električni kabli, oklopljeni in oplaščeni - Tehnična specifikacija  
*Aerospace series - Single and multicore electrical cables, screened and jacketed - Technical specification*

Osnova: EN 2235:2022

ICS: 29.060.20, 49.060

This document specifies the required characteristics, test methods, qualification and acceptance conditions of single and multicore cables, screened, jacketed and multicore jacketed cables for use in aircraft electrical systems.

**SIST EN 2997-002:2023**

SIST EN 2997-002:2016

**2023-03 (po) (en;fr;de) 31 str. (G)**

Aeronavtika - Konektorji, električni, okrogli, priključeni z navojnim obročkom, odporni ali neodporni proti ognju, s stalno delovno temperaturo med  $-65\text{ °C}$  in  $175\text{ °C}$ , stalno  $200\text{ °C}$ , najvišjo  $260\text{ °C}$  - 002. del: Specifikacija lastnosti in razporeditev kontaktov

*Aerospace series - Connectors, electrical, circular, coupled by threaded ring, fire-resistant or non fire-resistant, operating temperatures -  $65\text{ °C}$  to  $175\text{ °C}$  continuous,  $200\text{ °C}$  continuous,  $260\text{ °C}$  peak - Part 002: Specification of performance and contact arrangements*

Osnova: EN 2997-002:2022

ICS: 31.220.10, 49.060

This document defines the performance and contact arrangements of circular electrical connectors, coupled by threaded ring. It also lists the product standards and models available for selection in this series.

**SIST EN 3364:2023**

SIST EN 3364:2009

**2023-03 (po) (en;fr;de) 9 str. (C)**

Aeronavtika - Jeklo X5CrNiCu15-5 (1.4545) - Pretaljeno s taljivo elektrodo, mehčano - Materiali za kovanje - a ali  $D \leq 300\text{ mm}$

*Aerospace series - Steel X5CrNiCu15-5 (1.4545) - Consumable electrode remelted, softened - Forging stocks - a or  $D \leq 300\text{ mm}$*

Osnova: EN 3364:2022

ICS: 49.025.10

This document specifies the requirements relating to:

Steel X5CrNiCu15-5 (1.4545)

Consumable electrode remelted, softened

Forging stocks

a or  $D \leq 300\text{ mm}$ 

for aerospace applications.

**SIST EN 3375-011:2023**

SIST EN 3375-011:2017

**2023-03 (po) (en;fr;de) 15 str. (D)**

Aeronavtika - Električni kabli za digitalni prenos podatkov - 011. del: Enojni oplet - Štirižilni zvezdasti kabel, 100 ohm - Lahki - Tip KL - Standard za proizvod

*Aerospace series - Cable, electrical for digital data transmission - Part 011: Single braid - Star Quad 100 ohms - Lightweight - Type KL - Product standard*

Osnova: EN 3375-011:2022

ICS: 49.060, 29.060.20

This document specifies the dimensions, tolerances, required characteristics and the mass of an AWG 24 shielded quad cable, type KL, intended for high speed (100 Mbit/s) full duplex Ethernet networks. Linked to this particular application, the operating temperatures of the cable are between  $-65\text{ °C}$  and  $125\text{ °C}$ .

This cable is laser markable, this marking satisfies the requirements of EN 3838.

The impedance is  $100\ \Omega \pm 15\ \Omega$ .

**SIST EN 3434:2023**

**2023-03** (po) (en;fr;de) **8 str. (B)**

Aeronavtika - Matice, šestrobe, z zarezo/kronske, samozaporne, iz jekla, kadmirane, mazane z MoS<sub>2</sub> - Klasifikacija: 900 MPa (pri okoljski temperaturi)/235 °C

*Aerospace series - Nuts, hexagon, slotted/castellated, self-locking, in steel, cadmium plated, MoS<sub>2</sub> lubricated - Classification: 900 MPa (at ambient temperature)/235 °C*

Osnova: EN 3434:2022

ICS: 49.025.10, 49.030.30

This standard specifies characteristics of self-locking hexagonal slotted/castellated nuts, in steel, cadmium plated, MoS<sub>2</sub> lubricated, for aerospace applications.

Classification: 900 MPa /235 °C .

**SIST EN 3479:2023**

SIST EN 3479:2009

**2023-03** (po) (en;fr;de) **9 str. (C)**

Aeronavtika - Jeklo X5CrNiCu15-5 (1.4545) - Pretaljeno s taljivo elektrodo - Topilno žarjeno in izločevalno utrjeno - Plošče - 6 mm < a ≤ 20 mm - 1070 MPa ≤ Rm ≤ 1220 MPa

*Aerospace series - Steel X5CrNiCu15-5 (1.4545) - Consumable electrode remelted - Solution treated and precipitation treated - Plates - 6 mm < a ≤ 20 mm - 1 070 MPa ≤ Rm ≤ 1 220 MPa*

Osnova: EN 3479:2022

ICS: 77.140.50, 49.025.10

This document specifies the requirements relating to:

Steel X5CrNiCu15-5 (1.4545)

Consumable electrode remelted

Solution treated and precipitation treated

Plates

6 mm < a ≤ 20 mm

1 070 MPa ≤ Rm ≤ 1 220 MPa

for aerospace applications.

**SIST EN 3557:2023**

**2023-03** (po) (en;fr;de) **9 str. (C)**

Aeronavtika - Aluminijeva zlitina AL-P6061-T4 - Vlečena cev za tlačno uporabo - 0,6 mm ≤ a ≤ 3 mm

*Aerospace series - Aluminium alloy AL-P6061-T4 - Drawn tube for pressure applications - 0,6 mm ≤ a ≤ 3 mm*

Osnova: EN 3557:2022

ICS: 77.150.10, 49.025.20

This document specifies the requirements relating to:

Aluminium alloy AL-P6061-T4

Drawn tube for pressure applications

0,6 mm ≤ a ≤ 3 mm

for aerospace applications.

**SIST EN 3656:2023**

**2023-03** (po) (en;fr;de) **6 str. (B)**

Aeronavtika - Polikarbonat, samougasljiv, majhne emisije dima - Značilnosti

*Aerospace series - Polycarbonate, self-extinguishing, low smoke emission - Characteristics*

Osnova: EN 3656:2022

ICS: 49.025.40

This document specifies the characteristics of self-extinguishing and low smoke emission semi-finished polycarbonate sheets with and without UV radiation protection requirement, as used for aircraft equipment, such as internal panelling, simple internal glazing, sound-proofing panels, light covers, etc.

**SIST EN 3675:2023****2023-03** (po) (en;fr;de) **8 str. (B)**

Aeronavtika - Načrt vzorčenja za preskušanje sprejemljivosti aramidnih in ogljikovih vlaken ter tekstilne steklene filamentne preje

*Aerospace series - Sampling plan for acceptance testing of aramid, carbon fibre and textile glass filament yarns*

Osnova: EN 3675:2022

ICS: 49.025.60

This document specifies the sampling plan for acceptance testing of aramid, carbon fibre and textile glass filament yarns in terms of sample size and rejection criteria.

This document serves as a basis for the corresponding technical specification. It covers the inspection by attributes. The inspection by measurements (variables) will be added in subsequent edition. It is also planned to extend its scope of application to reinforcing woven fabrics.

**SIST EN 3762:2023****2023-03** (po) (en;fr;de) **9 str. (C)**Aeronavtika - Toplotno odporna zlitina X6NiCrTiMnMoV26-15 (1.4944) - Popuščana in hladno obdelana - Žice za kovane vezne elemente -  $D \leq 15 \text{ mm}$  -  $1100 \text{ MPa} \leq R_m \leq 1300 \text{ MPa}$ *Aerospace series - Heat-resisting alloy X6NiCrTiMnMoV26-15 (1.4944) - Softened and cold worked - Wire for forged fasteners -  $D \leq 15 \text{ mm}$  -  $1100 \text{ MPa} \leq R_m \leq 1300 \text{ MPa}$* 

Osnova: EN 3762:2022

ICS: 77.140.65, 49.025.05

This document specifies the requirements relating to:

Heat-resisting alloy X6NiCrTiMnMoV26-15 (1.4944)

Softened and cold worked

Wire for forged fasteners

 $D \leq 15 \text{ mm}$  $1100 \text{ MPa} \leq R_m \leq 1300 \text{ MPa}$ 

for aerospace applications.

**SIST EN 4374:2023****2023-03** (po) (en;fr;de) **9 str. (C)**Aeronavtika - Toplotno odporna zlitina NI-PH1301 (NiCr19Co18Mo4Ti3Al3) - Topilno žarjena in izločevalno utrjena - Palice in profili -  $De \leq 200 \text{ mm}$ *Aerospace series - Heat-resisting alloy NI-PH1301 (NiCr19Co18Mo4Ti3Al3) - Solution treated and precipitation treated - Bars and sections -  $De \leq 200 \text{ mm}$* 

Osnova: EN 4374:2022

ICS: 77.140.60, 49.025.99

This document specifies the requirements relating to:

Heat-resisting alloy NI-PH1301 (NiCr19Co18Mo4Ti3Al3)

Solution treated and precipitation treated

Bars and sections

 $De \leq 200 \text{ mm}$ 

for aerospace applications.

**SIST EN 4627:2023**

SIST EN 4627:2014

**2023-03** (po) (en;fr;de) **10 str. (C)**Aeronavtika - Jeklo X4CrNiMo16-5-1 (1.4418) - Taljeno - Utrjeno in mehko žarjeno - Izkovki -  $De \leq 200 \text{ mm}$  -  $1150 \text{ MPa} \leq R_m \leq 1300 \text{ MPa}$ *Aerospace series - Steel X4CrNiMo16-5-1 (1.4418) - Air melted - Hardened and tempered - Forgings -  $De \leq 200 \text{ mm}$  -  $1150 \text{ MPa} \leq R_m \leq 1300 \text{ MPa}$* 

Osnova: EN 4627:2022

ICS: 77.140.85, 49.025.10

This document specifies the requirements relating to:

Steel X4CrNiMo16-5-1 (1.4418)

Air melted

Hardened and tempered

Forgings

De ≤ 200 mm

1 150 MPa ≤ Rm ≤ 1 300 MPa

for aerospace applications.

NOTE Other common designations:

- AIR: Z 8 CND 17-04.

- Only the chemical composition according to this document is considered.

**SIST EN 4628:2023**

SIST EN 4628:2014

**2023-03 (po) (en;fr;de) 10 str. (C)**

Aeronavtika - Jeklo X4CrNiMo16-5-1 (1.4418) - Taljeno - Utrjeno in mehko žarjeno - Palice - De ≤ 200 mm - 1150 MPa ≤ Rm ≤ 1300 MPa

*Aerospace series - Steel X4CrNiMo16-5-1 (1.4418) - Air melted - Hardened and tempered - Bars - De ≤ 200 mm - 1 150 MPa ≤ Rm ≤ 1 300 MPa*

Osnova: EN 4628:2022

ICS: 77.140.60, 49.025.10

This document specifies the requirements relating to:

Steel X4CrNiMo16-5-1 (1.4418)

Air melted

Hardened and tempered

Bars

De ≤ 200 mm

1 150 MPa ≤ Rm ≤ 1 300 MPa

for aerospace applications.

NOTE Other common designations:

- AIR: Z 8 CND 17-04.

- Only the chemical composition according to this document is considered.

**SIST EN 4703:2023**

**2023-03 (po) (en;fr;de) 10 str. (C)**

Aeronavtika - Specifikacija preskusa za preverjanje prepustnosti izolacije električne opreme

*Aerospace series - Test specification for verification of the permeability of electrical insulation*

Osnova: EN 4703:2022

ICS: 49.060

This document specifies a test that determines the ability of electrical equipment to withstand wet atmospheres in combination with variable ambient air pressure in particular in an aircraft installation. The main adverse effects to be anticipated are fluid ingress and related insulation breakdown.

**SIST EN 4708-201:2023**

**2023-03 (po) (en;fr;de) 13 str. (D)**

Aeronavtika - Toplotno skrčljive cevke za povezovanje, izolacijo in prepoznavanje - 201. del: Poliolfinske identifikacijske cevke - Obratovalno temperaturno območje med -55 °C in 135 °C - Standard za proizvod

*Aerospace series - Sleeves, heat-shrinkable, for binding, insulation and identification - Part 201: Polyolefin identification sleeves - Operating Temperature range -55 °C to 135 °C - Product standard*

Osnova: EN 4708-201:2022

ICS: 49.060, 49.025.40

This document specifies the required characteristics for heat-shrinkable polyolefin identification sleeving for use in aircraft electrical systems at operating temperatures between -55 °C and 135 °C.

This specification is for the characterisation of identification sleeves only.

This sleeving is flexible and flame retarded, and is available with 2:1 and 3:1 shrink ratios.

The product is normally supplied with internal diameters up to 57 mm.

The standard colours are white or yellow.

Sizes or colours other than those specifically listed in this standard may be available. These items are considered to comply with this document if they comply with the property requirements listed in tables 3 and 4 except for dimensions and mass.

As the sleeving to be tested is a printed article the complete system is to be recorded as part of the evaluation. The sleeve will only be considered as meeting the requirements of this document if printed with the printer, ribbon, inks, and settings referenced within the test report.

Mark adherence and print permanence are determined in this document using method EN 6059-407.

### **SIST EN 4708-203:2023**

**2023-03** (po) (en;fr;de) **11 str. (C)**

Aeronavtika - Toplotno skrčljive cevke za povezovanje, izolacijo in prepoznavanje - 203. del: Polivinilidensko kloridne identifikacijske cevke iz (PVDF) – Obratovalno temperaturno območje med – 55 °C in 225 °C - Standard za proizvod

*Aerospace series - Sleeving, heat-shrinkable, for binding, insulation and identification - Part 203: polyvinylidene fluoride (PVDF) Identification sleeves - Operating Temperature range -55°C to 225°C - Product Standard*

Osnova: EN 4708-203:2022

ICS: 49.025.40, 49.060

This document specifies the required characteristics for heat-shrinkable semi rigid polyvinylidene identification sleeves for use in aircraft electrical systems at operating temperatures between -55 °C and 225 °C.

This specification is for the characterisation of Identification sleeves only.

This sleeving is a semi rigid tough product and is suitable for use where high temperatures and extreme fluid resistance properties are required.

It is available with a shrink ratio of 2:1.

The product is normally supplied with internal diameters up to 38 mm

The standard colours are white, black or yellow.

For use at temperatures above 200 °C black with white or silver ink is recommended.

Sizes or colours other than those specifically listed in this standard may be available. These items shall be considered to comply with this document if they comply with the property requirements listed in tables 2 and 3 except for dimensions and mass.

As the sleeving to be tested is a printed article the complete system is to be recorded as part of the evaluation. The sleeve will only be considered as meeting the requirements of this specification if printed with the printer, ribbon/inks and settings referenced within the test report.

Mark adherence and print permanence are determined in this document using method EN 6059-407.

### **SIST EN 4882:2023**

**2023-03** (po) (en;fr;de) **9 str. (C)**

Aeronavtika - Jeklo X5CrNiCu 17-4 (1.4542) - Taljeno - Topilno žarjeno in izločevalno utrjeno - Pločevina in trakovi -  $a \leq 6 \text{ mm}$  -  $R_m \geq 1070 \text{ MPa}$

*Aerospace series - Steel X5CrNiCu 17-4 (1.4542) - Air melted - Solution treated and precipitation treated - Sheets and strips -  $a \leq 6 \text{ mm}$  -  $R_m \geq 1070 \text{ MPa}$*

Osnova: EN 4882:2022

ICS: 77.140.50, 49.025.10

This document specifies the requirements relating to:

Steel X5CrNiCu 17-4 (1.4542)

Air melted

Solution treated and precipitation treated

Sheets and strips

$a \leq 6 \text{ mm}$

$R_m \geq 1070 \text{ MPa}$

for aerospace applications.

W.nr: 1.4542.

The ASD-STAN designation of this material is FE-PM3801.

**SIST EN 4883:2023**

**2023-03** (po) (en;fr;de) **9 str. (C)**

Aeronavtika - Jeklo X5CrNiCu 17-4 (1.4542) - Taljeno - Topilno žarjeno in izločevalno utrjeno - Plošče -  $6\text{ mm} \leq a \leq 100\text{ mm}$  -  $R_m \geq 1070\text{ MPa}$

*Aerospace series - Steel X5CrNiCu 17-4 (1.4542) - Air melted - Solution treated and precipitation treated - Plates -  $6\text{ mm} \leq a \leq 100\text{ mm}$  -  $R_m \geq 1070\text{ MPa}$*

Osnova: EN 4883:2022

ICS: 77.140.50, 49.025.10

This document specifies the requirements relating to:

Steel X5CrNiCu 17-4 (1.4542)

Air melted

Solution treated and precipitation treated

Plates

$6\text{ mm} \leq a \leq 100\text{ mm}$

$R_m \geq 1070\text{ MPa}$

for aerospace applications.

W.nr: 1.4542.

The ASD-STAN designation of this material is FE-PM3801.

**SIST EN 4884:2023**

**2023-03** (po) (en;fr;de) **9 str. (C)**

Aeronavtika - Jeklo X3CrNiMoAl (1.4534) - Indukcijsko taljeno v vakuumu in pretaljeno s taljivo elektrodo - Topilno žarjena in izločevalno utrjena - Palice za obdelavo - a ali  $D \leq 200\text{ mm}$  -  $1200\text{ MPa} \leq R_m \leq 1350\text{ MPa}$

*Aerospace series - Steel X3CrNiMoAl (1.4534) - Vacuum induction melted and consumable electrode remelted - Solution treated and precipitation treated - Bars for machining - a or  $D \leq 200\text{ mm}$  -  $1200\text{ MPa} \leq R_m \leq 1350\text{ MPa}$*

Osnova: EN 4884:2022

ICS: 77.140.60, 49.025.10

This document specifies the requirements relating to:

Steel X3CrNiMoAl (13-8-2)

Vacuum induction melted and consumable electrode remelted

Solution treated and precipitation treated

Bars for machining

a or  $D \leq 200\text{ mm}$

$1200\text{ MPa} \leq R_m \leq 1350\text{ MPa}$

for aerospace applications.

Material no (W.L): 1.4534.

**SIST EN 4904:2023**

**2023-03** (po) (en;fr;de) **9 str. (C)**

Aeronavtika - Jeklo 36NiCrMo16 (1.6773) -  $1000\text{ MPa} \leq R_m \leq 1200\text{ MPa}$  - Palice -  $100\text{ mm} \leq D \leq 250\text{ mm}$

*Aerospace series - Steel 36NiCrMo16 (1.6773) -  $1000\text{ MPa} \leq R_m \leq 1200\text{ MPa}$  - Bars -  $100\text{ mm} \leq D \leq 250\text{ mm}$*

Osnova: EN 4904:2022

ICS: 49.025.10

This document specifies the requirements relating to:

Steel 36NiCrMo16

$1000\text{ MPa} \leq R_m \leq 1200\text{ MPa}$

Bars

$100\text{ mm} \leq D \leq 250\text{ mm}$

for aerospace applications.

**SIST EN 6069:2023**

SIST EN 6069:2010

**2023-03 (po) (en;fr;de) 14 str. (D)**Aeronavtika - Kovice, 100° zmanjšana ugrezna glava, ozka toleranca - Palčne mere  
*Aerospace series - Rivet, 100° reduced flush head, close tolerance - Inch series*

Osnova: EN 6069:2022

ICS: 49.030.60

This document specifies the dimensions, tolerances and mass of rivets with 100° reduced flush head, close tolerance, inch series, for aerospace application.

**SIST EN 6080:2023**

SIST EN 6080:2016

**2023-03 (po) (en;fr;de) 14 str. (D)**Aeronavtika - Kovice, 100° normalna ugrezna glava, ozka toleranca - Palčne mere  
*Aerospace series - Rivet, 100° normal flush head, close tolerance - Inch series*

Osnova: EN 6080:2022

ICS: 49.030.60

This document specifies the dimensions, tolerances and masses of rivets with 100° normal flush head, close tolerance, inch series, for aerospace application.

**SIST EN 6081:2023**

SIST EN 6081:2016

**2023-03 (po) (en;fr;de) 14 str. (D)**Aeronavtika - Kovice, univerzalna glava, ozka toleranca - Palčne mere  
*Aerospace series - Rivet, universal head, close tolerance - Inch series*

Osnova: EN 6081:2022

ICS: 21.060.40, 49.030.60

This document specifies the dimensions, tolerances and mass of rivets with universal head, close tolerance, inch series, for aerospace application.

**SIST EN 6101:2023**

SIST EN 6101:2016

**2023-03 (po) (en;fr;de) 15 str. (D)**Aeronavtika - Kovice, 100° srednje ugrezna glava, ozka toleranca - Palčne mere  
*Aerospace series - Rivet, 100° medium flush head, close tolerance - Inch series*

Osnova: EN 6101:2022

ICS: 21.060.40, 49.030.60

This document specifies the dimensions, tolerances and mass of rivets with 100° medium flush head, close tolerance, inch series, for aerospace application.

**SIST EN 9114:2023**

SIST EN 9114:2016

**2023-03 (po) (en;fr;de) 11 str. (C)**

Aeronavtika - Sistem vodenja kakovosti - Neposredna dobava - Navodilo za letalsko in vesoljsko industrijo

*Aerospace series - Quality systems - Direct Ship - Guidance for Aerospace Companies*

Osnova: EN 9114:2022

ICS: 49.020, 03.120.10

## 1.1 General

This document is limited to the aerospace industry, where an approved manufacturer requests a supplier to ship an article against the approved manufacturer's quality system directly to a customer. The direct ship process is not required or applicable to standard parts or military parts. In this process, the approved manufacturer is responsible for assurance that the article conforms to type design information.

## 1.2 Purpose

This document provides guidance to approved manufacturers, their suppliers, and customers when an approved manufacturer requests a supplier to ship an article against the approved manufacturer's purchase document directly to a customer, commonly known as "Direct Ship".

**SIST EN ISO 13304-1:2023**

**2023-03** (po) (en;fr;de) **27 str. (G)**

Radiološka zaščita - Minimalna merila za spektroskopijo z elektronsko paramagnetno resonanco (EPR) za retrospektivno dozimetrijo ionizirnega sevanja - 1. del: Splošna načela (ISO 13304-1:2020)

*Radiological protection - Minimum criteria for electron paramagnetic resonance (EPR) spectroscopy for retrospective dosimetry of ionizing radiation - Part 1: General principles (ISO 13304-1:2020)*

Osnova: EN ISO 13304-1:2022

ICS: 17.240, 13.280

The primary purpose of this document is to provide minimum acceptable criteria required to establish a procedure for retrospective dosimetry by electron paramagnetic resonance spectroscopy and to report the results.

The second purpose is to facilitate the comparison of measurements related to absorbed dose estimation obtained in different laboratories.

This document covers the determination of absorbed dose in the measured material. It does not cover the calculation of dose to organs or to the body. It covers measurements in both biological and inanimate samples, and specifically:

- a) based on inanimate environmental materials like glass, plastics, clothing fabrics, saccharides, etc., usually made at X-band microwave frequencies (8 GHz to 12 GHz);
- b) in vitro tooth enamel using concentrated enamel in a sample tube, usually employing X-band frequency, but higher frequencies are also being considered;
- c) in vivo tooth dosimetry, currently using L-band (1 GHz to 2 GHz), but higher frequencies are also being considered;
- d) in vitro nail dosimetry using nail clippings measured principally at X-band, but higher frequencies are also being considered;
- e) in vivo nail dosimetry with the measurements made at X-band on the intact finger or toe;
- f) in vitro measurements of bone, usually employing X-band frequency, but higher frequencies are also being considered.

For biological samples, in vitro measurements are carried out in samples after their removal from the person or animal and under laboratory conditions, whereas the measurements in vivo are carried out without sample removal and may take place under field conditions.

NOTE The dose referred to in this document is the absorbed dose of ionizing radiation in the measured materials.

**SIST EN ISO 13304-2:2023**

**2023-03** (po) (en;fr;de) **31 str. (G)**

Radiološka zaščita - Minimalna merila za spektroskopijo z elektronsko paramagnetno resonanco (EPR) za retrospektivno dozimetrijo ionizirnega sevanja - 2. del: Dozimetrija človeške zobne sklenine ex vivo (ISO 13304-2:2020)

*Radiological protection - Minimum criteria for electron paramagnetic resonance (EPR) spectroscopy for retrospective dosimetry of ionizing radiation - Part 2: Ex vivo human tooth enamel dosimetry (ISO 13304-2:2020)*

Osnova: EN ISO 13304-2:2022

ICS: 17.240, 13.280

The purpose of this document is to provide minimum criteria required for quality assurance and quality control, evaluation of the performance and to facilitate the comparison of measurements related to absorbed dose estimation obtained in different laboratories applying ex vivo X-band EPR spectroscopy with human tooth enamel.

This document covers the determination of absorbed dose in tooth enamel (hydroxyapatite). It does not cover the calculation of dose to organs or to the body.

This document addresses:

- a) responsibilities of the customer and laboratory;
- b) confidentiality and ethical considerations;
- c) laboratory safety requirements;
- d) the measurement apparatus;
- e) preparation of samples;
- f) measurement of samples and EPR signal evaluation;



- g) calibration of EPR dose response;
- h) dose uncertainty and performance test;
- i) quality assurance and control.

**SIST EN ISO 14644-4:2023**

SIST EN ISO 14644-4:2002

**2023-03 (po) (en;de)****65 str. (K)**

Čiste sobe in podobna nadzorovana okolja - 4. del: Načrtovanje, izdelava in začetek obratovanja (ISO 14644-4:2022)

*Cleanrooms and associated controlled environments - Part 4: Design, construction and start-up (ISO 14644-4:2022)*

Osnova: EN ISO 14644-4:2022

ICS: 13.040.35

This document specifies the process for creating a cleanroom from requirements through to its design, construction and start-up. It applies to new, refurbished and modified cleanroom installations. It does not prescribe specific technological or contractual means of achieving these requirements. It is intended for use by users, specifiers, designers, purchasers, suppliers, builders and performance verifiers of cleanroom installations. The primary cleanliness consideration is airborne particle concentration. Detailed checklists are provided for the requirements, design, construction and start-up, which include important performance parameters to be considered. Energy management design approaches are identified to support an energy-efficient cleanroom design. Construction guidance is provided, including requirements for start-up and verification. A basic element of this document is consideration of aspects, including maintenance, that will help to ensure continued satisfactory operation for the entire life cycle of the cleanroom.

NOTE Further guidance is given in Annexes A to D. ISO 14644-1, ISO 14644-2, ISO 14644-8, ISO 14644-9, ISO 14644-10, ISO 14644-12 and ISO 14644-17 provide complementary information. ISO 14644-7 offers guidance on design, construction and requirements for separative devices (clean air hoods, glove boxes, isolators and mini-environments).

The following subjects are mentioned but not addressed in this document:

- specific operational activities, processes to be accommodated and process equipment in the cleanroom installation;
- fire and safety regulations;
- ongoing operation, cleaning and maintenance activities, which are covered by ISO 14644-5.

**SIST EN ISO 16640:2023****2023-03 (po) (en;fr;de)****62 str. (K)**

Nadzorovanje radioaktivnih plinov v iztokih iz obratov, ki proizvajajo radionuklide in radiofarmaceutvske izdelke, ki oddajajo pozitrone (ISO 16640:2021)

*Monitoring radioactive gases in effluents from facilities producing positron emitting radionuclides and radiopharmaceuticals (ISO 16640:2021)*

Osnova: EN ISO 16640:2022

ICS: 13.060.25, 13.280, 13.030.30

This document focuses on monitoring the activity concentrations of radioactive gases. They allow the calculation of the activity releases, in the gaseous effluent discharge from facilities producing positron emitting radionuclides and radiopharmaceuticals. Such facilities produce short-lived radionuclides used for medical purposes or research and can release gases typically including, but not limited to 18F, 11C, 15O and 13N. These facilities include accelerators, radiopharmacies, hospitals and universities. This document provides performance-based criteria for the design and use of air monitoring equipment including probes, transport lines, sample monitoring instruments, and gas flow measuring methods. This document also provides information on monitoring program objectives, quality assurance, development of air monitoring control action levels, system optimisation and system performance verification.

The goal of achieving an unbiased measurement is accomplished either by direct (in-line) measurement on the exhaust stream or with samples extracted from the exhaust stream (bypass), provided that the radioactive gases are well mixed in the airstream. This document sets forth performance criteria and recommendations to assist in obtaining valid measurements.

NOTE 1 The criteria and recommendations of this document are aimed at monitoring which is conducted for regulatory compliance and system control. If existing air monitoring systems were not designed according to the performance criteria and recommendations of this document, an evaluation of the performance of the system is advised. If deficiencies are discovered based on a performance evaluation, a determination of the need for a system retrofit is to be made and corrective actions adopted where practicable.

NOTE 2 The criteria and recommendations of this document apply under both normal and off-normal operating conditions, provided that these conditions do not include production of aerosols or vapours. If the normal and/or off-normal conditions produce aerosols and vapours, then the aerosol collection principles of ISO 2889 also apply.

**SIST EN ISO 20501:2023**

SIST EN 843-5:2007

**2023-03 (po) (en;fr;de) 45 str. (I)**

Fina keramika (sodobna keramika, sodobna tehnična keramika) - Weibullova statistika za podatke o trdnosti (ISO 20501:2019)

*Fine ceramics (advanced ceramics, advanced technical ceramics) - Weibull statistics for strength data (ISO 20501:2019)*

Osnova: EN ISO 20501:2022

ICS: 81.060.30

This document covers the reporting of uniaxial strength data and the estimation of probability distribution parameters for advanced ceramics which fail in a brittle fashion. The failure strength of advanced ceramics is treated as a continuous random variable. Typically, a number of test specimens with well-defined geometry are brought to failure under well-defined isothermal loading conditions. The load at which each specimen fails is recorded. The resulting failure stresses are used to obtain parameter estimates associated with the underlying population distribution.

This document is restricted to the assumption that the distribution underlying the failure strengths is the two-parameter Weibull distribution with size scaling. Furthermore, this document is restricted to test specimens (tensile, flexural, pressurized ring, etc.) that are primarily subjected to uniaxial stress states. Subclauses 6.4 and 6.5 outline methods of correcting for bias errors in the estimated Weibull parameters, and to calculate confidence bounds on those estimates from data sets where all failures originate from a single flaw population (i.e. a single failure mode). In samples where failures originate from multiple independent flaw populations (e.g. competing failure modes), the methods outlined in 6.4 and 6.5 for bias correction and confidence bounds are not applicable.

**SIST EN ISO 20504:2023**

SIST EN ISO 20504:2019

**2023-03 (po) (en;fr;de) 24 str. (F)**

Fina keramika (sodobna keramika, sodobna tehnična keramika) - Mehanske lastnosti keramičnih kompozitov pri sobni temperaturi - Določanje tlačnih lastnosti (ISO 20504:2022)

*Fine ceramics (advanced ceramics, advanced technical ceramics) - Mechanical properties of ceramic composites at room temperature - Determination of compressive properties (ISO 20504:2022)*

Osnova: EN ISO 20504:2022

ICS: 81.060.30

This document describes procedures for determination of the compressive behaviour of ceramic matrix composite materials with continuous fibre reinforcement at room temperature. This method applies to all ceramic matrix composites with a continuous fibre reinforcement, uni-directional (1D), bi-directional (2D) and tri-directional (xD, with  $2 < x < 3$ ), tested along one principal axis of reinforcement or off axis conditions. This method also applies to carbon-fibre-reinforced carbon matrix composites (also known as carbon/carbon or C/C). Two cases of testing are distinguished: compression between platens and compression using grips.

**SIST EN ISO 22916:2023****2023-03 (po) (en;fr;de) 23 str. (F)**

Mikrofluidne naprave - Zahteve za interoperabilnost dimenzij, priključkov in začetne razvrstitve naprav (ISO 22916:2022)

*Microfluidic devices - Interoperability requirements for dimensions, connections and initial device classification (ISO 22916:2022)*

Osnova: EN ISO 22916:2022

ICS: 71.040.20

This document specifies requirements for the seamless integration with other microfluidic components and systems to facilitate the process of designing new microfluidic devices (e.g. microfluidic chips, sensors, actuators, connectors).

This document is applicable to devices in the field of "microfluidics" needing microfluidic interconnections.

**SIST EN ISO 23062:2023**

SIST EN 710:2000+A1:2010

SIST EN 710:2000+A1:2010/AC:2013

**2023-03 (po) (en;fr;de) 54 str. (J)**

Livarski stroji - Varnostne zahteve za stroje za oblikovanje in izdelavo jeder ter pripadajočo opremo (ISO 23062:2022)

*Foundry machinery - Safety requirements for molding and coremaking machinery and associated equipment (ISO 23062:2022)*

Osnova: EN ISO 23062:2022

ICS: 25.120.30, 77.180

This document applies to the following equipment:

- a) Machinery constructed to condition and/or reclaim foundry sands for mold and core making (including related moldable granular materials);
- b) Molding machinery;
- c) Coremaking machinery;
- d) Knock-out equipment;
- e) Other directly associated equipment.

This document does not apply to

☒ ladles and pouring equipment

NOTE This equipment is covered within EEC by EN 1247

☒ wax- and lost foam pattern production and wax removal equipment;

☒ additive manufacturing equipment;

☒ dust and/or gaseous emissions reduction equipment;

☒ crane installations;

☒ winches;

☒ continuous conveyors or handling systems which could be an integral part of the equipment covered by the scope.

This document deals with foreseeable significant hazards, hazardous situations and events relevant to molding and coremaking machinery and associated equipment when used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer. It provides the requirements to be met by the manufacturer to ensure the safety of persons and property during the life-cycle phases according ISO 12100:2010; 5.4, as well as in the event of foreseeable failures or malfunctions that can occur in the equipment.

The foreseeable significant hazards are listed in clause 5 and include:

☒ Mechanical hazards, movement of machinery and workpieces, ejection of material, of liquids and gases, inadequacy of the mechanical strength;

☒ Explosion, fire, exothermic reactions;

☒ Contact with hot parts, gases and flames;

☒ Noise and vibration;

☒ Thermal heat radiation and conduction;

☒ Harmful by-products, poisoning, pollution of operators' breathing air.

**SIST EN ISO 23133:2023**

**2023-03** (po) (en;fr;de) **16 str. (D)**

Varnost pred kritičnostjo - Usposabljanje za varnost pred kritičnostjo pri obratovanju (ISO 23133:2021)  
*Nuclear criticality safety - Nuclear criticality safety training for operations (ISO 23133:2021)*

Osnova: EN ISO 23133:2022

ICS: 27.120.20, 03.100.30

This document specifies minimum nuclear criticality safety training requirements for operations staff, operations supervisors, and management.

This document is applicable to areas, processes or facilities containing quantities of fissile material for which nuclear criticality safety assessment is required as defined in ISO 1709.

This document is not applicable to the transport of fissile materials outside the boundaries of nuclear establishments.

**SIST EN ISO 8528-10:2023**

**2023-03** (po) (en;fr;de) **54 str. (J)**

Sestavi tokovnih generatorjev, ki jih poganja batni stroj z notranjim zgorevanjem - 10. del: Meritev hrupa v zraku (ISO 8528-10:2022)

*Reciprocating internal combustion engine driven alternating current generating sets - Part 10: Measurement of airborne noise (ISO 8528-10:2022)*

Osnova: EN ISO 8528-10:2022

ICS: 29.160.40, 27.020, 17.140.20

This part of ISO 8528 defines measurement methods for the determination of airborne noise emitted by reciprocating internal combustion engine driven generating sets in such a way that the total of relevant noise emissions, e.g. exhaust and cooling system noise, together with all other sources of engine noise, are evaluated on a similar basis to yield comparable results.

This part of ISO 8528 applies to RIC engine driven AC generating sets for fixed and mobile applications with rigid or flexible mountings. It is applicable for land and marine use, excluding generating sets used on aircraft or to propel land vehicles and locomotives.

**SIST EN ISO 8769:2023**

**2023-03** (po) (en;fr;de) **21 str. (F)**

Merjenje radioaktivnosti - Radionuklidi, ki oddajajo alfa in beta žarke ter fotone - Specifikacije referenčnega merilnega standarda za kalibracijo merilnikov površinske kontaminacije (ISO 8769:2020)  
*Measurement of radioactivity - Alpha-, beta- and photon emitting radionuclides - Reference measurement standard specifications for the calibration of surface contamination monitors (ISO 8769:2020)*

Osnova: EN ISO 8769:2022

ICS: 17.240

This document specifies the characteristics of reference measurement standards of radioactive surface contamination, traceable to national measurement standards, for the calibration of surface contamination monitors. This document relates to alpha-emitters, beta-emitters, and photon emitters of maximum photon energy not greater than 1,5 MeV.

It does not describe the procedures involved in the use of these reference measurement standards for the calibration of surface contamination monitors. Such procedures are specified in IEC 60325[6], IEC 62363[7], and other documents.

NOTE Since some of the proposed photon standards include filters, the photon standards are to be regarded as reference measurement standards of photons of a particular energy range and not as reference measurement standards of a particular radionuclide. For example, a <sup>241</sup>Am source with the recommended filtration does not emit from the surface the alpha particles or characteristic low-energy L X-ray photons associated with the decay of the nuclide. It is designed to be a reference measurement standard that emits photons with an average energy of approximately 60 keV.

This document also specifies preferred reference radiations for the calibration of surface contamination monitors. These reference radiations are realized in the form of adequately characterized large area sources specified, without exception, in terms of surface emission rate and activity which are traceable to national standards.

**SIST EN ISO 9094:2023****2023-03 (po) (en;fr;de)**

SIST EN ISO 9094:2017

**39 str. (H)**

Mala plovila - Požarna zaščita (ISO 9094:2022)

*Small craft - Fire protection (ISO 9094:2022)*

Osnova: EN ISO 9094:2022

ICS: 13.220.20, 47.080

This document defines a practical degree of fire prevention and protection intended to provide enough time for occupants to escape a fire on board small craft.

It applies to small craft having a length of the hull (LH) of up to 24 m except for personal watercraft.

This document does not cover:

- the design and installation of permanently installed galley stoves and heating appliances (including components used to distribute the heat) using fuels that are liquid at atmospheric pressure on small craft, which are covered by ISO 14895:2016;
- carbon monoxide detecting systems, which are covered by ISO 12133.

**SIST EN ISO 9978:2023****2023-03 (po) (en;fr;de) 22 str. (F)**

Zaščita pred sevanjem - Zaprti viri - Metode preskušanja prepuščanja (ISO 9978:2020)

*Radiation protection - Sealed sources - Leakage test methods (ISO 9978:2020)*

Osnova: EN ISO 9978:2022

ICS: 13.280

This document specifies the different leakage test methods for sealed sources. It gives a comprehensive set of procedures using radioactive and non-radioactive means.

This document applies to the following situations:

- leakage testing of test sources following design classification testing in accordance with ISO 2919[1];
- production quality control testing of sealed sources;
- periodic inspections of the sealed sources performed at regular intervals, during the working life.

Annex A of this document gives guidance to the user in the choice of the most suitable method(s) according to situation and source type.

It is recognized that there can be circumstances where special tests, not described in this document, are required.

It is emphasized, however, that insofar as production, use, storage and transport of sealed radioactive sources are concerned, compliance with this document is no substitute for complying with the requirements of the relevant IAEA regulations[17] and other relevant national regulations. It is also recognized that countries can enact statutory regulations which specify exemptions for tests, according to sealed source type, design, working environment, and activity (e.g., for very low activity reference sources where the total activity is less than the leakage test limit).

**SIST CWA 17918:2023****2023-03 (po) (en;fr;de) 12 str. (C)**

Proizvodnja brez napak - Slovar

*Zero Defects Manufacturing - Vocabulary*

Osnova: CWA 17918:2022

ICS: 01.040.03, 03.100.50

The CWA defines terms for Zero-Defect Manufacturing (ZDM) in digital manufacturing with correlation to Industry 4.0 and quality management. The CWA does not define quality management requirements.



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