# IZVLEČKI V ANGLEŠČINI

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# Izvlečki iz novih slovenskih nacionalnih standardov v angleškem jeziku

# SIST/TC BIM Informacijsko modeliranje gradenj

# SIST-TP CEN/TR 17741:2022

2022-03 (en:fr:de) 19 str. (E) (po) Navodila za razumevanje in uporabo EN/ISO 29481-1 Informacijski modeli stavb - Priročnik z informacijami - 1. del: Metodologija in oblika Guidance for understanding and utilize EN/ISO 29481-1 Building information models - Information delivery manual - Part 1: Methodology and format Osnova: CEN/TR 17741:2021 ICS: 91.010.01, 35.240.67

This document provides a guidance on how to develop an Information Delivery Manual (IDM) in compliance with EN ISO 29481-1 hereafter referred to as the "IDM standard". This document explains the core components and development process of the IDM methodology in non-technical terms. This guidance aims to help users and software vendors understand and utilise the IDM standard in defining information requirements and deliverables.

The technical implementation of IDM in a data model, Model View Definition 1) (MVD), is excluded from this guideline's scope. IDM standard introduces the MVD concept but does not specify it in detail.

This guidance also utilises some transaction framework concepts introduced in EN ISO 29481-2. The technical XML- and XSD-schema definitions supporting the software solutions are excluded from this guidance.

1) An MVD defines a data model or a subset of an existing data model that is necessary to support one or many specific data exchange requirements. MVDs are used in software development and should have a machine-readable representation. An MVD that is dedicated to a single IDM can be used to filter information in software tools to a specific exchange requirement. [SOURCE: EN ISO 29481-1:2017, 5.6.4]. 1.1

# Background

This guideline primary reference is the IDM standard part 1 (EN ISO 29481-1:2017) (hereafter referred to as IDM standard). This guideline helps in understanding and using the IDM standard to describe information delivery. The guidance also uses some concepts described in part 2 of the IDM standard series (EN ISO 29481-2:2016). Considerable efforts have been made to align this guidance with the terminology and concepts introduced in EN ISO 19650-1 and EN ISO 19650-2.

Information Delivery Manual specification (hereafter referred to as the IDM specification) provides help in getting the full benefit from building information modelling (BIM). When the required information is available in the BIM to support a construction process or use case, and the quality of information is satisfactory, the process itself is much improved. The IDM standard provides a method to create the specification.

A complete IDM specification should support two perspectives: user requirements and technical solutions. User requirements describe the needed information delivery and the overall process in which information exchange occurs. The technical solution defines an exchange requirement model using a harmonised data schema.

EN ISO 29481-1 provides a methodology and a harmonised format to specify information requirements. It offers a framework and method to determine the needed information delivery with process maps and exchange requirements.

EN ISO 29481-2 specifies an interaction framework and format to describe "coordination acts" between actors or parties within an appointment. It facilitates interoperability between software applications used in the construction process to promote digital collaboration between actors in the building construction process. Also, it provides a basis for accurate, reliable, repeatable, and high-quality information exchange.

1.2 Users of this guidance document

This guidance document is intended for clients, architects, engineers, contractors, surveyors, authorities, and other parties who need to specify or implement information delivery. Originally, the IDM standard was focused on defining BIM deliverables, but the possible application of the standard is much broader. It can be used to specify any requirement for information delivery.

Although software developers and technology adapters are not the primary audiences of this guidance document, it may help them better understand existing IDMs and develop their own IDMs.

1.3 Relation to EN ISO 19650

The IDM standard is a process-oriented methodology used to describe the information exchange requirements for a particular purpose which may complement the information-management approach outlined in the EN ISO 19650 series...

# SIST/TC EAL Električni alarmi

SIST EN 62820-1-1:2017/A11:20222022-03(po)(en;fr)7 str. (B)Notranja komunikacija v stavbah - 1-1. del: Splošne zahteve - Dopolnilo A11Building intercom systems - Part 1-1: System requirements - GeneralOsnova:EN 62820-1-1:2016/A11:2021ICS:35.240.67, 97.120

Amandma A11:2022 je dodatek k standardu SIST EN 62820-1-1:2017.

Ta del standarda IEC 62820 določa tehnične zahteve za sestavo, funkcije, zmogljivost in preskusne metode za splošno notranjo komunikacijo v stavbah.

Ta del se uporablja za splošno notranjo komunikacijo v stavbah pri vhodu v stanovanjske ali poslovne stavbe.

Domofon je enostavna vrsta priročnega sistema notranje komunikacije v stavbah, ki je namenjen predvsem udobju uporabnika. Ta dokument v delu 1-1 razvršča splošne sisteme notranje komunikacije v stavbah v dva razreda. 1. razred zajema nižje zahteve za domofone glede varnosti, medtem ko 2. razred zajema višje zahteve za sisteme notranje komunikacije v stavbah glede varnosti. Vsak razred lahko zajema različne zahteve glede funkcionalnosti in zmogljivosti, preskusne metode in zveze s standardi.

OPOMBA: različne zahteve med 1. in 2. razredom so povzete v preglednici C.1.

# SIST/TC ELI Nizkonapetostne in komunikacijske električne inštalacije

# SIST EN 50667:2017/A1:2022

2022-03 (po) (en;fr) 9 str. (C)

Informacijska tehnologija - Avtomatizirani sistemi upravljanja infrastrukture (AIM) - Zahteve, izmenjava podatkov in uporaba - Dopolnilo A1

Information technology - Automated infrastructure management (AIM) systems - Requirements, data exchange and applications

Osnova: EN 50667:2016/A1:2021 ICS: 35.110

Amandma A1:2022 je dodatek k standardu SIST EN 50667:2017.

Ta evropski standard določa zahteve in priporočila za lastnosti avtomatiziranih sistemov upravljanja infrastrukture (AIM).

Ta evropski standard pojasnjuje, kako lahko avtomatizirani sistemi upravljanja infrastrukture pripomorejo k učinkovitosti delovanja in so lahko koristni za:

a) upravljanje kabelske infrastrukture in povezanih naprav,

b) naprave ter postopke in sisteme za upravljanje informacijske tehnologije,

c) druge omrežne upravljalne postopke in sisteme (npr. pametni stavbni sistemi),

d) poslovne informacijske sisteme, ki zajemajo sledenje in upravljanje sredstev, vključno z obveščanjem o dogodkih ter opozorili, ki pripomorejo k varnosti fizičnega omrežja.

Ta evropski standard določa okvir zahtev in priporočil za izmenjavo podatkov z drugimi sistemi.

# SIST/TC EMC Elektromagnetna združljivost

# SIST EN 61000-3-3:2014/A2:2022/AC:2022

2022-03(po)(en,fr)4 str. (AC)Elektromagnetna združljivost (EMC) - 3-3. del: Mejne vrednosti - Omejitev vrednosti kolebanja<br/>napetosti in flikerja v nizkonapetostnih napajalnih sistemih za opremo z naznačenim tokom do 16 A in<br/>ni priključena pod posebnimi pogoji - Dopolnilo A2 - Popravek AC<br/>Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage

fluctuations and flicker in public low-voltage supply systems, for equipment with rated current  $\leq$ 16 A per phase and not subject to conditional connection

Osnova: EN 61000-3-3:2013/A2:2021/AC:2022-01 ICS: 33.100.01

Popravek k standardu SIST EN 61000-3-3:2014/A2:2022.

Ta del standarda IEC 61000 obravnava omejitev vrednosti kolebanja napetosti in flikerja v javnih nizkonapetostnih napajalnih sistemih. Določa omejitve vrednosti kolebanja napetosti, ki jih lahko proizvede oprema, preizkušena pod določenimi pogoji, in podaja smernice za metode ocenjevanja. Ta del standarda IEC 61000 se uporablja za električno in elektronsko opremo z vhodnim tokom do vključno 16 A na fazo, ki je namenjena za povezavo z javnimi nizkonapetostnimi razdelilnimi sistemi z napetostjo med linijskim in nevtralnim vodnikom od 220 V do 250 V pri 50 Hz ter ni priključena pod posebnimi pogoji. Če opremo, ki ni v skladu z omejitvami tega dela standarda IEC 61000, preskušate z referenčno impedanco Zref 6,4 in je zato ni mogoče razglasiti za skladno s tem delom, jo lahko znova preskusite oziroma ocenite, ali je skladna s standardom IEC 61000-3-11. Del 3-11 se uporablja za opremo z nazivnim vhodnim tokom ≤ 75 A na fazo in je priključena pod posebnimi pogoji. Preskusi po tem delu so tipski preskusi. Posebni preskusni pogoji so navedeni v dodatku A, preskusni krog pa je prikazan na sliki 1.

# SIST/TC EPO Embalaža - prodajna in ovojna

SIST EN ISO 861	1-1:2022		SIST EN ISO 8611-1:2013	
2022-03	(ро)	(en;fr;de)	38 str. (H)	
Palete za ravnanj	je z materi	iali - Ravne palete - 1	I. del: Preskusne meto	de (ISO 8611-1:2021)
Pallets for materi	als handliı	ng - Flat pallets - Par	t 1: Test methods (ISO	8611-1:2021)
Osnova:	EN ISO 8	3611-1:2022		
ICS:	55.180.2	20		

This document specifies the test methods available for evaluating new flat pallets for materials handling. The test methods are split into groups for: – nominal load testing; – maximum working load testing; – durability comparison testing. This document does not apply to pallets with a fixed superstructure or a rigid, self-supporting container that can be mechanically attached to the pallet and which contributes to the strength of the pallet. NOTE Specific tests for determining load capacity do not replace the value of conducting field tests on specific pallet designs.

## SIST EN ISO 8611-2:2022

SIST EN ISO 8611-2:2013 SIST EN ISO 8611-2:2013/A1:2017 21 otr (E)

2022-03(po)(en;fr;de)21 str. (F)Palete za ravnanje z materiali - Ravne palete - 2. del: Zahtevane lastnosti in izbira preskusa (ISO 8611-<br/>2:2021)Pallets for materials handling - Flat pallets - Part 2: Performance requirements and selection of tests<br/>(ISO 8611-2:2021)Osnova:EN ISO 8611-2:2022<br/>55.180.20

This document specifies the performance requirements to establish nominal loads for new flat pallets. It also specifies the tests required for new flat pallets in various handling environments and the performance requirements for tests with payloads. This document does not apply to pallets with a fixed superstructure or a rigid, self-supporting container that can be mechanically attached to the pallet and which contributes to the strength of the pallet.

SIST EN 14373:2006

46 str. (I)

# SIST/TC EXP Električni aparati za eksplozivne atmosfere

SIST EN 14373:20222022-03(po)(en;fr;de)Sistemi za dušenje eksplozijExplosion suppression systemsOsnova:EN 14373:2021ICS:13.230

This document describes the basic requirements for the design and application of explosion suppression systems. This document also specifies test methods for evaluating the effectiveness and the scale up of explosion suppression systems against defined explosions. This document covers:

- general requirements for explosion suppression system components;
- evaluating the effectiveness of an explosion suppression system;
- evaluating the scale up of an explosion suppression system;
- development and evaluation of design tools for explosion suppression systems;
- installation, operation and maintenance instructions for an explosion suppression system.

This document is applicable only to explosion suppression systems intended for the protection of closed, or essentially closed, enclosures in which an explosion could result as a consequence of ignition of an explosible mixture, e.g. dust-air, gas(vapour)-air, dust-gas(vapour)-air and mist-air.

This document is not applicable for explosions of materials listed below, or for mixtures containing some of those materials:

- unstable materials that are liable to dissociate;

- explosive materials;
- pyrotechnic materials;
- pyrophoric materials.

# SIST/TC FGA Funkcionalnost gospodinjskih aparatov

## SIST EN IEC 63174:2022

2022-03

17 str. (E)

Električne zobne ščetke - Metode za merjenje funkcionalnosti Electrically operated toothbrushes - Method for measuring performance Osnova: EN IEC 63174:2022

(en)

ICS: 11.060.01, 97.170

(po)

This document deals with the methods for measuring the performance of electrically powered toothbrushes.

This document applies to electrically powered toothbrushes used for cleaning the teeth with electric energy to drive. Rechargeable toothbrushes and primary battery powered toothbrushes, both for adult and child, are within the scope of this standard.

This standard is just to specify the measurement method but does not define any limit value.

NOTE: The electrically powered toothbrushes are classified as follows:

Classification with regard to supply modes:

- primary battery powered toothbrush

- rechargeable toothbrush

-- wireless rechargeable toothbrush

-- corded rechargeable toothbrush

Classification with regard to moving modes:

- rotary electrically powered toothbrush
- reciprocated electrically powered toothbrush
- -- linear reciprocated electrically powered toothbrush
- -- rotational reciprocated electrically powered toothbrush
- vibratory electrically powered toothbrush

The different types are clarified for information, since there is no difference in the tests to be done, except for the types of primary battery powered toothbrush and rechargeable toothbrush.

# SIST/TC IBLP Barve, laki in premazi

SIST EN ISO 2	23322:2022			
2022-03	(po)	(en;fr;de)	20 str. (E)	
Barve in laki -	Določevanje t	opil v premazih, ki v	/sebujejo samo organska †	topila - Plinska
kromatografs	ka metoda (IS	0 23322:2021)		
Paints and vai	rnishes - Deter	mination of solvent	s in coating materials cont	aining organic solvents only -
Gas-chromato	graphic meth	od (ISO 23322:2021	)	
Osnova:	EN ISO 2	3322:2021		
ICS:	87.060.3	0, 87.040		

This document specifies a method for the gas-chromatographic determination of the qualitative and quantitative composition of solvents contained in a product. The method is applicable to coating materials containing solely organic solvents (generally called conventional coating materials) and binder solutions and non-aqueous dispersions containing solely organic solvents.

The method defined in this document is not applicable for determination of volatile organic compounds (VOC) and semi-volatile organic compounds (SVOC) content.

For determination of VOC and SVOC, see ISO 11890-2.

# SIST-TS CEN ISO/TS 23973:2022

2022-03

(en;fr;de) 57 str. (J)

Tekočinska kromatografija pri kritičnih pogojih (LCCC) - Kemijska heterogenost polietilen oksidov (ISO/TS 23973:2020)

Liquid chromatography at critical conditions (LCCC) - Chemical heterogeneity of polyethylene oxides (ISO/TS 23973:2020)

Osnova: CEN ISO/TS 23973:2021 ICS: 71.040.50

(po)

This document establishes a valid method for separation of chemically heterogeneous polyethylene oxide (PEO) mixtures and for the determination the number and content of the chemically heterogeneous species in the overall sample. The method presented in this document serves as a technical guideline and enables laboratories to learn the principle of "critical chromatography" on a validated system. This method presented in this document with its stated system parameters is not applicable for other polymer classes, due to the diversity of the interactions between the polymer/mobile phase/stationary phase and the number of separation systems that are therefore available. The evaluation of the interlaboratory testing has shown that many error sources relate to the technique of liquid chromatography in general. Possible error sources are described in Annex A. Details on the evaluation of the interlaboratory testing are given in Annex B. Elugrams of the participants (excerpts) are given in Annex C. Investigations of the long-term stability of the test mixture are given in Annex D

# SIST/TC IEHT Elektrotehnika - Hidravlične turbine

 SIST EN 61400-13:2016/A1:2022

 2022-03
 (po)
 (en)
 13 str. (D)

 Vetrne turbine - 13. del: Meritve mehanskih obremenitev - Dopolnilo A1 (IEC 61400-13:2015/AMD1:2021)

 Wind turbines - Part 13: Measurement of mechanical loads (IEC 61400-13:2015/AMD1:2021)

 Osnova:
 EN 61400-13:2016/A1:2022

 ICS:
 27.180

Amandma A1:2022 je dodatek k standardu SIST EN 61400-13:2016.

Ta del standarda IEC 61400 opisuje meritve temeljnih obremenitev konstrukcije pri vetrnih turbinah za namene preverjanja veljavnosti modela za simulacijo obremenitve. Standard predpisuje zahteve in priporočila za izbiro mesta uporabe, izbiro signalizacije, pridobivanje podatkov, umerjanje, preverjanje veljavnosti podatkov, primere meritvene obremenitve, metriko zajemanja, naknadno obdelavo, ugotavljanje negotovosti in poročanje. Vključeni so tudi informativni dodatki za boljše razumevanje preskusnih metod.

V tem dokumentu opisane metode se lahko uporabljajo tudi za meritve mehanskih obremenitev za druge namene, na primer za pridobivanje izmerjenih statističnih prikazov obremenitve, neposredne meritve projektnih obremenitev, preskušanje varnostnih in funkcionalnih lastnosti ali merjenje sestavnih obremenitev. Če se te metode uporabljajo za druge namene ali projektiranje nekonvencionalnih vetrnih turbin, je treba ovrednotiti potrebno signalizacijo, primere meritvene obremenitve, metriko zajemanja in metode naknadne obdelave ter jih po potrebi prilagoditi za te namene.

Te metode so namenjene za vetrne turbine z vodoravno osjo (HAWT) za proizvodnjo električne energije na kopnem z območji delovanja rotorja, katerih površina je večja kot 200 m2. Vendar opisane metode se lahko uporabljajo za druge vetrne turbine (npr. male vetrne turbine, kanalne vetrne turbine ali vetrne turbine z navpično osjo).

# SIST/TC IFEK Železne kovine

SIST EN 10264-2:2022SIST EN 10264-2:20122022-03(po)(en;fr;de)16 str. (D)Jeklena žica in žični izdelki - Jeklena žica za vrvi - 2. del: Hladno vlečena nelegirana jeklena žica za vrvi za splošno uporaboSteel wire and wire products - Steel wire for ropes - Part 2: Cold drawn non alloy steel wire for ropes for general applications

 Osnova:
 EN 10264-2:2021

 ICS:
 77.140.45, 77.140.65

This part of EN 10264 defines cold drawn non alloy steel wire used for the manufacture of:

- ropes for general applications and lifts;
- ropes for applications for which there is no specific European Standard.

This part of EN 10264 does not apply to steel wire taken from manufactured ropes.

This part of EN 10264 specifies the following for cold drawn non alloy steel wire for ropes for general applications:

- dimensional tolerances;
- mechanical characteristics;
- requirements relating to the chemical composition of the steel wire;
- conditions to be satisfied by any coating.

In addition to the requirements of this part of EN 10264, the requirements of EN 10264-1 also apply.

# SIST/TC IHPV Hidravlika in pnevmatika

SIST ISO 11943:2022SIST ISO 11943:20212022-03(po)(en;fr;de)34 str. (H)Fluidna tehnika - Hidravlika - Postopki za samodejno štetje delcev v tekočinah med pogonom -<br/>Metode kalibriranja in validacijeHydraulic fluid power - Online automatic particle-counting systems for liquids - Methods of calibration<br/>and validationOsnova:ISO 11943:2021<br/>23.100.60

This document establishes methods for: – validating equipment used to prepare secondary calibration suspensions for automatic particle counters; – performing online secondary calibration of automatic particle counters; – matching two or more online particle counters, i.e. to count the same number of particles at a given size by two APCs associated online; – validating online particle counting systems with and without online dilution as used, for example, to measure the filtration efficiency of a hydraulic filter as described in the multi-pass filter test in ISO 16889.

SIST ISO 1215	1-3:2022		SIST ISO 12151-3:2014	
2022-03	(ро)	(en;fr;de)	17 str. (E)	
Fluidna tehnika	i - Hidravlika	a - Spoji za hidravli	ko in za splošno uporabo ·	- Cevne armature
Connections fo	r hydraulic f	fluid power and ger	ieral use - Hose fittings	
Osnova:	ISO 121	51-3:2021		
ICS:	23.100.4	40, 23.040.70		

This document specifies the general and dimensional requirements for the design and performance of flange hose fittings, made of carbon steel, for nominal hose inside diameters of 12,5 mm to 76 mm inclusive, in accordance with ISO 4397, for use with ports and clamps in accordance with ISO 6162-1 and ISO 6162-2. Note 1 Materials other than carbon steel can be supplied as agreed between the manufacturer and user. Note 2 For hose fittings used in hydraulic and pneumatic braking systems on road vehicles (as defined in the scope of ISO/TC 22/SC 2, Road vehicles), see ISO 4038, ISO 4039-1 and ISO 4039-2. These hose fittings (see Figure 1 for a typical example) are for use in hydraulic fluid power systems with a hose that meets the requirements of the respective hose standards and in general applications with suitable hoses.

SIST ISO 440	6:2022		SIST ISO 4406:2001	
2022-03	(ро)	(en)	11 str. (C)	
Moč hidravlič	nega fluida - F	-luidi - Metoda z	a označevanje stopnje onesnaženos	ti s trdnimi delci
Hydraulic flui	d power - Fluid	ls - Method for c	oding the level of contamination by s	olid particles
Osnova:	ISO 4406	5:2021		
ICS:	75.120, 2	23.100.60		

This document specifies the code to be used in defining the quantity of solid particles in the fluid used in a given hydraulic fluid power system.

# SIST/TC IMKF Magnetne komponente in feritni materiali

 SIST EN IEC 63182-4:2022

 2022-03
 (po)
 (en)
 12 str. (C)

 Jedra iz magnetnega prahu - Smernice o merah in mejnih vrednostih površinskih nepravilnosti - 4. del:

 Blokovna jedra

 Magnetic powder cores - guidelines on dimensions and the limits of surface irregularities - Part 4: Block-cores

 Osnova:
 EN IEC 63182-4:2022

 ICS:
 29.100.10

This part of IEC 63182 specifies the preferred range of the dimensions that are important for mechanical interchangeability and the guidelines on allowable limits of surface irregularities for block-cores made of metallic magnetic powder.

This document is a specification about surface irregularities which is useful in the negotiations between suppliers and users of magnetic powder core.

The use of "derived" standards which give more detailed specifications of component parts while still permitting compliance with this standard is discussed in Annex A.

# SIST/TC IPMA Polimerni materiali in izdelki

SIST EN ISO 527-4:2022SIST EN ISO 527-4:19992022-03(po)(en;fr;de)35 str. (H)Polimerni materiali - Določanje nateznih lastnosti - 4. del: Preskusni pogoji za izotropne in ortotropne<br/>z vlakni ojačene polimerne kompozite (ISO 527-4:2021)Plastics - Determination of tensile properties - Part 4: Test conditions for isotropic and orthotropic fibre-<br/>reinforced plastic composites (ISO 527-4:2021)Osnova:EN ISO 527-4:2021ICS:83.120

This document specifies the test conditions for the determination of the tensile properties of isotropic and orthotropic fibre-reinforced plastic composites, based upon the general principles given in ISO 527-1. NOTE 1 Unidirectional reinforced materials are covered by ISO 527-5. The methods are used to investigate the tensile behaviour of the test specimens and for determining the tensile strength, tensile modulus, Poisson's ratios and other aspects of the tensile stress-strain relationship under the defined conditions. The test method is suitable for use with the following materials: — fibre-reinforced thermosetting and thermoplastic composites incorporating non-unidirectional reinforcements such as mats, woven fabrics, woven rovings, chopped strands, combinations of such reinforcements, hybrids, rovings, short or milled fibres or preimpregnated materials (prepregs); NOTE 2 Injection moulded specimens are covered by ISO 527-2. — combinations of the above with unidirectional reinforcements and multidirectional reinforced materials constructed from unidirectional layers, provided such laminates are symmetrical; NOTE 3 Materials with completely or mainly unidirectional reinforcements are covered by ISO 527-5. — finished products made from materials mentioned above. The reinforcement fibres covered include glass fibres, carbon fibres, aramid fibres and other similar fibres.

# SIST ISO 4079:2022

2022-03 (po) (en;fr;de) 17 str. (E)

Gumene cevi in cevni priključki - S tekstilom ojačene hidravlične cevi za tekočine na oljni ali vodni osnovi - Specifikacija

Rubber hoses and hose assemblies - Textile-reinforced hydraulic types for oil-based or water-based fluids - Specification

Osnova: ISO 4079:2020 ICS: 83.140.40, 23.100.40

This document specifies requirements for five types of textile-reinforced hydraulic hoses and hose assemblies of nominal size from 5 to 100.

They are suitable for use with:

- oil-based hydraulic fluids HH, HL, HM, HR and HV as defined in ISO 6743-4 at temperatures ranging from -40 °C to +100 °C;

- water-based fluids HFC, HFAE, HFAS and HFB as defined in ISO 6743-4 at temperatures ranging from -40 °C to +70 °C;

- water at temperatures ranging from 0 °C to +70 °C.

This document does not include requirements for end fittings. It is limited to requirements for hoses and hose assemblies.

NOTE It is the responsibility of the user, in consultation with the hose manufacturer, to establish the compatibility of the hose with the fluid to be used.

# SIST ISO 9772:2022

#### 2022-03 (po) (en;fr;de) 21 str. (F)

Penjeni polimerni materiali - Ugotavljanje gorilnih lastnosti majhnih preskušancev, izpostavljenih majhnemu plamenu, s horizontalno metodo

Cellular plastics - Determination of horizontal burning characteristics of small specimens subjected to a small flame

Osnova: ISO 9772:2020 ICS: 83.100, 13.220.40

This document specifies a small-scale laboratory screening procedure for comparing the relative burning characteristics of horizontally oriented, small cellular plastic specimens having a density less than 250 kg·m-3 determined in accordance with ISO 845, when exposed to a small-flame ignition source.

NOTE Another International Standard which covers flexible cellular plastic and cellular rubber is ISO 3582[2].

This method of test is intended for quality assurance and limited product evaluation of cellular plastic materials under controlled laboratory conditions, and is not intended to assess the fire behaviour of, for example, building materials or furnishings under actual fire conditions.

The optional classification system described in Annex A is intended for the pre-selection of cellular plastic materials for products, including the determination of the ranges of material parameters that give the same classification (see 6.1).

# SIST/TC ISEL Strojni elementi

# SIST EN ISO 12179:2022

SIST EN ISO 12179:2000 SIST EN ISO 12179:2000/AC:2008

2022-03 (en;fr;de) (po)

29 str. (G) Specifikacija geometrijskih veličin izdelka (GPS) - Tekstura površine: profilna metoda - Umerjanje kontaktnih (s tipalom) instrumentov (ISO 12179:2021)

Geometrical product specifications (GPS) - Surface texture: Profile method - Calibration of contact (stylus) instruments (ISO 12179:2021)

Osnova: EN ISO 12179:2022 ICS: 17.040.40, 17.040.30

This document specifies the calibration and adjustment of the metrological characteristics of contact (stylus) instruments for the measurement of surface texture by the profile method as defined in ISO 3274. The calibration and adjustment is intended to be carried out with the aid of measurement standards.

Annex B specifies the calibration and adjustment of metrological characteristics of simplified operator contact (stylus) instruments which do not conform with ISO 3274.

# SIST EN ISO 21920-1:2022

2022-03

(en;fr;de)

SIST EN ISO 1302:2004 58 str. (J)

(po) Specifikacija geometrijskih veličin izdelka (GPS) - Tekstura površine: profil - 1. del: Označevanje površinskih tekstur (ISO 21920-1:2021)

Geometrical product specifications (GPS) - Surface texture: Profile - Part 1: Indication of surface texture (ISO 21920-1:2021)

Osnova: EN ISO 21920-1:2022 17.040.20, 17.040.40 ICS:

This document specifies the rules for indication of surface texture by profile methods in technical product documentation by means of graphical symbols.

This document does not cover population requirements.

NOTE See ISO 18391 for population (batch) specifications.

## SIST EN ISO 21920-2:2022

SIST EN ISO 12085:2000 SIST EN ISO 12085:2000/AC:2008 SIST EN ISO 13565-2:2000 SIST EN ISO 13565-3:2002 SIST EN ISO 4287:2000 SIST EN ISO 4287:2000/A1:2011 SIST EN ISO 4287:2000/AC:2008 87 str. (M)

2022-03 (po) (en;fr;de)

Specifikacija geometrijskih veličin izdelka (GPS) - Tekstura površine: profil - 2. del: Izrazi, definicije in parametri teksture površine (ISO 21920-2:2021)

Geometrical product specifications (GPS) - Surface texture: Profile - Part 2: Terms, definitions and surface texture parameters (ISO 21920-2:2021)

Osnova: EN ISO 21920-2:2022

ICS: 17.040.40, 17.040.20, 01.040.17

This document specifies terms, definitions and parameters for the determination of surface texture by profile methods.

NOTE 1 The main changes to previous ISO profile documents are described in Annex I. NOTE 2 An overview of profile and areal standards in the GPS matrix model is given in Annex J. NOTE 3 The relation of this document to the GPS matrix model is given in Annex K.

SIST EN ISO 21920-3:2022SIST EN ISO 4288:20002022-03(po)(en;fr;de)37 str. (H)Specifikacija geometrijskih veličin izdelka (GPS) - Tekstura površine: profil - 3. del: Operatorji<br/>specifikacij (ISO 21920-3:2021)Fekstura površine: profil - 3. del: Operatorji<br/>Specification operators (ISO 21920-3:2021)Geometrical product specifications (GPS) - Surface texture: Profile - Part 3: Specification operators (ISO 21920-3:2021)Sist EN ISO 21920-3:2022Osnova:EN ISO 21920-3:2022ICS:17.040.20, 17.040.40

This document specifies the complete specification operator for surface texture by profile methods.

SIST EN ISO 25178-2:20222022-03(po)(en;fr;de)73 str. (L)Specifikacija geometrijskih veličin izdelka (GPS) - Tekstura površine: ploskovna - 2. del: Izrazi,<br/>definicije in parametri teksture površine (ISO 25178-2:2021)Geometrical product specifications (GPS) - Surface texture: Areal - Part 2: Terms, definitions and<br/>surface texture parameters (ISO 25178-2:2021)Osnova:EN ISO 25178-2:2022ICS:17.040.40, 17.040.2

This document specifies parameters for the determination of surface texture by areal methods.

SIST ISO 20515:20222022-03(po)(en;fr;de)17 str. (E)Kotalni ležaji - Radialni ležaji, zadrževalni žlebovi - Mere, specifikacija geometrijskih veličin izdelka<br/>(GPS) in vrednosti tolerance<br/>Rolling bearings - Radial bearings, retaining slots - Dimensions, geometrical product specifications<br/>(GPS) and tolerance values<br/>Osnova:ISO 20515:2021

ICS: 21.100.20

This document specifies dimensions and tolerances of retaining slots to be used for outer rings of single-row angular contact ball bearings, four-point-contact ball bearings and radial cylindrical roller bearings.

The retaining slots are not suitable for use in the outer rings of sealed and shielded radial ball bearings, nor in the outer rings of radial cylindrical roller bearings without ribs.

# SIST ISO 4382-1:20222022-03(po)(en;fr;de)12 str. (C)Drsni ležaji - Bakrove zlitine - 1. del: Bakrove zlitine za masivne in večslojne debelostene drsne ležajePlain bearings - Copper alloys - Part 1: Cast copper alloys for solid and multilayer thick-walled plainbearingsOsnova:ISO 4382-1:2021ICS:77.150.30, 21.100.10

This document specifies requirements for cast copper alloys for use in solid and multilayer thick-walled plain bearings. It gives a limited selection of alloys currently available for general purposes.

SIST ISO 4382-2:20222022-03(po)(en;fr;de)9 str. (C)Drsni ležaji - Bakrove zlitine - 2. del: Kovne bakrove zlitine za masivne drsne ležajePlain bearings - Copper alloys - Part 2: Wrought copper alloys for solid plain bearingsOsnova:ISO 4382-2:2021ICS:77.150.30, 21.100.10

This document specifies requirements for wrought copper alloys for use in solid plain bearings, particularly for bushes. This document provides a limited selection of alloys currently available for general purposes.

# SIST/TC ITC Informacijska tehnologija

SIST-TS CEN ISO/TS 21719-3:20222022-03(po)(en;fr;de)25 str. (F)Elektronsko pobiranje pristojbin - Personalizacija (prilagajanje) opreme vozil (OBE) - 3. del: Uporaba<br/>kartic z integriranimi vezji (ISO/TS 21719-3:2021)Electronic fee collection - Personalization of on-board equipment (OBE) - Part 3: Using integrated<br/>circuit(s) cards (ISO/TS 21719-3:2021)Osnova:CEN ISO/TS 21719-3:2021<br/>35.240.60, 03.220.20

This document specifies: – personalization interface; – physical systems: on-board equipment (OBE), personalization equipment (PE) and integrated circuit(s) cards (ICCs); – electronic fee collection (EFC) personalization functions between the PE and the OBE in accordance with ISO/TS 21719-1 when using an ICC; – data and security elements that are transferred between the PE and the OBE using the ICC. It is outside the scope of this document to define: – conformance procedures and test specifications; – setting-up of operating organizations (e.g. toll service provider, personalization agent, trusted third party, etc.); – legal issues; – the exact commands and security functionality within ISO/IEC 7816-4 used by the PE and the OBE, respectively, to interface an ICC. NOTE Some of the issues that are outside the scope of this document are the subject of separate standards prepared by CEN/TC 278 and ISO/TC 204.

# SIST/TC ITEK Tekstil in tekstilni izdelki

103:2022		
(ро)	(en;fr;de)	14 str. (D)
3ombažna vlakn	a - Določanje mikro	onerske vrednosti
otton fibres - Det	ermination of micro	onaire value
ISO 2403	:2021	
59.060.1	0	
	<b>103:2022</b> (po) Bombažna vlakn otton fibres - Det ISO 2403 59.060.1	<b>103:2022</b> (po) (en;fr;de) Bombažna vlakna - Določanje mikro otton fibres - Determination of micro ISO 2403:2021 59.060.10

This document specifies a method of determining the micronaire value of loose disorientated cotton fibres taken from bales, laps and slivers, or other sources of lint cotton.

# SIST/TC IZL Izolatorji

SIST EN 50336:2022SIST EN 50336:20042022-03(po)(en;fr;de)17 str. (E)Skoznjiki za transformatorje in reaktorska kabelska ohišja do vključno 36 kVBushings for transformers and reactor cable boxes not exceeding 36 kVOsnova:EN 50336:2021ICS:29.180, 29.080.20

This document is applicable to insulated bushings, excluding those plug-in bushings specified by EN 50180 series, for use in air insulated, shroud insulated and fully insulated cable boxes for liquid filled transformers and reactors for rated voltages up to 36 kV, and rated currents up to 4 000 A at frequencies from 15 Hz to 60 Hz.

# SIST/TC KAT Karakterizacija tal, odpadkov in blata

SIST EN 16166:	2022		SIST EN 16166:2013	
2022-03	(ро)	(en;fr;de)	16 str. (D)	
Tla, obdelani bio	loški odpa	idki in blato - Določe	vanje adsorbiranih or	gansko vezanih halogenov (AOX)
Soil, treated biow	vaste and s	sludge - Determinatio	on of adsorbed organi	cally bound halogens (AOX)
Osnova:	EN 1616	56:2021		
ICS:	13.030.	20, 13.080.10		

This European Standard describes an empirical method for the direct determination of organically bound chlorine, bromine and iodine (but not fluorine) adsorbed and occluded to the sample matrix. Non-volatile organically bound halogens adsorbable on activated carbon present in the aqueous phase of the sample prior to drying or adsorbed to sample surface are included in the determination. This European Standard is intended for analysis of sludge, treated biowaste or soil in concentrations ranging from 5 mg/kg dry matter to approximately 6 g/kg dry matter. The exact concentration range covered depends on the instrument used for determination.

# SIST EN ISO 24032:2022

2022-03(po)(en;fr;de)67 str. (K)Kakovost tal - Uporaba kletk s polži na terenu za oceno bioakumulacije onesnaževal (ISO 24032:2021)Soil quality - In situ caging of snails to assess bioaccumulation of contaminants (ISO 24032:2021)Osnova:EN ISO 24032:2021ICS:13.080.30

This document describes a method to assess the bioaccumulation of chemicals in snails, i.e. concentrations of metal(loid)s (ME) or organic compounds [e.g. polycyclic aromatic hydrocarbons (PAHs) and polychlorinated biphenyls (PCBs)] accumulated in their tissues. This document presents how to prepare snails for caging in situ for 28 days, the in situ test design and then how to collect and prepare the snails until conservation and further analysis. If a kinetic study of accumulation is necessary, sampling of snails at different time-points during exposure is possible as well [13],[19],[22]. This document excludes analytical methods. Preparation (extraction and mineralization) of the samples and quantification of chemicals are not in the scope of the present document. The method is applicable for soils under different uses (agricultural, industrial, residential, forests, before and after remediation, on potentially contaminated sites, etc.) and waste materials [8],[10], preferably with vegetation and/or humus cover. The method is applicable subject to certain limits of temperature (frost-free period, i.e. mainly from April to October in temperate region). Optionally (see Annex I), the method can be used in the laboratory to evaluate the accumulation of contaminants [and optionally, the sum of excess of transfer (SET) index for ME, PAH, PCB] of snails exposed only to soil

SIST-TP CEN/TR 14061:2021/AC:20222022-03(po)(en;fr;de)2 str. (AC)Gnojila - Določanje količine prahu - Popravek ACFertilizers - Determination of dust contentOsnova:CEN/TR 14061:2021/AC:2022ICS:65.080

Popravek k standardu SIST-TP CEN/TR 14061:2021.

This document is applicable to crushing strength measurement as applied to grains of fertilizer obtained in prilling or wet-granulation process. Compacted or crystalline materials were not considered.

# SIST/TC KAZ Kakovost zraka

 SIST EN 14583:2022
 SIST EN 14583:2004

 2022-03
 (po)
 (en;fr;de)
 23 str. (F)

 Izpostavljenost na delovnem mestu - Vzorčevalniki za volumetrijsko vzorčenje bioaerosolov - Splošne zahteve in vrednotenje lastnosti
 Vzorčevalniki za volumetrijsko vzorčenje bioaerosolov - Splošne zahteve in vrednotenje lastnosti

Workplace exposure - Volumetric bioaerosol samplers - General requirements and evaluation of performance

Osnova: EN 14583:2021 ICS: 13.040.30

This document specifies general requirements for the use and evaluation of physical and biological performance of volumetric sampling devices applied for assessing bioaerosols in the workplace.

This document lists the criteria for the selection of microbial strains that can be used for the evaluation of biological performance of samplers.

This document also describes a bioaerosol test chamber suited for assessing the biological performance of bioaerosol sampling devices.

This document is not applicable for clean room measurements.

 SIST EN 1540:2022
 SIST EN 1540:2012

 2022-03
 (po)
 (en;fr;de)
 36 str. (H)

 Izpostavljenost na delovnem mestu - Terminologija
 Workplace exposure - Terminology
 Sist EN 1540:2021

 Osnova:
 EN 1540:2021
 13.040.30, 01.040.13
 Sist EN 1540:2021

This document specifies terms and definitions that are related to the assessment of workplace exposure to chemical and biological agents. These are either general terms or are specific to physical and chemical processes of air sampling, the analytical method or method performance.

The terms included are those that have been identified as being fundamental because their definition is necessary to avoid ambiguity and ensure consistency of use.

# SIST-TS CEN/TS 17660-1:2022

2022-03 (po) (en;fr;de) 88 str. (M)

Kakovost zraka - Vrednotenje lastnosti senzorskih sistemov za kakovost zraka - 1. del: Plinasta onesnaževala v zunanjem zraku

Air quality - Performance evaluation of air quality sensor systems - Part 1: Gaseous pollutants in ambient air

Osnova:	CEN/TS 17660-1:2021
ICS:	13.040.20

This Technical Specification (TS) describes the general principles, including testing procedures and requirements, for the evaluation of performances of low-cost sensor systems for the monitoring of gaseous compounds in ambient air at fixed sites. The evaluation of sensor systems includes tests that shall be performed under prescribed laboratory and/or field conditions.

This TS is not intended for the test of sensors systems used for mobile devices, for the testing of networks of sensor nodes, or for indoor air monitoring although their potential importance is recognized and they could be the subjects of future TS documents.

Low-cost sensors are based on several principles of operations, e. g. amperometric sensors, metal oxides, optical sensors (Infra-Red absorption) etc. However, sensors share some common features, regarding their portability and low-cost compared to traditional reference methods. Typically, sensors are able to continuously monitor air pollution, with low response time ranging between a few tens of seconds and a few minutes.

The described procedure is applicable to the determination of the mass concentration of air pollutants. The pollutants that are considered in this TS consists of:

-the gaseous pollutants regulated under Directives 2008/50/EC: O3, NO2 and NO, CO, SO2 and benzene, in the range of concentrations expected in outdoor ambient air;

-CO2 as proxy for activities involving combustion processes or for CO2 evaporation from soil or water. When applying the current Technical Specifications, the evaluation of sensors considers the thresholds, limits and averaging times that are defined into the Air Quality Directive (2008/50/EC)[1]. Generally, the Directive sets Limit Values consists of an annual average that is computed by averaging hourly values. For sensors, it can be useful to select shorter averaging time.

In order to rely on the results of tests this protocol, future users shall make sure that sensors will be implemented with the same configuration as the sensor submitted to this protocol. This can include: the same power supply, data acquisition, data processing, identical sampling/ protective box and periodicity of calibration. The sensor shall be submitted to the same regime of QA/QC and maintenance operation as during tests. In addition, it is strongly recommended that sensors measurements are periodically compared side-by-side with the reference method.

For the purpose of this technical specification sensor systems are significantly less expensive than reference methods for the same pollutant.

# SIST/TC KON.007 Geotehnika - EC 7

SIST EN ISO 22475-1:2022SIST EN ISO 22475-1:20072022-03(po)(en;fr;de)150 str. (P)Geotehnično preiskovanje in preskušanje - Metode vzorčenja in merjenje podzemne vode - 1. del:

Tehnična načela za vzorčenje zemlje, skal in podzemne vode (ISO 22475-1:2021)

Geotechnical investigation and testing - Sampling methods and groundwater measurements - Part 1: Technical principles for the sampling of soil, rock and groundwater (ISO 22475-1:2021)

Osnova: EN ISO 22475-1:2021 ICS: 93.020

This document deals with principles of sampling of soil, rock and groundwater as part of the programme of geotechnical investigation and testing.

NOTE 1 This document fulfils the requirements for sampling of soil, rock and groundwater, and groundwater measurements as part of the programme of geotechnical investigation and testing according to EN 1997-1 and EN 1997-2.

The aims of such ground investigations are:

a) to recover soil, rock and water samples of a quality appropriate to assess the general suitability of a site for geotechnical engineering purposes and to determine the required ground characteristics in the laboratory;

b) to obtain information on the sequence, thickness and orientation of strata and discontinuities;

c) to establish the type, composition and condition of strata;

d) to obtain information on groundwater conditions and recover water samples for assessment of the interaction of groundwater, soil, rock and construction material.

Soil sampling for the purposes of agricultural and environmental soil investigation is not covered.

NOTE 2 Guidance on soil sampling for these purposes including of contaminated or potentially contaminated sites is provided in the ISO 18400 series. ISO 18400-204 provides in addition guidance on sampling and measurement of soil (ground) gas.

NOTE 3 The sampling methods, presented in this document may not be suitable for all types of soil e.g. peat with strong fibrous structure.

NOTE 4 Some of the sampling methods presented in this document are suitable for both soil and rock. Water sampling for the purposes of quality control, quality characterisation and identification of sources of pollution of water, including bottom deposits and sludges, is not covered. NOTE 5 Water sampling for these purposes can be found in the ISO 5667 series.

# SIST/TC MOC Mobilne komunikacije

# SIST EN IEC 60794-1-219:2022

16 str. (D)

2022-03 (po) (en) Optični kabli - 1-219. del: Splošna specifikacija - Osnovni preskusni postopki za optične kable -Preskus združljivosti materiala, metoda F19 (IEC 60794-1-219:2021) Optical fibre cables - Part 1-219: Generic specification - Basic optical cable test procedures - Material compatibility test, method F19 (IEC 60794-1-219:2021) Osnova: EN IEC 60794-1-219:2022

ICS: 33,180,10

This part of IEC 60794 applies to optical fibre cables for use with telecommunication equipment and devices employing similar techniques, as well as hybrid telecommunication cables having a combination of both optical fibres and electrical conductors.

The object of this standard is to define test procedures to be used in establishing uniform requirements for the material compatibility performance of cables, cable components, and cable subassemblies.

Compatibility of materials within a cable has the potential to involve a range of material pairs. However, experience has shown that the most pertinent evaluations are of the cable filling and flooding materials interactions with other materials in the cable.

Throughout the standard the wording "optical cable" may also include optical fibre units, microduct fibre units. etc.

See IEC 60794-1-2 for general requirements and definitions and reference guide to test methods of all types.

#### SIST EN IEC 62037-1:2022 SIST EN 62037-1:2012 2022-03 (po)

(en) 18 str. (E)

Pasivne radiofrekvenčne (RF) in mikrovalovne naprave, meritve intermodulacijskega nivoja - 1. del: Splošne zahteve in merilne metode (IEC 62037-1:2021)

Passive RF and microwave devices, intermodulation level measurement - Part 1: General requirements and measuring methods (IEC 62037-1:2021)

Osnova:	5	EN IEC 62037-1:2021
ICS:		33.120.30

This part of IEC 62037 deals with the general requirements and measuring methods for intermodulation (IM) level measurement of passive RF and microwave components, which can be caused by the presence of two or more transmitting signals. The test procedures given in this document give the general requirements and measurement methods required to characterize the level of unwanted IM signals using two transmitting signals. The IEC 62037 series addresses the measurement of PIM, but does not cover the long-term reliability of a product with reference to its performance.

SIST EN IEC 62037-2:2022 SIST EN 62037-2:2013 2022-03 (po) (en) 11 str. (C) Pasivne radiofrekvenčne (RF) in mikrovalovne naprave, meritve intermodulacijskega nivoja - 2. del: Meritve pasivne intermodulacije v koaksialnih kabelskih sestavih (IEC 62037-2:2021) Passive RF and microwave devices, intermodulation level measurement - Part 2: Measurement of passive intermodulation in coaxial cable assemblies (IEC 62037-2:2021) Osnova: EN IEC 62037-2:2021 ICS: 33.120.10, 33.120.30

This part of IEC 62037 defines a procedure to measure levels of passive intermodulation generated by a coaxial cable assembly. This test method is applicable to jumper cables, i.e. cable assemblies intended to provide interface flexibility between rigid devices. It is also used to evaluate cable assemblies that are subjected to motion in operation.

SIST EN IEC 62037-3:2022SIST EN 62037-3:20122022-03(po)(en)12 str. (C)Pasivne radiofrekvenčne (RF) in mikrovalovne naprave, meritve intermodulacijskega nivoja - 3. del:Meritve pasivne intermodulacije v koaksialnih konektorjih (IEC 62037-3:2021)Passive RF and microwave devices, intermodulation level measurement - Part 3: Measurement ofpassive intermodulation in coaxial connectors (IEC 62037-3:2021)Osnova:EN IEC 62037-3:2021ICS:33.120.10, 33.120.30

This part of IEC 62037 defines the impact test on coaxial connectors to evaluate their robustness against weak connections and particles inside the connector, as independently as possible from the effects of cable PIM (passive intermodulation). For other connectors (e.g. panel mounted connectors), the cable can be replaced by an adequate transmission-line (e.g. airline, stripline). In order to evaluate the effects of mechanical stresses on the connectors, a series of impacts is applied to the connectors while measuring the PIM.

SIST EN IEC 62037-5:2022SIST EN 62037-5:20142022-03(po)(en)16 str. (D)Pasivne radiofrekvenčne (RF) in mikrovalovne naprave, meritve intermodulacijskega nivoja - 5. del:Meritve pasivne intermodulacije v filtrih (IEC 62037-5:2021)Passive RF and microwave devices, intermodulation level measurement - Part 5: Measurement ofpassive intermodulation in filters (IEC 62037-5:2021)Osnova:EN IEC 62037-5:2021ICS:33.120.30

This part of IEC 62037 defines test fixtures and procedures recommended for measuring levels of passive intermodulation generated by filters, typically used in wireless communication systems. The purpose is to define qualification and acceptance test methods for filters for use in low intermodulation (low IM) applications.

SIST EN IEC 62037-6:2022SIST EN 62037-6:20142022-03(po)(en)16 str. (D)Pasivne radiofrekvenčne (RF) in mikrovalovne naprave, meritve intermodulacijskega nivoja - 6. del:Meritve pasivne intermodulacije v antenah (IEC 62037-6:2021)Passive RF and microwave devices, intermodulation level measurement - Part 6: Measurement ofpassive intermodulation in antennas (IEC 62037-6:2021)Osnova:EN IEC 62037-6:2022ICS:33.120.30

This part of IEC 62037 defines the test fixtures and procedures recommended for measuring levels of passive intermodulation generated by antennas, typically used in wireless communication systems. The purpose is to define qualification and acceptance test methods for antennas for use in low intermodulation (low IM) applications.

# SIST/TC MOV Merilna oprema za elektromagnetne veličine

SIST EN 50171:20222022-03(po)(en;fr;de)Centralni varnostni napajalni sistemiCentral safety power supply systemsOsnova:EN 50171:2021ICS:29.200

SIST EN 50171:2002 27 str. (G) This European Standard specifies the general requirements for central power supply systems for an independent energy supply to essential safety equipment. This standard covers systems that are permanently connected to AC supply voltages not exceeding 1 000 V and use batteries as an alternative power source.

Central safety power supply systems are intended to ensure energy supply to emergency escape lighting in the event of normal supply failure and may be suitable for energising other essential safety equipment, for example:

- electric circuits of automatic fire extinguishing installations;

- paging systems and signalling safety installations;

- smoke extraction equipment;

- carbon monoxide warning systems;

- special safety installations related to specific buildings, e.g. high-risk areas.

The power supply of CPS should be dedicated only to the essential safety equipment, and not for other typeof loads such as general purpose IT or industrial systems etc.

Combinations of the aforementioned safety equipment types and / or non-safety equipment loads are permitted together on the same central safety power supply system providing the availability for safety equipment loads is not impaired. A fault occurring in a circuit should not cause the interruption in any other circuit used to supply safety equipment.

Schematic representations of typical central safety power supply equipment are depicted in Clause 4. Power supply systems for fire alarm equipment that are covered by EN 54 (series) are excluded.

# SIST EN 60700-1:2015/A1:2022

# 2022-03 (po) (en;fr;de) 9 str. (C)

Tiristorski ventili (elektronke) za visokonapetostni enosmerni prenos (HVDC) električne energije - 1. del: Električno preskušanje - Dopolnilo A1 (IEC 60700-1:2015/AMD1:2021)

Thyristor valves for high voltage direct current (HVDC) power transmission - Part 1: Electrical testing (IEC 60700-1:2015/AMD1:2021)

Osnova:	EN 60700-1:2015/A1:2021
ICS:	19.080, 31.080.20, 29.200

Amandma A1:2022 je dodatek k standardu SIST EN 60700-1:2015.

Ta del standarda IEC 60700 velja za tiristorske elektronke s kovinskooksidnimi prenapetostnimi odvodniki, ki so neposredno povezani med priključki elektronke, za uporabo v vodovno komutiranih pretvornikih za visokonapetostni enosmerni prenos moči ali kot del povezave zaporedne vrste. Omejen je na električno vrsto in proizvodne preskuse.

Preskusi, določeni v tem standardu, temeljijo na zračno izoliranih elektronkah. Za druge vrste elektronk se lahko sklene dogovor glede zahtev preskusa in meril sprejemljivosti.

# SIST EN 61010-031:2015/A1:2022

2022-03 (po) (en;fr;de) 18 str. (E)

Varnostne zahteve za električno opremo za meritve, nadzor in laboratorijsko uporabo - 031. del: Varnostne zahteve za ročne sonde za električne meritve in preskušanje - Dopolnilo A1 (IEC 61010-031:2015/A1:2018)

Safety requirements for electrical equipment for measurement, control and laboratory use - Part 031: Safety requirements for hand-held and hand-manipulated probe assemblies for electrical test and measurement (IEC 61010-031:2015/A1:2018)

Osnova: EN 61010-031:2015/A1:2021

ICS: 71.040.10, 19.080

Amandma A1:2022 je dodatek k standardu SIST EN 61010-031:2015.

Ta del standarda IEC 61010 določa varnostne zahteve za spodaj navedene tipe ročnih in ročno vodenih sond ter pripadajočo dodatno opremo. Te sonde so namenjene neposredni električni povezavi med delom in električnimi preskušanji ter merilno opremo. Pritrdijo se lahko na opremo ali so odstranljivi dodatki za opremo.

a) Tip A: nizkonapetostne in visokonapetostne neslabilne sonde. Neslabilne sonde, ki so NAZNAČENE za neposredno povezavo na napetosti nad 30 V efektivne izmenične napetosti, 42,4 V vršne vrednosti ali 60 V enosmerne napetosti, vendar ne presegajo 63 kV. Ne zajemajo komponent, ki so namenjene

zagotavljanju funkcije razdelitve napetosti ali kondicioniranja signala, vendar lahko zajemajo neslabilne komponente, kot so varovalke (glej sliko 1).

b) Tip B: visokonapetostne slabilne ali razdelitvene sonde. Slabilne ali razdelitvene sonde, ki so NAZNAČENE za neposredno povezavo na drugotne napetosti nad 1 kV efektivne izmenične napetosti ali 1,5 kV enosmerne napetosti, vendar ne presegajo 63 kV efektivne izmenične napetosti ali enosmerne napetosti. Funkcija razdelitve se lahko v celoti izvede v sondi ali delno v preskusni ali merilni opremi, ki se uporablja s sondo (glej sliko 2).

c) Tip C: nizkonapetostne slabilne ali razdelitvene sonde. Slabilne ali razdelitvene sonde za neposredno povezano na napetosti, ki ne presegajo 1 kV efektivne izmenične napetosti ali 1,5 kV enosmerne napetosti. Funkcija kondicioniranja signala se lahko v celoti izvede v sondi ali delno v preskusni ali merilni opremi, ki je namenjena uporabi s sondo (glej sliko 3).

d) Tip D: nizkonapetostne slabilne, neslabilne ali druge sonde za kondicioniranje signala, ki so NAZNAČENE za neposredno povezavo le na napetosti pod 30 V efektivne izmenične napetosti ali 42,4 V vršne vrednosti ali 60 V enosmerne napetosti in so primerne za tok nad 8 A (glej sliko 4). Ta standard se ne uporablja za tokovne senzorje znotraj področja uporabe standarda IEC 61010-2-032 (Ročni in ročni vodeni tokovni senzorji), vendar se lahko uporabljajo za njihove vhodne merilne tokovne vode in dodatno opremo.

# SIST EN 61010-031:2015/A11:2022

2022-03 (po) (en;fr;de) 8 str. (B)

Varnostne zahteve za električno opremo za meritve, nadzor in laboratorijsko uporabo - 031. del:Varnostne zahteve za ročne sonde za električne meritve in preskušanje - Dopolnilo A11Safety requirements for electrical equipment for measurement, control and laboratory use - Part 031:Safety requirements for hand-held probe assemblies for electrical measurement and testOsnova:EN 61010-031:2015/A11:2021ICS:71.040.10, 19.080

Amandma A11:2022 je dodatek k standardu SIST EN 61010-031:2015.

Ta del standarda IEC 61010 določa varnostne zahteve za spodaj navedene tipe ročnih in ročno vodenih sond ter pripadajočo dodatno opremo. Te sonde so namenjene neposredni električni povezavi med delom in električnimi preskušanji ter merilno opremo. Pritrdijo se lahko na opremo ali so odstranljivi dodatki za opremo.

a) Tip A: nizkonapetostne in visokonapetostne neslabilne sonde. Neslabilne sonde, ki so NAZNAČENE za neposredno povezavo na napetosti nad 30 V efektivne izmenične napetosti, 42,4 V vršne vrednosti ali 60 V enosmerne napetosti, vendar ne presegajo 63 kV. Ne zajemajo komponent, ki so namenjene zagotavljanju funkcije razdelitve napetosti ali kondicioniranja signala, vendar lahko zajemajo neslabilne komponente, kot so varovalke (glej sliko 1).

b) Tip B: visokonapetostne slabilne ali razdelitvene sonde. Slabilne ali razdelitvene sonde, ki so NAZNAČENE za neposredno povezavo na drugotne napetosti nad 1 kV efektivne izmenične napetosti ali 1,5 kV enosmerne napetosti, vendar ne presegajo 63 kV efektivne izmenične napetosti ali enosmerne napetosti. Funkcija razdelitve se lahko v celoti izvede v sondi ali delno v preskusni ali merilni opremi, ki se uporablja s sondo (glej sliko 2).

c) Tip C: nizkonapetostne slabilne ali razdelitvene sonde. Slabilne ali razdelitvene sonde za neposredno povezano na napetosti, ki ne presegajo 1 kV efektivne izmenične napetosti ali 1,5 kV enosmerne napetosti. Funkcija kondicioniranja signala se lahko v celoti izvede v sondi ali delno v preskusni ali merilni opremi, ki je namenjena uporabi s sondo (glej sliko 3).

d) Tip D: nizkonapetostne slabilne, neslabilne ali druge sonde za kondicioniranje signala, ki so NAZNAČENE za neposredno povezavo le na napetosti pod 30 V efektivne izmenične napetosti ali 42,4 V vršne vrednosti ali 60 V enosmerne napetosti in so primerne za tok nad 8 A (glej sliko 4). Ta standard se ne uporablja za tokovne senzorje znotraj področja uporabe standarda IEC 61010-2-032 (Ročni in ročni vodeni tokovni senzorji), vendar se lahko uporabljajo za njihove vhodne merilne tokovne vode in dodatno opremo.

## SIST EN IEC 61010-2-011:2022 2022-03

### SIST EN 61010-2-011:2017 53 str. (J)

(po) (en;fr;de) Varnostne zahteve za električno opremo za meritve, nadzor in laboratorijsko uporabo - 2-011. del: Posebne zahteve za hladilno opremo (IEC 61010-2-011:2019)

Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-011: Particular requirements for refrigerating equipment (IEC 61010-2-011:2019)

Osnova:	EN IEC 61010-2-011:2021
ICS:	71.040.10, 19.080, 27.200

This Part 2 of IEC 61010 specifies particular safety requirements for the following types a) to c) of electrical equipment and their accessories, wherever they are intended to be used, whenever that equipment incorporates REFRIGERATING SYSTEMS as an integral part of, or separate from, the equipment and the equipment is in direct control of the REFRIGERATING SYSTEM. This document details all the requirements when up to 150 g of FLAMMABLE REFRIGERANT are used per stage of a REFRIGERATING SYSTEM. Additional requirements beyond the current scope of this document apply if a REFRIGERANT charge of FLAMMABLE REFRIGERANT exceeds this amount

#### SIST EN IEC 61010-2-011:2022/A11:2022 2022-03 (po)

16 str. (D)

Varnostne zahteve za električno opremo za meritve, nadzor in laboratorijsko uporabo - 2-011. del: Posebne zahteve za hladilno opremo - Dopolnilo A11

Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-011: Particular requirements for refrigerating equipment

EN IEC 61010-2-011:2021/A11:2021 Osnova: ICS: 27.200, 71.040.10, 19.080

Amandma A11:2022 je dodatek k standardu SIST EN IEC 61010-2-011:2022.

(en;fr;de)

This Part 2 of IEC 61010 specifies particular safety requirements for the following types a) to c) of electrical equipment and their accessories, wherever they are intended to be used, whenever that equipment incorporates REFRIGERATING SYSTEMS as an integral part of, or separate from, the equipment and the equipment is in direct control of the REFRIGERATING SYSTEM.

This document details all the requirements when up to 150 g of FLAMMABLE REFRIGERANT are used per stage of a REFRIGERATING SYSTEM. Additional requirements beyond the current scope of this document apply if a REFRIGERANT charge of FLAMMABLE REFRIGERANT exceeds this amount.

SIST EN IEC 61010-2-032:2022			SIST EN 61010-2-032:2013
2022-03	(ро)	(en)	67 str. (K)

Varnostne zahteve za električno opremo za meritve, nadzor in laboratorijsko uporabo - 2-032. del: Posebne zahteve za ročne in ročno vodene tokovne senzorje za električno preskušanje in meritve (IEC 61010-2-032:2019 + COR1:2020)

Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-032: Particular requirements for hand-held and hand-manipulated current sensors for electrical test and measurement (IEC 61010-2-032:2019 + COR1:2020)

Osnova: EN IEC 61010-2-032:2021 71.040.10, 19.080 ICS:

This part of IEC 61010 specifies safety requirements for HAND-HELD and hand-manipulated current sensors described below. These current sensors are for measuring, detecting or injecting current, or indicating current waveforms on circuits without physically opening the current path of the circuit being measured. They can be stand-alone current sensors or accessories to other equipment or parts of combined equipment (see Figure 101). These include measurement circuits which are part of electrical test and measurement equipment, laboratory equipment, or process control equipment. These current sensors and circuits need additional protective means between the current sensor, the circuit and an OPERATOR. NOTE 1 Combined equipment is equipment that is electrically connected to a current sensor by means of a permanent connection which can be detached only by the use of a TOOL. NOTE 2 Some current sensors are also known as current clamps, CLAMP MULTIMETERS and current probes. Current sensors are hand-manipulated before and/or after a test or measurement, but do not necessarily need to be HAND-HELD during the test or measurement. Current sensors used as FIXED EQUIPMENT are not within the scope of this document.

# SIST EN IEC 61010-2-032:2022/A11:2022

2022-03 (po) (en;fr;de) 7 str. (B)

Varnostne zahteve za električno opremo za meritve, nadzor in laboratorijsko uporabo - 2-032. del: Posebne zahteve za ročne in ročno vodene tokovne senzorje za električno meritev in preskušanje -Dopolnilo A11

Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-032: Particular requirements for hand-held and hand-manipulated current sensors for electrical test and measurement

Osnova:	EN IEC 61010-2-032:2021/A11:2021
ICS:	71.040.10, 19.080

Amandma A11:2022 je dodatek k standardu SIST EN IEC 61010-2-032:2022. This part of IEC 61010 specifies safety requirements for HAND-HELD and hand-manipulated current sensors described below.

These current sensors are for measuring, detecting or injecting current, or indicating current waveforms on circuits without physically opening the current path of the circuit being measured. They can be standalone current sensors or accessories to other equipment or parts of combined equipment (see Figure 101). These include measurement circuits which are part of electrical test and measurement equipment, laboratory equipment, or process control equipment. These current sensors and circuits need additional protective means between the current sensor, the circuit and an OPERATOR.

NOTE 1 Combined equipment is equipment that is electrically connected to a current sensor by means of a permanent connection which can be detached only by the use of a TOOL.

NOTE 2 Some current sensors are also known as current clamps, CLAMP MULTIMETERS and current probes.

Current sensors are hand-manipulated before and/or after a test or measurement, but do not necessarily need to be HAND-HELD during the test or measurement. Current sensors used as FIXED EQUIPMENT are not within the scope of this document.

SIST EN IEC 6	51010-2-033:	SIST EN 61010-2-033:2012	
2022-03	(po)	(en)	46 str. (I)

2022-03(po)(en)46 str. (l)Varnostne zahteve za električno opremo za meritve, nadzor in laboratorijsko uporabo - 2-033. del:Posebne zahteve za ročne multimetre in druge merilnike za domačo in profesionalno uporabo, kiomogočajo merjenje omrežne napetosti (IEC 61010-2-033:2019)

Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-033: Particular requirements for hand-held multimeters and other meters, for domestic and professional use, capable of measuring mains voltage (IEC 61010-2-033:2019)

Osnova: EN IEC 61010-2-033:2021 ICS: 71.040.10, 19.080

This part of IEC 61010 specifies safety requirements for hand-held multimeters for domestic and professional use, capable of measuring MAINS.

Hand-held multimeters are multi-range multifunction measuring instruments intended to measure voltage and other electrical quantities such as resistance or current. Their primary purpose is to measure voltage on a live MAINS. They are suitable to be supported by one hand during NORMAL USE.

# SIST EN IEC 61010-2-033:2022/A11:2022

2022-03 (po) (en;fr;de) 7 str. (B)

Varnostne zahteve za električno opremo za meritve, nadzor in laboratorijsko uporabo - 2-033. del: Posebne zahteve za ročne multimetre in druge merilnike za domačo in profesionalno uporabo, ki omogočajo merjenje omrežne napetosti - Dopolnilo A11

Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-033: Particular requirements for hand-held multimeters and other meters for domestic and professional use, capable of measuring mains voltage

Osnova: EN IEC 61010-2-033:2021/A11:2021

ICS: 71.040.10, 19.080

# Amandma A11:2022 je dodatek k standardu SIST EN IEC 61010-2-033:2022.

This document applies to electrical equipment using signals in the frequency range 3 kHz to 95 kHz to transmit or receive information on low voltage electrical systems, for electricity suppliers and distributors. In the case of equipment which includes functions other than the transmission or reception of information on LV distribution networks or installations of network users connected to the public electricity distribution network, this document applies only to that part of the equipment intended for such transmission or reception of information. Other parts of the equipment are expected to comply with the immunity standard or standards relevant to the functions of those other parts.

The object of this document is to contribute to ensuring EMC in general. It specifies essential immunity requirements and test methods, including those tests which are to be performed during type-testing of MCE, for electromagnetic interference (EMI) generated on LV installations.

It defines the methods and requirements for testing immunity concerning the basic function of an MCE, in relation to continuous and transient disturbances, both conducted and radiated, and electrostatic discharges. Test requirements are specified for each port considered.

Furthermore it provides guidelines for the assessment of the performance of the communication function of an MCE. Normative specifications are under consideration.

This document gives limits which are applicable to MCE used by electricity suppliers and distributors (e.g. DSOs) for purposes like energy management and network monitoring and automation. The levels do not however cover extreme cases which could occur in any location but with a low probability of occurrence. In special cases situations will arise where the level of disturbances could exceed the levels specified in this document, e.g. where a hand-held transmitter is used in proximity of an apparatus. In these instances special mitigation measures might have to be employed.

It does not specify immunity between MCE operating in the same nominal frequency band or immunity to signals originating from power line carrier systems operating on high or medium-voltage networks. Safety considerations are not included in this document.

SIST EN IEC 61557-1:2022			SIST EN 61557-1:2007
2022-03	(po)	(en:fr:de)	29 str. (G)

(en;fr;de)

(po) (en;fr;de) 29 str. (G) Električna varnost v nizkonapetostnih razdelilnih sistemih za izmenične napetosti do 1 kV in enosmerne napetosti do 1,5 kV - Oprema za preskušanje, merjenje ali nadzorovanje zaščitnih ukrepov - 1. del: Splošne zahteve (IEC 61557-1:2019)

Electrical safety in low voltage distribution systems up to 1 000 V AC and 1 500 V DC - Equipment for testing, measuring or monitoring of protective measures - Part 1: General requirements (IEC 61557-1:2019)

Osnova:	EN IEC 61557-1:2021
ICS:	29.240.01, 29.080.01, 17.220.20

This part of IEC 61557 specifies the general requirements applicable to measuring and monitoring equipment for testing the electrical safety in low-voltage distribution systems with nominal voltages up to 1 000 V AC and 1 500 V DC.

When measuring equipment or measuring installations involve measurement tasks of various measuring equipment covered by this series of standards, then the part of this series relevant to each of the measurement tasks is applicable.

NOTE The term "measuring equipment" will hereafter be used to designate "testing, measuring and monitoring equipment".

Other parts of IEC 61557 can specify additional requirements or deviations. This document does not cover functional safety or cybersecurity

# SIST EN IEC 61557-12:2022

2022-03

(po)

SIST EN 61557-12:2008 106 str. (N)

Električna varnost v nizkonapetostnih razdelilnih sistemih za izmenične napetosti do 1 kV in enosmerne napetosti do 1,5 kV - Oprema za preskušanje, merjenje ali nadzorovanje zaščitnih ukrepov - 12. del: Naprave za merjenje in nadzorovanje moči (PMD) (IEC 61557-12:2018)

Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. - Equipment for testing, measuring or monitoring of protective measures - Part 12: Power metering and monitoring devices (PMD) (IEC 61557-12:2018)

Osnova: EN IEC 61557-12:2022 ICS: 29.240.01, 29.080.01, 17.220.20 This part of IEC 61557 specifies requirements for power metering and monitoring devices (PMD) that measure and monitor the electrical quantities within electrical distribution systems, and optionally other external signals. These requirements also define the performance in single- and three-phase AC or DC systems having rated voltages up to 1 000 V AC or up to 1 500 V DC.

These devices are fixed or portable. They are intended to be used indoors and/or outdoors.

Power metering and monitoring devices (PMD), as defined in this document, give additional safety information, which aids the verification of the installation and enhances the performance of the distribution systems.

The power metering and monitoring devices (PMD) for electrical parameters described in this document are used for general industrial and commercial applications.

This document does not address functional safety and cyber security aspects.

This document is not applicable for:

- electricity metering equipment that complies with IEC 62053-21, IEC 62053-22, IEC 62053-23 and IEC 62053-24. Nevertheless, uncertainties defined in this document for active and reactive energy measurement are derived from those defined in IEC 62053 (all parts);

- the measurement and monitoring of electrical parameters defined in IEC 61557-2 to IEC 61557-9 and IEC 61557-13 or in IEC 62020;

- power quality instrument (PQI) according IEC 62586 (all parts);

- devices covered by IEC 60051 (all parts) (direct acting analogue electrical measuring instrument).

NOTE 1 Generally such types of devices are used in the following applications or for the following general needs:

- energy management inside the installation, such as facilitating the implementation of documents such as ISO 50001 and IEC 60364-8-1;

- monitoring and/or measurement of electrical parameters;

- measurement and/or monitoring of the quality of energy inside commercial/industrial installations.

NOTE 2 A measuring and monitoring device of electrical parameters usually consists of several functional modules. All or some of the functional modules are combined in one device. Examples of functional modules are:

- measurement and monitoring of several electrical parameters simultaneously;

- energy measurement and/or monitoring, as well as sometimes compliance with aspects of building regulations;

alarms functions;

- demand side quality (current and voltage harmonics, over/under voltages, voltage dips and swells, etc.).

NOTE 3 PMD are historically called power meter, power monitor, power monitor device, power energy monitoring device, power analyser, multifunction meter, measuring multifunction equipment, energy meters.

NOTE 4 Metering, measuring and monitoring applications are explained in Annex A.

# SIST EN IEC 61557-12:2022/A1:2022

# 2022-03 (po) (en;fr;de) 26 str. (F)

Električna varnost v nizkonapetostnih razdelilnih sistemih za izmenične napetosti do 1 kV in enosmerne napetosti do 1,5 kV - Oprema za preskušanje, merjenje ali nadzorovanje zaščitnih ukrepov - 12. del: Naprave za merjenje in nadzorovanje moči (PMD) - Dopolnilo A1 (IEC 61557-12:2018/A1:2021)

Electrical safety in low voltage distribution systems up to 1 000 V AC and 1 500 V DC - Equipment for testing, measuring or monitoring of protective measures - Part 12: Power metering and monitoring devices (PMD) (IEC 61557-12:2018/A1:2021)

Osnova:	EN IEC 61557-12:2022/A1:2022
ICS:	29.240.01, 29.080.01, 17.220.20

Amandma A1:2022 je dodatek k standardu SIST EN IEC 61557-12:2022.

This part of IEC 61557 specifies requirements for power metering and monitoring devices (PMD) that measure and monitor the electrical quantities within electrical distribution systems, and optionally other external signals. These requirements also define the performance in single- and three-phase AC or DC systems having rated voltages up to 1 000 V AC or up to 1 500 V DC.

These devices are fixed or portable. They are intended to be used indoors and/or outdoors. Power metering and monitoring devices (PMD), as defined in this document, give additional safety information, which aids the verification of the installation and enhances the performance of the distribution systems. The power metering and monitoring devices (PMD) for electrical parameters described in this document are used for general industrial and commercial applications.

This document does not address functional safety and cyber security aspects.

This document is not applicable for:

- electricity metering equipment that complies with IEC 62053-21, IEC 62053-22, IEC 62053-23 and IEC 62053-24. Nevertheless, uncertainties defined in this document for active and reactive energy measurement are derived from those defined in IEC 62053 (all parts);

- the measurement and monitoring of electrical parameters defined in IEC 61557-2 to IEC 61557-9 and IEC 61557-13 or in IEC 62020;

- power quality instrument (PQI) according IEC 62586 (all parts);

- devices covered by IEC 60051 (all parts) (direct acting analogue electrical measuring instrument).

NOTE 1 Generally such types of devices are used in the following applications or for the following general needs:

- energy management inside the installation, such as facilitating the implementation of documents such as ISO 50001 and IEC 60364-8-1;

- monitoring and/or measurement of electrical parameters;

- measurement and/or monitoring of the quality of energy inside commercial/industrial installations.

NOTE 2 A measuring and monitoring device of electrical parameters usually consists of several functional modules. All or some of the functional modules are combined in one device. Examples of functional modules are:

- measurement and monitoring of several electrical parameters simultaneously;

- energy measurement and/or monitoring, as well as sometimes compliance with aspects of building regulations;

- alarms functions;

- demand side quality (current and voltage harmonics, over/under voltages, voltage dips and swells, etc.).

NOTE 3 PMD are historically called power meter, power monitor, power monitor device, power energy monitoring device, power analyser, multifunction meter, measuring multifunction equipment, energy meters.

NOTE 4 Metering, measuring and monitoring applications are explained in Annex A.

# SIST EN IEC 61557-17:2022

2022-03 (po) (en;fr;de) 16 str. (D)

Električna varnost v nizkonapetostnih razdelilnih sistemih za izmenične napetosti do 1 kV in enosmerne napetosti do 1,5 kV - Oprema za preskušanje, merjenje in nadzorovanje zaščitnih ukrepov - 17. del: Brezstični indikatorji napetosti (IEC 61557-17:2021)

Electrical safety in low voltage distribution systems up to 1 000 V AC and 1 500 V DC - Equipment for testing, measuring or monitoring of protective measures - Part 17: Non-contact AC voltage indicators (IEC 61557-17:2021)

Osnova: EN IEC 61557-17:2021 ICS: 29.240.01, 29.080.01, 17.220.20

This part of IEC 61557 defines minimum performance requirements for non-contact AC voltage indicators to reduce the risk of electric shock for the testing person and bystanders caused by the wrong interpretation of the indication. Products designed and manufactured in accordance with this document are for use by (electrically) skilled persons only. Non-contact AC voltage indicators are not designed for testing the absence of the operating voltage.

# SIST EN IEC 61557-2:2022

(en;fr;de) 2022-03 (po)

Električna varnost v nizkonapetostnih razdelilnih sistemih za izmenične napetosti do 1 kV in enosmerne napetosti do 1,5 kV - Oprema za preskušanje, merjenje ali nadzorovanje zaščitnih ukrepov - 2. del: Izolacijska upornost (IEC 61557-2:2019)

SIST EN 61557-2:2007

12 str. (C)

Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. - Equipment for testing, measuring or monitoring of protective measures - Part 2: Insulation resistance (IEC 61557-2:2019)

Osnova:	EN IEC 61557-2:2021
ICS:	29.240.01, 29.080.01, 17.220.20

This part of IEC 61557 specifies the requirements applicable to equipment for measuring the insulation resistance of equipment and installations in the de-energized state.

# SIST EN IEC 61557-4:2022

2022-03 (po) SIST EN 61557-4:2007 13 str. (D)

(en;fr;de) Električna varnost v nizkonapetostnih razdelilnih sistemih za izmenične napetosti do 1 kV in enosmerne napetosti do 1,5 kV - Oprema za preskušanje, merjenje ali nadzorovanje zaščitnih ukrepov - 4. del: Upornost ozemljitvenega priključka in povezav za izenačitev potencialov (IEC 61557-4:2019) Electrical safety in low voltage distribution systems up to 1 000 V AC and 1 500 V DC - Equipment for testing, measuring or monitoring of protective measures - Part 4: Resistance of earth connection and equipotential bonding

(IEC 61557-4:2019)

Osnova:	EN IEC 61557-4:2021
ICS:	29.240.01, 29.080.01, 17.220.20

This part of IEC 61557 specifies the requirements applicable to equipment for measuring the resistance of earth conductors, protective earth conductors and conductors for equipotential bonding, including their connections and terminals, with an indication of the measured value or an indication of the limits.

SIST EN IEC 6	51557-5:2022		SIST EN 61557-5:2007	
2022-03	(ро)	(en;fr;de)	15 str. (D)	

Električna varnost v nizkonapetostnih razdelilnih sistemih za izmenične napetosti do 1 kV in enosmerne napetosti do 1,5 kV - Oprema za preskušanje, merjenje ali nadzorovanje zaščitnih ukrepov - 5. del: Ozemljitvena upornost (IEC 61557-5:2019)

Electrical safety in low voltage distribution systems up to 1 000 V AC and 1 500 V DC - Equipment for testing, measuring or monitoring of protective measures - Part 5: Resistance to earth (IEC 61557-5:2019)

Osnova:	EN IEC 61557-5:2021
ICS:	29.240.01, 29.080.01, 17.220.20

This part of IEC 61557 specifies the requirements applicable to measuring equipment for measuring the resistance to earth using an AC voltage.

SIST EN IEC 61954:2022			SIST EN 61954:2011	
			SIST EN 61954:2011/A1:2	2016
			SIST EN 61954:2011/A2:2	2018
2022-03	(ро)	(en;fr;de)	47 str. (I)	
Statični komp	penzatorji jalov	ve energije (var) - Pr	eskušanje tiristorskih	ventilov (IEC 61954:2021)
Static var con	npensators (S	VC) - Testing of thyr	istor valves (IEC 61954	4:2021)
Osnova:	EN IEC 6	1954:2021		
ICS:	31.080.2	20, 29.240.99		

This International Standard defines type, production and optional tests on thyristor valves used in thyristor controlled reactors (TCR), thyristor switched reactors (TSR) and thyristor switched capacitors (TSC) forming part of static VAR compensators (SVC) for power system applications. The requirements of the standard apply both to single valve units (one phase) and to multiple valve units (several phases).

Clauses 4 to 7 detail the type tests, i.e. tests which are carried out to verify that the valve design meets the requirements specified. Clause 8 covers the production tests, i.e. tests which are carried out to verify proper manufacturing. Clauses 9 and 10 detail optional tests, i.e. tests additional to the type and production tests.

# SIST/TC NAD Naftni proizvodi, maziva in sorodni proizvodi

# SIST EN ISO 8222:2020/A1:2022

2022-03(po)(en;fr;de)7 str. (B)Naftni merilni sistemi - Umerjanje - Volumetrične mere, rezervoarji in terenske mere (vključno s<br/>formulami za lastnosti tekočin in materialov) - Dopolnilo A1: Popravek dveh tiskarskih napak (ISO<br/>8222:2020/Amd 1:2022)Petroleum measurement systems - Calibration - Volumetric measures, proving tanks and field measures<br/>(including formulae for properties of liquids and materials) - Amendment 1: Correction of two<br/>typographical errors (ISO 8222:2020/Amd 1:2022)Osnova:EN ISO 8222:2020/A1:2022<br/>ICS:TS:75.180.30

Amandma A1:2022 je dodatek k standardu SIST EN ISO 8222:2020.

EN-ISO 8222 describes the design, use and calibration of volumetric measures (capacity measures) which are intended for use in fixed locations in a laboratory or in the field. This document gives guidance on both standard and non-standard measures. It also covers portable and mobile measures. This document is applicable to the petroleum industry; however, it may be applied more widely to other applications. This document excludes measures for cryogenic liquids and pressurized measures as used for liquid petroleum gas (LPG) and liquefied natural gas (LNG). Volumetric measures are classified as test measures or prover tanks depending on capacity and design. Measures described in this document are primarily designed, calibrated and used to measure volumes from a measure which is wetted and drained for a specified time before use and designated to deliver. Many of the provisions, however, apply equally to measures which are used to measure a volume using a clean and dry measure and designated to contain. Guidance is given regarding commonly expected uncertainties and calibration specifications. The document also provides, in Annex A, reference formulae describing the properties of water and other fluids and materials used in volumetric measurement more generally.

# SIST/TC OTR Izdelki za otroke

 SIST-TP CEN/TR 15371-2:2022
 SIST-TP CEN/TR 15371-2:2019

 2022-03
 (po)
 (en;fr;de)
 10 str. (C)

 Varnost igrač - Razlaga - 2. del: Odgovori na zahteve po razlagi standardov skupine EN 71 glede kemijskih lastnosti
 Safety of toys - Interpretations - Part 2: Replies to requests for interpretation of the chemical standards in the EN 71-series

Osnova: CEN/TR 15371-2:2021 ICS: 97.200.50

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The purpose of this document is to provide replies to requests for interpretations of actual chemical standards in the EN 71-series:

- EN 71 3: Migration of certain elements;
- EN 71 4: Experimental sets for chemistry and related activities;
  - EN 71 5: Chemical toys (sets) other than experimental sets;
- EN 71 7: Finger paints Requirements and test methods;
- EN 71 9: Organic chemical compounds Requirements;
- EN 71 10: Organic chemical compounds Sample preparation and extraction;
- EN 71 11: Organic chemical compounds Methods of analysis;
- EN 71 12: N-Nitrosamines and N-Nitrosatable substances;

EN 71 13: Olfactory board games, cosmetic kits and gustative games.

# SIST/TC OVP Osebna varovalna oprema

SIST EN ISO 22568-4:2022SIST EN ISO 22568-4:20192022-03(po)(en;fr;de)26 str. (F)Ščitniki nog in stopal - Zahteve in preskusne metode za sestavne dele obutve - 4. del: Nekovinski<br/>vložki, odporni proti prediranju (ISO 22568-4:2021)Foot and leg protectors - Requirements and test methods for footwear components - Part 4: Non-<br/>metallic perforation resistant inserts (ISO 22568-4:2021)Osnova:EN ISO 22568-4:2021ICS:13.340.50

This document specifies requirements and test methods for the non-metallic inserts with resistance against mechanical perforation, intended to function as components of PPE footwear (e.g. as described by ISO 20345, ISO 20346 and ISO 20347).

# SIST/TC PSE Procesni sistemi v energetiki

SIST EN IEC 61970-600-2:20222022-03(po)(en)879 str. (2H)Aplikacijski programski vmesnik za sistem upravljanja z energijo (EMS-API) - 600-2. del: Specifikacijaizmenjave skupnega modela mreže (CGMS) - Specifikacija profilov izmenjaveEnergy management system application program interface (EMS-API) - Part 600-2: Common Grid ModelExchange Specification (CGMES) - Exchange profiles specificationOsnova:EN IEC 61970-600-2:2021ICS:35.200, 29.240.30

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

# SIST/TC SKA Stikalni in krmilni aparati

# SIST EN IEC 61439-1:2021/AC:2022

2022-03 (en,fr) (po)

3 str. (AC)

Sestavi nizkonapetostnih stikalnih in krmilnih naprav - 1. del: Splošna pravila - Popravek AC (IEC 61439-1:2020/COR1:2021)

Low-voltage switchgear and controlgear assemblies - Part 1: General rules (IEC 61439-1:2020/COR1:2021)

EN IEC 61439-1:2021/AC:2022-01 Osnova: ICS: 29.130.20

Popravek k standardu SIST EN IEC 61439-1:2021.

This part of IEC 61439 lays down the general definitions and service conditions, construction requirements, technical characteristics and verification requirements for low-voltage switchgear and controlgear assemblies.

NOTE Throughout this document, the term assembly(s) (see 3.1.1) is used for a low-voltage switchgear and controlgear assembly(s).

For the purpose of determining assembly conformity, the requirements of the relevant part of the IEC 61439 series, Part 2 onwards, apply together with the cited requirements of this document. For assemblies not covered by Part 3 onward, Part 2 applies.

This document applies to assemblies only when required by the relevant assembly standard as follows: - assemblies for which the rated voltage does not exceed 1 000 V AC or 1 500 V DC;

- assemblies designed for a nominal frequency of the incoming supply or supplies not exceeding 1 000 Hz:

- assemblies intended for indoor and outdoor applications;

- stationary or movable assemblies with or without an enclosure:

- assemblies intended for use in connection with the generation, transmission, distribution and conversion of electric energy, and for the control of electrical energy consuming equipment.

This document does not apply to individual devices and self-contained components such as motor starters, fuse switches, power electronic converter systems and equipment (PECS), switch mode power supplies (SMPS), uninterruptable power supplies (UPS), basic drive modules (BDM), complete drive modules (CDM), adjustable speed power drives systems (PDS), and other electronic equipment which comply with their relevant product standards.

This document describes the integration of devices and self-contained components into an assembly or into an empty enclosure forming an assembly.

For some applications involving, for example, explosive atmospheres, functional safety, there can be a need to comply with the requirements of other standards or legislation in addition to those specified in the IEC 61439 series.

# SIST/TC TGO Trainostnost gradbenih objektov

#### SIST EN 15942:2022 SIST EN 15942:2011

(en;fr;de) 2022-03 (po)

35 str. (H)

Trajnostnost gradbenih objektov - Okoljske deklaracije za proizvode - Komunikacijski format za medpodjetniško poslovanje

Sustainability of construction works - Environmental product declarations - Communication format business-to-business

Osnova: EN 15942:2021

ICS: 35.240.67, 13.020.20, 91.040.01

This document is applicable to all construction products and services related to buildings and construction works. It specifies and describes the communication format for the information defined in EN 15804 for business-to-business communication to ensure a common understanding through consistent communication of information.

NOTE This document does not deal with business to consumer communication and is not intended for that purpose. Business to consumer communication format is planned to be the subject of a future document.

# SIST/TC TOP Toplota

SIST EN 12976-1:2022SIST EN 12976-1:20172022-03(po)(en;fr;de)35 str. (H)Toplotni sončni sistemi in sestavni deli - Industrijsko izdelani sistemi - 1. del: Splošne zahteveThermal solar systems and components - Factory made systems - Part 1: General requirementsOsnova:EN 12976-1:2021ICS:27.160

This European Standard specifies requirements on durability, reliability and safety for Factory Made solar heating systems. The standard also includes provisions for evaluation of conformity to these requirements. Concept of system families is included, as well. The requirements in this standard apply to Factory Made solar systems as products. The installation of these systems including their integration with roofs or facades is not considered, but requirements are given for the documentation for the installer and the user to be delivered with the system. External auxiliary water heating devices that are placed in series with the Factory Made system as well as piping from the system. Cold water piping from the cold water grid to the system as well as piping from the system to an external auxiliary heater or to draw-off points is not considered to be part of the system. Piping between components of the Factory Made system is considered to be part of the system. Any integrated heat exchanger or piping for space heating is not considered to be part of the system.

# SIST EN ISO 12571:2022

2022-03 (po) (en;fr;de)

SIST EN ISO 12571:2013 26 str. (F)

Higrotermalno obnašanje gradbenih materialov in proizvodov - Ugotavljanje higroskopnosti (ISO 12571:2021)

Hygrothermal performance of building materials and products - Determination of hygroscopic sorption properties (ISO 12571:2021)

Osnova: EN ISO 12571:2021 ICS: 91.120.30, 91.100.01

This document specifies two alternative methods for determining hygroscopic sorption properties of porous building materials and products:

a) using desiccators and weighing cups (desiccator method);

b) using a climatic chamber (climatic chamber method).

The desiccator method is the reference method.

This document does not specify the method for sampling.

The methods specified in this document can be used to determine the moisture content of a sample in equilibrium with air at a specific temperature and humidity.

# SIST/TC VAR Varjenje

SIST EN ISO 106	75-1:2022		SIST EN ISO 10675-1:2017	
2022-03	(ро)	(en;fr;de)	21 str. (F)	
Neporušitveno pi	reskušanje	zvarnih spojev	- Stopnje sprejemljivosti pri radiografske	em preskušanju - 1.
del: Jeklo, nikelj,	titan in njih	ove zlitine (ISO	10675-1:2021)	
Non-destructive t	esting of w	elds - Acceptan	nce levels for radiographic testing - Part 1.	: Steel, nickel,
titanium and theii	r alloys (ISC	10675-1:2021	)	
Osnova:	EN ISO 10	675-1:2021		
ICS:	25.160.40	)		

This document specifies acceptance levels for indications from imperfections in butt welds of steel, nickel, titanium and their alloys detected by radiographic testing. If agreed, the acceptance levels can be applied to other types of welds (such as fillet welds, etc.) or materials.

The acceptance levels can be related to welding standards, application standards, specifications or codes. This document assumes that the radiographic testing has been carried out in accordance with ISO 17636-1 for RT-F (F = film) or ISO 17636-2 for RT-S (S = radioscopy) and RT-D (D = digital detectors).

# SIST EN ISO 10675-2:2022 SIST EN ISO 10675-2:2018 2022-03 (po) (en;fr;de) 21 str. (F)

Neporušitveno preskušanje zvarnih spojev - Stopnje sprejemljivosti pri radiografskem preskušanju - 2. del: Aluminij in njegove zlitine (ISO 10675-2:2021)

Non-destructive testing of welds - Acceptance levels for radiographic testing - Part 2: Aluminium and its alloys (ISO 10675-2:2021)

Osnova:	EN ISÓ 10675-2:2021
ICS:	77.120.10, 25.160.40

This document specifies acceptance levels for indications from imperfections in aluminium butt welds detected by radiographic testing. If agreed, the acceptance levels can be applied to other types of welds (such as fillet welds etc.) or materials. The acceptance levels can be related to welding standards, application standards, specifications or codes. This document assumes that the radiographic testing has been carried out in accordance with ISO 17636-1 for RT-F (F = film) or ISO 17636-2 for RT-S (S = radioscopy) and RT-D (D = digital detectors).

SIST EN ISO	15614-12:202	22	SIST EN ISO 15614-12:2	014
2022-03	(ро)	(en;fr;de)	15 str. (D)	
Popis in kval	ifikacija varilni	ih postopkov za kov	rinske materiale - Pres	skus varilnega postopka - 12. del:
Točkovno, ko	olutno in brada	vično uporovno var	jenje (ISO 15614-12:2	2021)
Specification	and qualificat	ion of welding proce	edures for metallic ma	terials - Welding procedure test -
Part 12: Spot	, seam and pro	ojection welding (ISC	0 15614-12:2021)	•
Osnova <sup>.</sup>	EN ISO 1	5614-12.2021	,	

Osnova: EN ISO 15614-12:2021 ICS: 25.160.10

This document specifies the tests which can be used for qualification of welding procedure specifications for spot, seam, and projection welding processes.

NOTE The procedures are written for embossed projection welding. They can be adapted for solid projections as well, e.g. nut welding, stud welding. cross wire welding.

This document defines the conditions for carrying out tests and the limits of validity of a qualified welding procedure for all practical welding operations covered by this document.

It covers the following resistance welding processes, as defined in ISO 4063:

- 21 resistance spot welding;
- 211 indirect spot welding;
- 212 direct spot welding;
- 22 resistance seam welding;
- 221 lap seam welding;
- 222 mash seam welding;
- 223 Prep-lap seam welding;
- 224 Wire seam welding;
- 225 foil butt-seam welding;
- 226 seam welding with strip;
- 23 projection welding;
- 231 indirect projection welding;
- 232 direct projection welding

SIST EN ISO 15614-13:2022SIST EN ISO 15614-13:20122022-03(po)(en;fr;de)23 str. (F)Popis in kvalifikacija varilnih postopkov za kovinske materiale - Preskus varilnega postopka - 13. del:Uporovno sočelno in obžigalno varjenje (ISO 15614-13:2021)Specification and qualification of welding procedures for metallic materials - Welding procedure test -Part 13: Upset (resistance butt) and flash welding (ISO 15614-13:2021)Osnova:EN ISO 15614-13:2021ICS:25.160.10

This document specifies tests for the qualification of welding procedure specifications applicable to upset (resistance butt) welding and flash welding of metallic materials, e.g. with solid, tubular, flat or circular cross-section. Its basic principles can also be applied to other resistance welding processes when this is stated in the specification. This document defines the conditions for carrying out tests and the limits of validity of a qualified welding procedure for all the practical welding operations that it covers. It covers the following resistance welding processes, as defined in ISO 4063: -24 flash welding, using direct current or alternating current with various movement sequences, constant flashing and pulsed flashing; -25 resistance upset welding, using direct current or alternating current with various pressure sequences.

SIST EN ISO 18496:2022		SIST EN 1045:1999		
2022-03	(po) (e	en;fr;de)	16 str. (D)	
Trdo spajkanje - Talila za trdo spajkanje - Razvrstitev in tehnični dobavni pogoji (ISO 18496:2020)				bavni pogoji (ISO 18496:2020)
Brazing - Fluxes fo	or brazing - Clas	ssification and tec	chnical delivery co	onditions (ISO 18496:2020)
Osnova:	EN ISO 18496	5:2021		
ICS:	25.160.50			

The document classifies fluxes used for brazing metals and characterizes these fluxes on the basis of their properties and use, and gives technical delivery conditions and health and safety precautions.

# SIST EN ISO 23864:2022

2022-03(po)(en;fr;de)40 str. (H)Neporušitveno preskušanje zvarnih spojev - Ultrazvočno preskušanje - Uporaba avtomatske popolne<br/>fokusirne metode (TFM) in sorodnih postopkov (ISO 23864:2021)Von-destructive testing of welds - Ultrasonic testing - Use of automated total focusing technique (TFM)<br/>and related technologies (ISO 23864:2021)Osnova:EN ISO 23864:2021<br/>25.160.40

This document specifies the application of the FMC/TFM technology for the ultrasonic testing of fusionwelded joints in metallic materials of minimum thickness 3.2 mm. It's is applicable only to components with welds fabricated using metals which lead to isotropic (constant properties in all directions) and homogeneous conditions. These classes of materials include welds in low carbon alloy steels and common aerospace grade aluminum and titanium alloys, provided they are homogeneous and isotropic.

## SIST EN ISO 3834-5:2022

2022-03 (po) (en;fr;de)

Zahteve za kakovost pri talilnem varjenju kovinskih materialov - 5. del: Dokumenti, katerih zahteve morajo biti izpolnjene, da se ustvari domneva o skladnosti z zahtevami za kakovost iz ISO 3834-2, ISO 3834-3 ali ISO 3834-4 (ISO 3834-5:2021)

SIST EN ISO 3834-5:2015

14 str. (D)

Quality requirements for fusion welding of metallic materials - Part 5: Documents with which it is necessary to conform to claim conformity to the quality requirements of ISO 3834-2, ISO 3834-3 or ISO 3834-4 (ISO 3834-5:2021)

Osnova: EN ISO 3834-5:2021 ICS: 03.120.99, 03.120.20, 25.160.10 This document specifies the International Standards, including clauses and subclauses, with which conformity to the quality requirements of ISO 3834-2, ISO 3834-3 or ISO 3834-4 can be claimed. NOTE For brazing, see ISO 22688.

**SIST EN ISO/ASTM 52900:2022** SIST EN ISO/ASTM 52900:2017 2022-03 (en;fr;de) 36 str. (H) (po) Aditivna proizvodnja - Splošna načela - Osnove in terminologija (ISO/ASTM 52900:2021) Additive manufacturing - General principles - Fundamentals and vocabulary (ISO/ASTM 52900:2021) EN ISO/ASTM 52900:2021 Osnova: ICS: 25.030, 01.040.25

This document establishes and defines terms used in additive manufacturing (AM) technology, which applies the additive shaping principle and thereby builds physical three-dimensional (3D) geometries by successive addition of material.

The terms have been classified into specific fields of application.

# SIST/TC VAZ Varovanje zdravja

# SIST EN ISO 10993-7:2009/A1:2022

2022-03 (po) (en;fr;de) 11 str. (C) Biološko ovrednotenje medicinskih pripomočkov - 7. del: Ostanki po sterilizaciji z etilenoksidom -Dopolnilo A1: Uporaba dovoljenih mejnih vrednosti za novorojenčke in dojenčke (ISO 10993-7:2008/Amd 1:2019)

Biological evaluation of medical devices - Part 7: Ethylene oxide sterilization residuals - Amendment 1: Applicability of allowable limits for neonates and infants (ISO 10993-7:2008/Amd 1:2019) Osnova: EN ISO 10993-7:2008/A1:2022 ICS: 11.100.20

Amandma A1:2022 je dodatek k standardu SIST EN ISO 10993-7:2009.

Ta del ISO 10993 določa dopustne meje za ostanke etilenoksida (EO) in etilen klorohidrina (ECH) na posameznem medicinskem pripomočku, steriliziranem z etilenoksidom; postopke za merjenje EO in ECH; in metode za ugotavljanje skladnosti, da se pripomočki lahko sprostijo. Dodatne informacije in vodilo ter prikaz delovnih postopkov, ki razlagajo uporabo standarda, so vključeni v informativne dodatke. Ta standard ne zajema pripomočkov, steriliziranih z etilenoksidom, ki niso v stiku z bolnikom (npr. diagnostičnih preskusnih sistemov in vitro).

# SIST EN ISO 20776-2:2022

2022-03 (po) SIST EN ISO 20776-2:2008 25 str. (F)

(en;fr;de) Klinični laboratorijski preskusi ter diagnostični preskusni sistemi in-vitro - Preskus občutljivosti povzročiteljev infekcij in vrednotenje delovanja antimikrobno občutljivih preskusnih naprav - 2. del: Vrednotenje delovanja antimikrobno občutljivih naprav (ISO 20776-2:2021)

Clinical laboratory testing and in vitro diagnostic test systems - Susceptibility testing of infectious agents and evaluation of performance of antimicrobial susceptibility test devices - Part 2: Evaluation of performance of antimicrobial susceptibility test devices against reference broth micro-dilution (ISO 20776-2:2021)

Osnova:	·	EN ISO 20776-2:2022
ICS:		11.100.10

This document establishes acceptable performance criteria for antimicrobial susceptibility test (AST) devices that are used to determine minimum inhibitory concentrations (MIC) of bacteria to antimicrobial agents in medical laboratories.

This document specifies requirements for AST devices and procedures for assessing performance of such devices. It defines how a performance evaluation of an AST device is to be conducted.

This document has been developed to guide manufacturers in the conduct of performance evaluation Studies.

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

## SIST EN 50632-1:2015/A2:2022

2022-03 (en;fr) 6 str. (B) (po) Elektromotorna orodja - Postopek meritve prahu - 1. del: Splošne zahteve - Dopolnilo A2 Electric motor-operated tools - Dust measurement procedure - Part 1: General requirements EN 50632-1:2015/A2:2021 Osnova: ICS: 25.140.20

Amandma A2:2022 je dodatek k standardu SIST EN 50632-1:2015.

(en;fr)

Ta evropski standard določa splošne zahteve za meritve prahu elektromotornih orodij, ki se napajajo iz omrežja ali baterij. Ta evropski standard velja za tista orodja, pri katerih se pričakuje nabiranje prahu (na primer mineralnega prahu, ki vsebuje kremenico, ali lesnega prahu), ne glede na to, ali so opremljeni z enoto za izločevanje prahu ali ne.

## SIST EN 50632-2-11:2016/A1:2022 2022-03

(po)

8 str. (B)

Elektromotorna orodja - Postopek meritve prahu - 2-11. del: Posebne zahteve za vbodne in sabljaste žage - Dopolnilo A1

Electric motor-operated tools - Dust measurement procedure - Part 2-11: Particular requirements for jig and sabre saws

Osnova:	EN 50632-2-11:2016/A1:2021
ICS:	25.100.40, 25.140.20

Amandma A1:2022 je dodatek k standardu SIST EN 50632-2-11:2016. Ta evropski standard se uporablja za ročna elektromotorna orodja ter obravnava postopek merjenja za vbodne in sabljaste žage za izvajanje meritev emisije prahu.

# SIST EN 50632-2-22:2015/A1:2022

2022-03 7 str. (B) (po) (en:fr)

Elektromotorna orodja - Postopek meritve prahu - 2-22. del: Posebne zahteve za rezalne stroje in rezalnike zidnih utorov - Dopolnilo A1

Electric motor-operated tools - Dust measurement procedure - Part 2-22: Particular requirements for cut-off machines and wall chasers

Osnova: EN 50632-2-22:2015/A1:2021 ICS: 25.100.01, 25.140.20

Amandma A1:2022 je dodatek k standardu SIST EN 50632-2-22:2015. Ta točka 1. dela se ne uporablja v naslednjih primerih: ta del standarda EN 50632 velja za rezalnike in zidne rezkarje.

# SIST EN 50632-2-3:2016/A1:2022

2022-03 (po) 6 str. (B)

Elektromotorna orodja - Postopek meritve prahu - 2-3. del: Posebne zahteve za brusilnike betona in diskovne brusilnike - Dopolnilo A1

Electric motor-operated tools - Dust measurement procedure - Part 2-3: Particular requirements for concrete grinders and disk-type sanders

EN 50632-2-3:2016/A1:2021 Osnova:

ICS: 25.080.50, 25.140.20

Amandma A1:2022 je dodatek k standardu SIST EN 50632-2-3:2016.

(en;fr)

Ta evropski standard določa splošne zahteve za merjenje prahu elektromotornih orodij, ki se napajajo rek omrežja ali baterij. Ta standard se uporablja za orodja, pri katerih se pričakuje nabiranje prahu (na primer mineralnega prahu, ki vsebuje kremenico, ali lesnega prahu), ne glede na to, ali so opremljena z enoto za izločevanje prahu.

1.2 Vrste prahu

Prah je razpršena porazdelitev trdnih snovi v plinih, zlasti v zraku, do katere pride pri mehanskih postopkih. V skladu s standardom EN 481 se razlikuje med dvema kategorijama velikosti: vdihljivi in respiratorni delež prahu. Vdihljivi prah se nanaša na celoten vdihljivi delež prahu skozi usta in/ali nos. Respiratorni prah se nanaša na delež vdihljivega prahu, ki lahko zaradi majhne velikosti delcev doseže pljučne mešičke.

Ta del standarda EN 50632 se uporablja za brusilnike betona in diskaste brusilnike.

# SIST EN 50632-2-4:2016/A1:2022

2022-03 (po) 5 str. (B)

Elektromotorna orodja - Postopek meritve prahu - 2-4. del: Posebne zahteve za brusilnike, razen diskovnih brusilnikov - Dopolnilo A1

Electric motor-operated tools - Dust measurement procedure - Part 2-4: Particular requirements for sanders other than disk type

Osnova: EN 50632-2-4:2016/A1:2021 ICS: 25.080.50, 25.140.20

Amandma A1:2022 je dodatek k standardu SIST EN 50632-2-4:2016.

(en;fr)

Ta evropski standard določa splošne zahteve za merjenje prahu elektromotornih orodij, ki se napajajo prek omrežja ali baterij. Ta standard se uporablja za orodja, pri katerih se pričakuje nabiranje prahu (na primer mineralnega prahu, ki vsebuje kremenico, ali lesnega prahu), ne glede na to, ali so opremljena z enoto za izločevanje prahu.

1.2 Vrste prahu

Prah je razpršena porazdelitev trdnih snovi v plinih, zlasti v zraku, do katere pride pri mehanskih postopkih. V skladu s standardom EN 481 se razlikuje med dvema kategorijama velikosti: vdihljivi in respiratorni delež prahu. Vdihljivi prah se nanaša na celoten vdihljivi delež prahu skozi usta in/ali nos. Respiratorni prah se nanaša na delež vdihljivega prahu, ki lahko zaradi majhne velikosti delcev doseže pljučne mešičke.

Ta del standarda EN 50632 se uporablja za brusilnike betona in diskaste brusilnike.

## SIST EN 60335-2-54:2009/A12:2022 2022-03

(po)

7 str. (B)

Gospodinjski in podobni električni aparati - Varnost - 2-54. del: Posebne zahteve za aparate za čiščenje površin s tekočinami ali paro - Dopolnilo A12

Household and similar electrical appliances - Safety - Part 2-54: Particular requirements for surfacecleaning appliances for household use employing liquids or steam

Osnova:	EN 60335-2-54:2008/A12:2021
ICS:	97.180, 13.120

Amandma A12:2022 je dodatek k standardu SIST EN 60335-2-54:2009.

(en;fr)

Ta mednarodni standard opisuje varnost električnih čistilnih aparatov za gospodinjsko uporabo, ki so namenjeni čiščenju površin, kot so okna, stene in prazni bazeni, z uporabo tekočih čistilnih sredstev ali pare, pri čemer njihova naznačena napetost ne presega 250 V. Zajema tudi odstranjevalce tapet. Ta standard v največji možni meri obravnava splošne nevarnosti, ki jih predstavljajo aparati ter s katerimi se srečujejo osebe doma in v okolici doma. Vendar na splošno ne upošteva: – oseb (vključno z otroki), ki zaradi fizičnih, čutilnih ali duševnih zmožnosti ali zaradi neizkušenosti in neznanja aparata ne morejo varno uporabljati brez nadzora ali navodil; - otrok, ki se igrajo z aparatom.

# SIST EN 60335-2-54:2009/A2:2022

2022-03 (en) 5 str. (B) (po) Gospodiniski in podobni električni aparati - Varnost - 2-54. del: Posebne zahteve za aparate za čiščenje površin s tekočinami ali paro - Dopolnilo A2 Household and similar electrical appliances - Safety - Part 2-54: Particular requirements for surfacecleaning appliances for household use employing liquids or steam EN 60335-2-54:2008/A2:2021 Osnova: ICS: 97.080, 13.120

# Amandma A2:2022 je dodatek k standardu SIST EN 60335-2-54:2009.

Ta mednarodni standard opisuje varnost električnih čistilnih aparatov za gospodinjsko uporabo, ki so namenjeni čiščenju površin, kot so okna, stene in prazni bazeni, z uporabo tekočih čistilnih sredstev ali pare, pri čemer njihova naznačena napetost ne presega 250 V. Zajema tudi odstranjevalce tapet. Ta standard v največji možni meri obravnava splošne nevarnosti, ki jih predstavljajo aparati ter s katerimi se srečujejo osebe doma in v okolici doma. Vendar na splošno ne upošteva: – oseb (vključno z otroki), ki zaradi fizičnih, čutilnih ali duševnih zmožnosti ali zaradi neizkušenosti in neznanja aparata ne morejo varno uporabljati brez nadzora ali navodil; – otrok, ki se igrajo z aparatom.

## SIST EN IEC 60335-2-105:2022

SIST EN 60335-2-105:2005 SIST EN 60335-2-105:2005/A1:2008 SIST EN 60335-2-105:2005/A11:2011 SIST EN EN 60335-2-105:2005/A2:2020 **20 str. (E)** 

**2022-03** (po) (en) 20 str. (E) Gospodinjski in podobni električni aparati - Varnost - 2-105. del: Posebne zahteve za večnamenske kabine za prhanje

Household and similar electrical appliances - Safety - Part 2-105: Particular requirements for multifunctional shower cabinets Osnova: EN IEC 60335-2-105:2021 ICS: 13.120, 91.140.70

This International Standard deals with the safety of electric multifunctional shower cabinets and electric separate multifunctional shower units for household and similar purposes, their rated voltage being not more than 250 V for single-phase appliances and 480 V for other appliances.

Appliances not intended for normal household use but which nevertheless may be a source of danger to the public, such as appliances intended to be used by laymen in hotels, fitness centres and similar locations, are within the scope of this standard.

As far as is practicable, this standard deals with the common hazards presented by appliances that are encountered by all persons in and around the home. However, in general, it does not take into account – persons (including children) whose

• physical, sensory or mental capabilities; or

lack of experience and knowledge

prevents them from using the appliance safely without supervision or instruction;

- children playing with the appliance.

NOTE 101 Attention is drawn to the fact that

- for appliances intended to be used in vehicles or on board ships or aircraft, additional requirements may be necessary;

- in many countries, additional requirements are specified by the national health authorities, the national water supply authorities, the national authorities responsible for the protection of labour and similar authorities;

- in many countries, mechanical strength, impact resistance and shattering properties of shower enclosures can be covered by national regulations.

NOTE 102 If an appliance incorporates a part that is within the scope of IEC 60065, IEC 60598 or IEC 60950, the part is tested in accordance with the relevant standard as far as reasonable.

NOTE 103 This standard does not apply to

- instantaneous water heaters used for showering (IEC 60335-2-35);

- shower-boost pumps (IEC 60335-2-41);

- appliances intended for medical purposes;

- appliances intended to be used in locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust, vapour or gas).

#### SIST EN IEC 60335-2-105:2022/A1:2022 2022-03 (po)

# 5 str. (B)

Gospodinjski in podobni električni aparati - Varnost - 2-105. del: Posebne zahteve za večnamenske kabine za prhanje - Dopolnilo A1

Household and similar electrical appliances - Safety - Part 2-105: Particular requirements for

multifunctional shower cabinets

Osnova: EN IEC 60335-2-105:2021/A1:2021

ICS: 91.140.70, 13.120

Amandma A1:2022 je dodatek k standardu SIST EN IEC 60335-2-105:2022.

(en)

This International Standard deals with the safety of electric multifunctional shower cabinets and electric separate multifunctional shower units for household and similar purposes, their rated voltage being not more than 250 V for single-phase appliances and 480 V for other appliances.

Appliances not intended for normal household use but which nevertheless may be a source of danger to the public, such as appliances intended to be used by laymen in hotels, fitness centres and similar locations, are within the scope of this standard.

As far as is practicable, this standard deals with the common hazards presented by appliances that are encountered by all persons in and around the home. However, in general, it does not take into account - persons (including children) whose

· physical, sensory or mental capabilities; or

lack of experience and knowledge

prevents them from using the appliance safely without supervision or instruction;

- children playing with the appliance.

NOTE 101 Attention is drawn to the fact that

- for appliances intended to be used in vehicles or on board ships or aircraft, additional requirements may be necessary;

- in many countries, additional requirements are specified by the national health authorities, the national water supply authorities, the national authorities responsible for the protection of labour and similar authorities:

- in many countries, mechanical strength, impact resistance and shattering properties of shower enclosures can be covered by national regulations.

NOTE 102 If an appliance incorporates a part that is within the scope of IEC 60065, IEC 60598 or IEC 60950, the part is tested in accordance with the relevant standard as far as reasonable.

NOTE 103 This standard does not apply to

instantaneous water heaters used for showering (IEC 60335-2-35);

(en;fr)

- shower-boost pumps (IEC 60335-2-41);

- appliances intended for medical purposes;

- appliances intended to be used in locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust, vapour or gas).

#### SIST EN IEC 60335-2-105:2022/A11:2022 2022-03 (po)

6 str. (B)

Gospodinjski in podobni električni aparati - Varnost - 2-105. del: Posebne zahteve za večnamenske kabine za prhanje - Dopolnilo A11

Household and similar electrical appliances - Safety - Part 2-105: Particular requirements for multifunctional shower cabinets

Osnova: EN IEC 60335-2-105:2021/A11:2021

ICS: 97.170, 13.120

Amandma A11:2022 je dodatek k standardu SIST EN IEC 60335-2-105:2022.

This International Standard deals with the safety of electric multifunctional shower cabinets and electric separate multifunctional shower units for household and similar purposes, their rated voltage being not more than 250 V for single-phase appliances and 480 V for other appliances.

Appliances not intended for normal household use but which nevertheless may be a source of danger to the public, such as appliances intended to be used by laymen in hotels, fitness centres and similar locations, are within the scope of this standard.

As far as is practicable, this standard deals with the common hazards presented by appliances that are encountered by all persons in and around the home. However, in general, it does not take into account

- persons (including children) whose

• physical, sensory or mental capabilities; or

lack of experience and knowledge

prevents them from using the appliance safely without supervision or instruction;

children playing with the appliance.

NOTE 101 Attention is drawn to the fact that

- for appliances intended to be used in vehicles or on board ships or aircraft, additional requirements may be necessary;

- in many countries, additional requirements are specified by the national health authorities, the national water supply authorities, the national authorities responsible for the protection of labour and similar authorities;

- in many countries, mechanical strength, impact resistance and shattering properties of shower enclosures can be covered by national regulations.

NOTE 102 If an appliance incorporates a part that is within the scope of IEC 60065, IEC 60598 or IEC 60950, the part is tested in accordance with the relevant standard as far as reasonable.

NOTE 103 This standard does not apply to

- instantaneous water heaters used for showering (IEC 60335-2-35);

- shower-boost pumps (IEC 60335-2-41);

- appliances intended for medical purposes;

- appliances intended to be used in locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust, vapour or gas).

SIST EN IEC 60335-2-41:2022			SIST EN 60335-2-41:2003		
			SIST EN 60335-2-41:2003/A1:2004		
			SIST EN 60335-2-41:2003/A2:2011		
2022-03	(po)	(en)	20 str. (E)		
Gospodinjski	in podobni ele	ektrični aparati -	Varnost - Posebne zahteve za črpalke		
Household an	d similar elec	trical appliances	s - Safety - Particular requirements for p	umps	
Osnova:	EN IEC 6	0335-2-41:2021	1		
ICS:	23.080,	13.120			

This International Standard deals with the safety of electric pumps for liquids having a temperature not exceeding 90 °C, intended for household and similar purposes, their rated voltage being not more than 250 V for single-phase appliances and 480 V for other appliances.

NOTE 101 Examples of appliances within the scope of this standard are

- aquarium pumps;

- pumps for garden ponds;
- shower-boost pumps;
- sludge pumps;
- submersible pumps;
- table fountain pumps;

- vertical wet pit pumps.

Appliances not intended for normal household use, but that nevertheless may be a source of danger to the public, such as appliances intended to be used by laymen in shops, in light industry and on farms, are within the scope of this standard.

As far as is practicable, this standard deals with the common hazards presented by appliances that are encountered by all persons in and around the home. However, in general, it does not take into account – persons (including children) whose

• physical, sensory or mental capabilities; or

lack of experience and knowledge

prevents them from using the appliance safely without supervision or instruction;

- children playing with the appliance.

NOTE 102 Attention is drawn to the fact that

- for appliances intended to be used in vehicles or on board ships or aircraft, additional requirements can be necessary;

- in many countries additional requirements are specified by the national health authorities, the national authorities responsible for the protection of labour and similar authorities.

NOTE 103 This standard does not apply to

- stationary circulation pumps for heating and service water installations (IEC 60335-2-51);

- pumps for flammable liquids;

- pumps intended exclusively for industrial purposes;

- pumps intended to be used in locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust, vapour or gas);

- pumps incorporating chlorinators of the electrolytic type.

NOTE 104 Pumps incorporated in appliances are not covered by this standard unless a specific reference is made.

## SIST EN IEC 60335-2-41:2022/A11:2022

# 2022-03 (po) (en;fr) 15 str. (D)

Gospodinjski in podobni električni aparati - Varnost - Posebne zahteve za črpalke - Dopolnilo A11 Household and similar electrical appliances - Safety - Particular requirements for pumps

Osnova: EN IEC 60335-2-41:2021/A11:2021 ICS: 97.180, 23.080, 13.120

Amandma A1:2022 je dodatek k standardu SIST EN IEC 60335-2-41:2022.

This International Standard deals with the safety of electric pumps for liquids having a temperature not exceeding 90 °C, intended for household and similar purposes, their rated voltage being not more than 250 V for single-phase appliances and 480 V for other appliances.

NOTE 101 Examples of appliances within the scope of this standard are

- aquarium pumps;

- pumps for garden ponds;
- shower-boost pumps;
- sludge pumps;
- submersible pumps;
- table fountain pumps;
- vertical wet pit pumps.

Appliances not intended for normal household use, but that nevertheless may be a source of danger to the public, such as appliances intended to be used by laymen in shops, in light industry and on farms, are within the scope of this standard.

As far as is practicable, this standard deals with the common hazards presented by appliances that are encountered by all persons in and around the home. However, in general, it does not take into account – persons (including children) whose

• physical, sensory or mental capabilities; or

· lack of experience and knowledge

prevents them from using the appliance safely without supervision or instruction;

- children playing with the appliance.

NOTE 102 Attention is drawn to the fact that

- for appliances intended to be used in vehicles or on board ships or aircraft, additional requirements can be necessary;

- in many countries additional requirements are specified by the national health authorities, the national authorities responsible for the protection of labour and similar authorities.

NOTE 103 This standard does not apply to

- stationary circulation pumps for heating and service water installations (IEC 60335-2-51);

– pumps for flammable liquids;

- pumps intended exclusively for industrial purposes;

- pumps intended to be used in locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust, vapour or gas);

- pumps incorporating chlorinators of the electrolytic type.

NOTE 104 Pumps incorporated in appliances are not covered by this standard unless a specific reference is made.

# SIST EN IEC 60335-2-87:2020/A1:2022

2022-03(po)(en)5 str. (B)Gospodinjski in podobni električni aparati - Varnost - 2-87. del: Posebne zahteve za električno opremo<br/>za omamljanje živali - Dopolnilo A1<br/>Household and similar electrical appliances - Safety - Part 2-87: Particular requirements for electrical<br/>animal-stunning equipment<br/>Osnova:EN IEC 60335-2-87:2020/A1:2021<br/>ICS:ICS:65.020.30

Amandma A1:2022 je dodatek k standardu SIST EN IEC 60335-2-87:2020.

Deals with the safety of electric animal-stunning equipment, These are for inductrial or commercial use, on farms or in areas where they may be a source of danger to the public. The standard covers manual, semi-automatic and automatic equipment. For electric fence energizers, see EN 60335-2-76. For electric fishing machines, see EN 60335-2-86.

# SIST/TC VPK Vlaknine, papir, karton in izdelki

SIST EN 17545:20222022-03(po)(en;fr;de)11 str. (C)Papir, karton in lepenka - Določevanje sestave papirja, kartona in lepenke za recikliranje z<br/>gravimetrično analizoPaper and board - Determination of composition of paper and board for recycling by gravimetric

analysis Osnova: EN 17545:2021 ICS: 85.060, 13.030.50

This International Standard deals with the safety of electric pumps for liquids having a temperature not exceeding 90 °C, intended for household and similar purposes, their rated voltage being not more than 250 V for single-phase appliances and 480 V for other appliances.

NOTE 101 Examples of appliances within the scope of this standard are

- aquarium pumps;
- pumps for garden ponds;
- shower-boost pumps;
- sludge pumps;
- submersible pumps;
- table fountain pumps;
- vertical wet pit pumps.

Appliances not intended for normal household use, but that nevertheless may be a source of danger to the public, such as appliances intended to be used by laymen in shops, in light industry and on farms, are within the scope of this standard.

As far as is practicable, this standard deals with the common hazards presented by appliances that are encountered by all persons in and around the home. However, in general, it does not take into account – persons (including children) whose

• physical, sensory or mental capabilities; or

lack of experience and knowledge

prevents them from using the appliance safely without supervision or instruction;

- children playing with the appliance.

NOTE 102 Attention is drawn to the fact that

- for appliances intended to be used in vehicles or on board ships or aircraft, additional requirements can be necessary;

- in many countries additional requirements are specified by the national health authorities, the national authorities responsible for the protection of labour and similar authorities.

NOTE 103 This standard does not apply to

- stationary circulation pumps for heating and service water installations (IEC 60335-2-51);

- pumps for flammable liquids;

- pumps intended exclusively for industrial purposes;

- pumps intended to be used in locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust, vapour or gas);

- pumps incorporating chlorinators of the electrolytic type.

NOTE 104 Pumps incorporated in appliances are not covered by this standard unless a specific reference is made.

 SIST EN ISO 7213:2022
 SIST EN 27213:2000

 2022-03
 (po)
 (en;fr;de)
 11 str.
 (C)

 Vlaknine - Vzorčenje za preskušanje (ISO 7213:2021)
 Pulps - Sampling for testing (ISO 7213:2021)
 Sister esting (ISO 7213:2021)

 Osnova:
 EN ISO 7213:2021
 EN ISO 7213:2021

 ICS:
 85.040

This document specifies a method of obtaining, for test purposes, a gross sample representative of a certain lot of pulp. This document applies to all kinds of pulp delivered in bales or rolls. It is intended for use when sampling for all kinds of testing purposes except for the determination of saleable mass, in which case other International Standards apply such as ISO 801-1 and ISO 801-2.

If, however, the pulp is to be tested for saleable mass in addition to other properties, the gross sample obtained according to the appropriate International Standard for sampling saleable mass can also be used for the other pulp property tests.

# SIST/TC ŽEN Železniške električne naprave

 SIST EN IEC 61133:2022
 SIST EN 50215:2009

 2022-03
 (po)
 (en)
 70 str. (K)

 Železniške naprave - Vozna sredstva - Preskušanje voznih sredstev po končani gradnji in pred rednim obratovanjem
 Railway applications - Rolling stock - Testing of rolling stock on completion of construction and before entry into service

 Osnova:
 EN IEC 61133:2021

 ICS:
 29.280, 45.060.01

This International Standard specifies general criteria to demonstrate by testing that newly constructed complete railway vehicles conform with standards or other normative documents. This International Standard, as a whole or in part, applies to all railway vehicles except special purpose vehicles such as track-laying machines, ballast cleaners and personnel carriers. The extent of application of the standard for particular vehicles will be specifically mentioned in the contract, to take account, where necessary, of any legislative requirements. NOTE 1 The parts of the standard which are applicable will depend on the type of vehicle (e.g. passenger, freight, powered trailer, etc.). NOTE 2 The scope of this standard excludes railbound and road/rail vehicles for construction and maintenance of railway infrastructure. NOTE 3 This standard does not deal with tests carried out on components or equipment before fitting to the vehicle. In so far as this International Standard is applicable, it may be used for the following: generator sets mounted on a vehicle provided for auxiliary purposes; - electrical transmission used on trolley buses or similar vehicles; - control and auxiliary equipment of vehicles with non-electrical propulsion systems; - vehicles guided, supported or electrically propelled by systems which do not use the adhesion between wheel and rail. NOTE 4 Specific technical requirements apply to vehicles which operate on the railways in the European Union. The source of those requirements is given in Annex B. Where a European requirement applies to a given clause, a note has been inserted at the end of the clause.

## SIST EN IEC 61375-2-8:2022

(po)

(en)

2022-03

361 str. (Z)

Železniške elektronske naprave - Komunikacijsko omrežje vlaka (TCN) - 2-8. del: Preskus skladnosti TCN

*Electronic railway equipment - Train communication network (TCN) - Part 2-8: TCN conformance test* Osnova: EN IEC 61375-2-8:2021 ICS: 35.240.60, 45.060.01

This part of IEC 61375 applies to all equipment and devices implemented according to IEC 61375-2-3:2015, IEC 61375-2-5:2014 and IEC 61375-3-4:2014, i.e. it covers the procedures to be applied to such equipment and devices when the conformance should be proven. The applicability of this document to a TCN implementation allows for individual conformance checking of the implementation itself, and is a pre-requisite for further interoperability checking between different TCN implementations.

## SIST-TS CLC/TS 50238-3:2022 2022-03 (po) (e

SIST-TS CLC/TS 50238-3:2020 13 str. (D)

**2022-03 (po) (en) 13 str. (D)** Železniške naprave - Združljivost voznih sredstev in sistemov za detekcijo vlaka - 3. del: Združljivost s števci osi

Railway applications - Compatibility between rolling stock and train detection systems - Part 3: Compatibility with axle counters

, Osnova:	,	CLC/TS 50238-3:2022
ICS:		03.220.30, 45.060.01

For the purpose of demonstrating compatibility between rolling stock and axle counter detectors, this document defines the interference limits and evaluation methods to verify rolling stock emissions. Wheel sensors and crossing loops are not covered by this document.

This document gives recommended individual limits to be applied to establish compatibility between RST and all selected types of axle counter detectors, including any covered by national standards.

The list of selected types of axle counters and their limits for compatibility are drawn on the basis of established performance criteria. It is expected that the trend for newly signalled interoperable lines will be fitted with types that meet the compatibility limits published in the TSI CCS Interfaces Document (ERA/ERTMS/033281).

To ensure adequate operational availability, it is essential that the rolling stock complies with the defined limits; otherwise, the established availability of the valid output function of axle counter detectors may be compromised.

NOTE The influences from metal parts or inductively coupled resonant circuits on the vehicle, eddy current brakes or magnetic brakes, are not covered by this document but are considered on the basis of national technical specifications.

For wheel sensors and wheel detectors in other applications than axle counters but utilizing the same rail sensors and detectors, transient and continuous interference can be considered as equivalent to axle counter detectors or axle counter sensors.

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

# SIST EN IEC 60749-39:2022

SIST EN 60749-39:2007 15 str. (D)

**2022-03** (po) (en) **15 str. (D)** Polprevodniški elementi - Mehanske in klimatske preskusne metode - 39. del: Meritve prepuščanja vlage organskih materialov in njihove vodotopnosti za polprevodniške komponente (IEC 60749-39:2021)

Semiconductor devices - Mechanical and climatic test methods - Part 39: Measurement of moisture diffusivity and water solubility in organic materials used for semiconductor components (IEC 60749-39:2021)

Osnova: EN IEC 60749-39:2022 ICS: 31.080.01 This part of IEC 60749 details the procedures for the measurement of the characteristic properties of moisture diffusivity and water solubility in organic materials used in the packaging of semiconductor components. These two material properties are important parameters for the effective reliability performance of plastic packaged semiconductors after exposure to moisture and being subjected to high-temperature solder reflow.

# SS SPL Strokovni svet SIST za splošno področje

SIST ISO 25551:20222022-03(po)(en)29 str. (G)Starajoča se družba - Splošne zahteve in smernice za oskrbovalcem prijazne organizacijeAgeing societies - General requirements and guidelines for carer-inclusive organizationsOsnova:ISO 25551:2021ICS:03.100.30, 11.020.10, 03.080.30

This document specifies requirements and provides guidelines for an organizational program for working carers providing care to:

- adult care recipients (e.g. adults with cognitive, sensory, physical, and invisible disabilities, adults with chronic or episodic conditions and older dependents);

- long-term childcare recipients (e.g. due to chronic illness or permanent cognitive, sensory or physical disability or injury).

This document is applicable to any organization, regardless of size, sector or community setting (i.e. urban, rural or remote).

This document can be used in conjunction with an organizationâ€<sup>™</sup>s management systems, human resource programs, and/or equity, diversity and inclusion programs, or on its own in the absence of a formal workplace program to support working carers.

# SIST ISO 2631-1:2022

2022-03 (po) (en;fr)

37 str. (H)

Mehanske vibracije in udarci - Vrednotenje izpostavljenosti človeka vibracijam celotnega telesa - 1. del: Splošne zahteve

Mechanical vibration and shock - Evaluation of human exposure to whole-body vibration - Part 1: General requirements

Osnova: ISO 2631-1:1997 ICS: 13.160

This part of ISO 2631 defines methods for the measurement of periodic, random and transient wholebody vibration. It indicates the principal factors that combine to determine the degree to which a vibration exposure will be acceptable. Informative annexes indicate current opinion and provide guidance on the possible effects of vibration on health, comfort and perception and motion sickness. The frequency range considered is - 0,5 Hz to 80 Hz for health, comfort and perception, and - 0,I Hz to 0,5 Hz for motion sickness. Although the potential effects on human performance are not covered, most of the guidance on whole-body vibration measurement also applies to this area. This part of ISO 2631 also defines the principles of preferred methods of mounting transducers for determining human exposure. It does not apply to the evaluation of extrememagnitude single shocks such as occur in vehicle accidents. This part of ISO 2631 is applicable to motions transmitted to the human body as a whole through the supporting surfaces: the feet of a standing person, the buttocks, back and feet of a seated person or the supporting area of a recumbent person. This type of vibration is found in vehicles, in machinery, in buildings and in the vicinity of working machinery.

# SIST ISO 2631-1:2022/Amd 1:2022

## 2022-03 (po) (en;fr) 9 str. (C)

Mehanske vibracije in udarci - Vrednotenje izpostavljenosti človeka vibracijam celotnega telesa - 1. del: Splošne zahteve - DOPOLNILO 1

Mechanical vibration and shock - Evaluation of human exposure to whole-body vibration - Part 1: General requirements - AMENDMENT 1

Osnova: ISO 2631-1:1997/Amd 1:2010 ICS: 13.160

Amandma 1:2022 je dodatek k standardu SIST ISO 2631-1:2022.

(en;fr)

This part of ISO 2631 defines methods for the measurement of periodic, random and transient wholebody vibration. It indicates the principal factors that combine to determine the degree to which a vibration exposure will be acceptable. Informative annexes indicate current opinion and provide guidance on the possible effects of vibration on health, comfort and perception and motion sickness. The frequency range considered is - 0,5 Hz to 80 Hz for health, comfort and perception, and - 0,I Hz to 0,5 Hz for motion sickness.

Although the potential effects on human performance are not covered, most of the guidance on wholebody vibration measurement also applies to this area. This part of ISO 2631 also defines the principles of preferred methods of mounting transducers for determining human exposure. It does not apply to the evaluation of extrememagnitude single shocks such as occur in vehicle accidents.

This part of ISO 2631 is applicable to motions transmitted to the human body as a whole through the supporting surfaces: the feet of a standing person, the buttocks, back and feet of a seated person or the supporting area of a recumbent person. This type of vibration is found in vehicles, in machinery, in buildings and in the vicinity of working machinery.

## SIST ISO 2631-2:2022

2022-03

16 str. (D)

Mehanske vibracije in udarci - Vrednotenje izpostavljenosti človeka vibracijam celotnega telesa - 2. del: Vibracije v zgradbah (1 Hz do 80 Hz)

Mechanical vibration and shock - Evaluation of human exposure to wholebody vibration - Part 2: Vibration in buildings (1 Hz to 80 Hz)

Osnova: ISO 2631-2:2003 ICS: 13.160

(po)

ISO 2631-2:2003 concerns human exposure to whole-body vibration and shock in buildings with respect to the comfort and annoyance of the occupants. It specifies a method for measurement and evaluation, comprising the determination of the measurement direction and measurement location. It defines the frequency weighting Wm which is applicable in the frequency range 1 Hz to 80 Hz where the posture of an occupant does not need to be defined.

Whilst it is often the case that a building will be available for experimental investigation, many of the concepts contained within ISO 2631-2 would apply equally to a building in the design process or where it will not be possible to gain access to an existing building. In these cases, reliance will have to be placed on the prediction of the building response by some means.

ISO 2631-2 does not provide guidance on the likelihood of structural damage, which is discussed in ISO 4866. Further, it is not applicable to the evaluation of effects on human health and safety.

Acceptable magnitudes of vibration are not stated in ISO 2631-2.

The mathematical definition of the frequency weighting Wm is given in Annex A. Guidelines for collecting data concerning complaints about building vibration are given in Annex B.

 SIST ISO 4803:2022
 SIST ISO 4803:1995

 2022-03
 (po)
 (en;fr;de)
 13 str. (D)

 Laboratorijska steklovina - Borosilikatne steklene cevi
 Laboratory glassware - Borosilicate glass tubing
 0snova:
 ISO 4803:2021

 ICS:
 71.040.20
 1.040.20
 1.040.20
 1.040.20

This document specifies requirements for borosilicate 3,3 glass tubing according to ISO 3585 for laboratory apparatus in an outer diameter range from 4 mm to 300 mm. This document defines dimensions, material, denomination, designation, requirements and inspection methods.

SIST ISO 6002:2022SIST ISO 6002:20002022-03(po)(en;fr;de)19 str. (E)Industrijski ventili - Jekleni zasuni s prirobničnim zgornjim delomIndustrial valves - Bolted bonnet steel gate valvesOsnova:ISO 6002:2021ICS:23.060.30

This document specifies the requirements for bolted bonnet steel gate vales having the following features:

- bolted bonnet;
- outside screw and yoke;
- inside screw (alternative for PN 10, PN 16, Class 150, PN 25 and PN 40 only);
- single or double obturator;
- wedge or parallel seating;
- with or without non-metallic obturator or seat seals;
- flanged or butt-welding ends.
- It covers valves of the nominal sizes DN:

- 10; 15; 20; 25; 32; 40; 50; 65; 80; 100; 125; 150; 200; 250; 300; 350; 400; 450; 500; 600; 700; 800; 900; 1 000;

corresponding to nominal pipe sizes NPS:

- <sup>3</sup>/<sub>8</sub>; "; ; 1; 1 Ľ; 1 "; 2; 2 "; 3; 4; 5; 6; 8; 10; 12; 14; 16; 18; 20; 24; 28; 32; 36; 40;

and applies to valves of the following pressure designations:

- PN 10; 16; 25; 40; 63; 100;

- Class 150; 300; 600.

This document applies to bolted bonnet steel gate valves used for all industrial applications.

Additional requirements given in the relevant application standards can apply to bolted bonnet steel gate valves used for more specific applications (e.g. for the water industry, the chemical and petrochemical process industry, the oil and gas industry).

<b>SIST EN 124</b> 1	8:2022		SIST EN 12418:2000+A1:20	09
2022-03	(po)	(en;fr;de)	49 str. (I)	
Rezalniki kam	nenja na gradl	biščih - Varnost		
Masonry and	stone cutting-	off machines for job	o site - Safety	
Osnova:	EN 1241	8:2021		
ICS:	91.220			

This document applies to transportable masonry and stone cutting-off machines stationary during work, principally used on job site building construction for cutting-off stones, other mineral construction materials and composite materials having at least one supporting surface. The power for the tool rotation is supplied by electrical or internal combustion prime motor. This document deals with all significant hazards pertinent to masonry and stone cutting-off machines for job site (see Clause 4), when they are used as intended and under the conditions foreseen by the manufacturer. This document specifies the appropriate technical measures to eliminate or reduce risks arising from the significant hazards.

These machines are designed for use with rotating diamond cutting-off wheels with a continuous rim and/or segmented rim according to prEN 13236:2017.

This document does not apply to:

- metal cutting-off machines;
- wood and timber sawing machines;
- machines with a feed or descent mechanism other than manual, or with a pedal;
  - mobile machines on a trolley travelling on the ground;
- hand-held portable grinding and cutting-off machines;

- hand-held portable grinding and cutting-off machines mounted on a support to be used in a fixed position.

This document does not cover the operation of transportable masonry and stone cutting-off machines in potential explosive atmospheres.

This document covers electrical hazards making reference to relevant European Standards (see 4.3). Those hazards that are relevant for all mechanical, electrical, hydraulic, pneumatic and other equipment of machinery and that are dealt with in standards for common use are not covered by this document. Reference to pertinent standards of this kind is made where such standards are applicable and so far necessary.

In this document, the masonry and stone cutting-off machines for job site construction are called: "cutting-off machines" or "machines", and cutting-off wheels are also called: "tools".

This document applies primarily to machines which are manufactured after the date of approval of the standard by CEN.

SIST EN 13862:20	)22		SIST EN 13862:2002+A1:2009
2022-03	(ро)	(en;fr;de)	50 str. (I)
Talni odrezovalni s	stroji - Varno	st	
Floor cutting-off m	achines - Sa	fety	
Osnova:	EN 13862:2	021	
ICS:	93.080.10		

This document applies to pedestrian controlled floor sawing machines having power feed, manual feed or hand feed (see 3.2) for sawing, grooving and milling floor surfaces made of concrete, asphalt and similar mineral building materials where the main power is supplied by electric or internal combustion prime engine. The power transmission of floor sawing machines is mechanical or hydraulic.

This document deals with all significant hazards pertinent to floor sawing machines, when they are used as intended and under the conditions foreseen by the manufacturer (see Clause 4). This document specifies the appropriate technical measures to eliminate or reduce risks arising from the significant hazards.

These machines are designed for use with rotating cutting-off wheels for wet and dry cutting. These cutting-off wheels can be either a diamond cutting-off wheel or a boron nitride cutting-off wheel, according to EN 13236.

This document does not apply to:

- self-propelled ride-on floor sawing machines;
  - machines moving along a rail;

- hand-held portable cutting off machines for construction materials mounted on a mobile support, to be used as floor saws;

remote controlled machines.

This document covers electrical hazards by making reference to relevant European Standards (see 4.2). Those hazards that are relevant for all mechanical, electrical, hydraulic and other equipment or machinery and that are dealt with in standards for common use are not covered by this document. Reference to pertinent standards is made where such standards are applicable and so far necessary. In this document, floor sawing machines are called "machines", and cutting-off wheels are called "tools". This document applies primarily to machines which are manufactured after the date of approval of the standard by CEN.

# SIST EN 13941-1:2019+A1:2022

(po)

2022-03

SIST EN 13941-1:2019 SIST EN 13941-1:2019/oprA1:2021 **161 str. (P)** 

(en;fr;de)

Cevi za daljinsko ogrevanje - Projektiranje in vgradnja toplotno izoliranih spojenih eno- in dvocevnih sistemov za neposredno zakopana vročevodna omrežja - 1. del: Projektiranje (vključno z dopolnilom A1)

District heating pipes - Design and installation of thermal insulated bonded single and twin pipe systems for directly buried hot water networks - Part 1: Design Osnova: EN 13941-1:2019+A1:2021 ICS: 91.140.10, 23.040.07

This European Standard specifies requirements for design, calculation and installation of factory made thermal insulated bonded single and twin pipe systems for directly buried hot water networks for continuous operation with treated hot water at various temperatures up to 120 °C and occasionally with

peak temperatures up to 140 °C and maximum internal pressure 2,5 MPa. Flexible pipe systems according to EN 15632 are not under the scope of this standard.

The standard EN 13941, Design and installation of thermal insulated bonded single and twin pipe systems for directly buried hot water networks consists of two parts:

a) prEN 13941-1: Design;

b) prEN 13941-2: Installation.

The requirements and stipulations in this part: EN 13941-1, form an unbreakable unity with those of prEN 13941-2. This part shall therefore exclusively be used in combination with prEN 13941-2.

The principles of the standard may be applied to thermal insulated pipe systems with pressures higher than 2,5 MPa, provided that special attention is paid to the effects of pressure.

Adjacent pipes, not buried, but belonging to the network (e. g. pipes in ducts, valve chambers, road crossings above ground etc.) may be designed and installed according to this standard.

This standard presupposes the use of treated water, which by softening, demineralisation, de-aeration, adding of chemicals, or otherwise has been treated to effectively prevent internal corrosion and deposits in the pipes.

NOTE For further information on water qualities to be used in district heating pipe systems see also [1].

This standard is not applicable for such units as:

a) pumps;

b) heat exchangers;

- c) boilers, tanks;
- d) systems behind domestic substations.

# SIST EN 13941-2:2019+A1:2022

SIST EN 13941-2:2019 SIST EN 13941-2:2019/oprA1:2021

96 str. (M)

2022-03 (po) (en;fr;de)

Cevi za daljinsko ogrevanje - Projektiranje in vgradnja toplotno izoliranih spojenih eno- in dvocevnih sistemov za neposredno zakopana vročevodna omrežja - 2. del: Vgradnja (vključno z dopolnilom A1) District heating pipes - Design and installation of thermal insulated bonded single and twin pipe systems for directly buried hot water networks - Part 2: Installation

Osnova: EN 13941-2:2019+A1:2021 ICS: 91.140.10, 23.040.07

This European Standard specifies requirements for design, calculation and installation of factory made thermal insulated bonded single and twin pipe systems for directly buried networks for continuous operation with treated hot water at various temperatures up to 120 °C and occasionally with peak temperatures up to 140 °C and maximum internal pressure 2,5 MPA. Flexible pipe systems according to EN 15632 are not under the scope of this standard.

The standard EN 13941, Design and installation of thermal insulated bonded single and twin pipe systems for directly buried hot water networks consists of two parts:

a) EN 13941-1: Design;

b) EN 13941-2: Installation.

The requirements and stipulations in this part: prEN 13941-2, form an unbreakable unity with those of prEN 13941-1. This part shall therefore exclusively be used in combination with prEN 13941-1.

The principles of the standard may be applied to thermal insulated pipe systems with pressures higher than 2,5 MPa, provided that special attention is paid to the effects of pressure.

Adjacent pipes, not buried, but belonging to the network (e. g. pipes in ducts, valve chambers, road crossings above ground etc.) may be designed and installed according to this standard.

This standard presupposes the use of treated water, which by softening, demineralisation, de-aeration, adding of chemicals, or otherwise has been treated to effectively prevent internal corrosion and deposits in the pipes.

This standard is not applicable for such units as:

- a) pumps;
- b) heat exchangers;
- c) boilers, tanks;
- d) systems behind domestic substations.

SIST EN 15805:2022SIST EN 15805:20102022-03(po)(en;fr;de)7 str. (B)Zračni filtri za delce pri splošnem prezračevanju - Standardne mereParticulate air filters for general ventilation - Standardised dimensionsOsnova:EN 15805:2021ICS:91.140.30

This European Standard specifies the header frame dimensions of air filters for general ventilation to be used in air handling units, air intake system filters for rotary machinery and other applications. This includes pocket filters, rigid (V type) filters and filters to which header frame dimensions are applicable.

SIST EN 16228-1:2014+A1:2022			SIST EN 16228-1:2014	
			SIST EN 16228-1:2014/kprA1:2021	
2022-03	(ро)	(en;fr;de)	176 str. (R)	
Oprema za vrta	anje in temel	jenje - Varnost - 1.	del: Splošne zahteve (vključno z dopolnilom A1	)
Drilling and fou	Indation equi	pment - Safety - Pa	art 1: Common requirements	
Osnova:	EN 1622	8-1:2014+A1:2021		
ICS:	53.100, 9	93.020		

This European Standard specifies the common safety requirements for drilling and foundation equipment.

Part 1 of this European Standard deals with the significant hazards common to drilling and foundation equipment (see Annex A), when they are used as intended and under the conditions of misuse which are reasonably foreseeable by the manufacturer associated with the whole life time of the machine (transport, assembly, dismantling, equipment in service and out of service, maintenance, moving on site, storage, disabling and scrapping).

NOTE 1 The requirements specified in this part of the standard are common to two or more families of drilling and foundation equipment.

This document gives safety requirements for all types of drilling and foundation equipment and is intended to be used in conjunction with one of parts 2 to 7. These machine specific parts do not repeat the requirements from part 1 but supplement or modify the requirements for the type of drilling and foundation equipment in question.

For multipurpose machinery, the parts of the standard that cover the specific functions and applications are used, e.g. a drilling machine also used as a piling machine will use the relevant requirements of EN 16228-1, EN 16228-2, and EN 16228-4.

The following machines are excluded from the scope of this standard:

- tunnelling machines, unshielded tunnel boring machines and rodless shaft boring machines for rock according to EN 16191;

- raise boring machines;

drill rigs used in oil and gas industry;

- specialized mining machinery and equipment for opencast mining (e.g. rock drill rigs, blast hole drills) (under the scope of CEN/TC 196);

- all underground mining machinery and equipment for the extraction of solid mineral substances (e.g. rock drill rigs, raise boring machines, shaft boring machines, mining auger boring machines, jumbos) as well as machinery and equipment for underground mine development (under the scope of CEN/TC 196);

core drilling machines on stand (covered by EN 12348);

hand-held machines (in particular machines covered by ISO 11148-5).

NOTE 2 Specific requirements for offshore applications are not covered by this European Standard.

Where a drilling or foundation equipment of fixed configuration that is not intended to be separated is assembled using a carrier based on earth-moving equipment, agricultural equipment, or a crane, then the completed assembly is !covered by this" standard.

Drilling and foundation equipment within the scope of EN 16228 parts 1 to 6 may include interchangeable auxiliary equipment within the scope of EN 16228-7, either as an integral part of its construction or as interchangeably fitted equipment.

If drilling and foundation equipment is intended to be used in a potentially explosive atmosphere, or in case of lightning risk, additional requirements will need to be met which are not covered by this document.

This document is not applicable to drilling and foundation equipment manufactured before the date of its publication."

## SIST EN 16228-2:2014+A1:2022

SIST EN 16228-2:2014 SIST EN 16228-2:2014/oprA1:2019 **32 str. (G)** 

2022-03 (po) (en;fr;de)

Oprema za vrtanje in temeljenje - Varnost - 2. del: Prenosna vrtalna oprema za gradbeništvo in

geotehniko, kamnolomstvo in rudarstvo (vključno z dopolnilom A1)

Drilling and foundation equipment - Safety - Part 2: Mobile drill rigs for civil and geotechnical engineering, quarrying and mining

Osnova:	EN 16228-2:2014+A1:2021
ICS:	25.080.40, 53.100, 93.020

This European Standard, together with part 1, deals with all significant hazards for mobile drill rigs for in soil or soil and rock mixture in civil and geotechnical engineering, "deleted text" when they are used as intended and under the conditions of misuse which are reasonably foreseeable by the manufacturer associated with the whole life time of the machine (see Clause 4).

The requirements of this part are complementary to the common requirements formulated in EN 16228 1:2014+A1:2021.

This document does not repeat the requirements from EN 16228 1:2014+A1:2021, but adds or replaces the requirements for application for mobile drill rigs.

In this document the general term "mobile drill rig" covers several different types of machines for use in:

- civil engineering;

- geotechnical engineering (including ground investigation, anchoring, soil nailing, mini-piling, ground stabilization, grouting);

- water well drilling;

- geothermal installations;

- landfill drilling;

underpinning and tunnelling;

for use above ground as well as underground.

Typically, the process of drilling involves the addition of drill rods, tubes, casings or augers etc., normally threaded, as the borehole extends to depth.

NOTE 1 EN 16228-4:2014+A1:2021 covers machines with a rotary torque greater than 35 kNm.

NOTE 2 The term "drill rigs" includes rigs with a separate power pack supplied by the rig manufacturer.

The following machines are excluded from the scope of this document:

- tunnelling machines, unshielded tunnel boring machines and rodless shaft boring machines for rock according to prEN 16191;

- raise boring machines;
  - drill rigs used in oil and gas industry;

- specialized mining machinery and equipment for opencast mining (e.g. rock drill rigs, blast hole drills) (under the scope of CEN/TC 196);

- all underground mining machinery and equipment for the extraction of solid mineral substances (e. g. rock drill rigs, raise boring machines, shaft boring machines, mining auger boring machines, jumbos) as well as machinery and equipment for underground mine development (under the scope of CEN/TC 196);

- core drilling machines on stand covered by EN 12348;

hand-held machines (in particular machines covered by ISO 11148-5).

This document is not applicable to mobile drill rigs for in soil or soil and rock mixture in civil and geotechnical engineering manufactured before the date of its publication.

# SIST EN 16228-3:2014+A1:2022

### SIST EN 16228-3:2014 SIST EN 16228-3:2014/oprA1:2019 **40 str. (H)**

2022-03 (po) (en;fr;de)

Oprema za vrtanje in temeljenje - Varnost - 3. del: Oprema za vodoravno usmerjeno vrtanje (HDD) (vključno z dopolnilom A1)

Drilling and foundation equipment - Safety - Part 3: Horizontal directional drilling equipment (HDD) Osnova: EN 16228-3:2014+A1:2021

ICS: 25.080.40, 53.100, 93.020

This European Standard, together with part 1, deals with all significant hazards for horizontal directional drilling equipment (HDD) when they are used as intended and under the conditions of misuse which are reasonably foreseeable by the manufacturer associated with the whole life time of the machine (see Clause 4).

The requirements of this part are complementary to the common requirements formulated in EN 16228-1:2014+A1:2021.

This document does not repeat the requirements from EN 16228-1:2014+A1:2021, but adds or replaces the requirements for application for horizontal directional drills.

A machine is considered a horizontal directional drill if it is designed to drill in a shallow arc for the installation of pipes, conduits, and cables and typically has a drill string entry angle of less than 45° relative to the operating surface of the earth.

# SIST EN 16228-4:2014+A1:2022

SIST EN 16228-4:2014 SIST EN 16228-4:2014/kprA1:2021

2022-03(po)(en;fr;de)17 str. (E)Oprema za vrtanje in temeljenje - Varnost - 4. del: Oprema za temeljenje (vključno z dopolnilom A1)Drilling and foundation equipment - Safety - Part 4: Foundation equipmentOsnova:EN 16228-4:2014+A1:2021Oprema za vrtanje in temeljenje (vključno z dopolnilom A1)

ICS: 53.100, 93.020

This European Standard, together with part 1, deals with all significant hazards for foundation equipment when they are used as intended and under the conditions of misuse which are reasonably foreseeable by the manufacturer associated with the whole life time of the machine (see Clause 4).

The requirements of this part are complementary to the common requirements formulated in EN 16228-1:2014+A1:2021.

This document does not repeat the requirements from EN 16228-1:2014+A1:2021 but adds or replaces the requirements for application for foundation equipment.

In this document the general term "foundation equipment" covers several different types of machines used for installation and/or extracting by drilling (machines with a rotary torque greater than 35 kNm), driving, vibrating, pushing, pulling or a combination of techniques, or any other way, of:

- longitudinal foundation elements;

- soil improvement by vibrating and soil mixing techniques;

- vertical drainage.

NOTE Some foundation equipment may have an additional rotary head with a torque less than 35 kNm for pre-drilling applications; this equipment is covered by this standard.

Machines with one or more of the following characteristics are not covered by this standard, but are covered by EN 16228-2:

- machines that have a main rotary head torque of less than 35 kNm;
- machines that have multi-directional drilling capability;

- machines for which adding and removing rods or digging and drilling tools etc. is usually required during the installation/extraction process.

Typically the process of foundation techniques involves the installation of longitudinal elements such as concrete piles, steel beams, tubes and sheet piles, injection elements as tubes and hoses and casings for cast in situ.

# SIST EN 16228-5:2014+A1:2022

## SIST EN 16228-5:2014 SIST EN 16228-5:2014/kprA1:2021

2022-03(po)(en;fr;de)24 str. (F)Oprema za vrtanje in temeljenje - Varnost - 5. del: Oprema za izdelavo membranskih sten (vključno z<br/>dopolnilom A1)Drilling and foundation equipment - Safety - Part 5: Diaphragm walling equipmentOsnova:EN 16228-5:2014+A1:2021ICS:53.100, 93.020

This European Standard, together with part 1, deals with all significant hazards for diaphragm walling equipment when they are used as intended and under the conditions of misuse which are reasonably foreseeable by the manufacturer associated with the whole life time of the machine (see Clause 4). The requirements of this part are complementary to the common requirements formulated in EN 16228-1:2014+A1:2021.

This document does not repeat the requirements from EN 16228-1:2014+A1:2021, but adds or replaces the requirements for application for diaphragm walling equipment.

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2022-03	(ро)	(en;fr;de)	17 str. (E)
			SIST EN 16228-6:2014/kprA1:2021
SIST EN 16228-6:2014+A1:2022			SIST EN 16228-6:2014

Oprema za vrtanje in temeljenje - Varnost - 6. del: Oprema za vpihavanje, nanašanje malte in vbrizgavanje

Drilling and foundation equipment - Safety - Part 6: Jetting, grouting and injection equipmentOsnova:EN 16228-6:2014+A1:2021ICS:53.100, 93.020

This European Standard, together with part 1, deals with all significant hazards for jetting, grouting and injection equipment when they are used as intended and under the conditions of misuse which are reasonably foreseeable by the manufacturer associated with the whole life time of the machine (see Clause 4).

The requirements of this part are complementary to the common requirements formulated in EN 16228-1:2014+A1:2021.

This document does not repeat the requirements from EN 16228-1:2014+A1:2021, but adds or replaces the requirements for application for jetting, grouting and injection equipment.

Rigs for drilling, vibrating, pile driving, to be used for preparing holes for these applications are covered by EN 16228-2:2014+A1:2021 and/or EN 16228-4:2014+A1:2021.

Jetting, grouting and injection equipment is used in the preparation, transfer and application of grouting materials used for either:

the improvement of ground condition; or

the filling of voids e.g. around piles or ground anchors.

Jetting, grouting and injection equipment are constituted by all equipment and installations, operated by hand or electrically, pneumatically, mechanically or hydraulically powered, necessary for the following:

- mixing, storing, measuring and pumping of substances (cement suspension, mortar or chemical liquids/mixtures);

- jetting, grouting and injection processes (of/into subsoil) with low, medium or high pressure or vacuum systems;

- deleted text

- all control systems, electrical or mechanical pressure and flow recorders, for monitoring the grouting;

- all jetting, grouting and injection accessories, such as: special tools, lances, rods, sockets, packers, retention clamps and swivel hooks.

This document does not apply to machines and equipment for conveying, spraying and placing concrete and mortar (covered by EN 12001).

This document does not deal with jetting, grouting or injection units intended to use products that generate toxic gases.

# SIST EN 16228-7:2014+A1:2022

## SIST EN 16228-7:2014 SIST EN 16228-7:2014/kprA1:2021

2022-03(po)(en;fr;de)28 str. (G)Oprema za vrtanje in temeljenje - Varnost - 7. del: Zamenljiva pomožna opremaDrilling and foundation equipment - Safety - Part 7: Interchangeable auxiliary equipmentOsnova:EN 16228-7:2014+A1:2021ICS:53.100, 93.020

This European Standard, together with part 1, deals with all significant hazards for interchangeable auxiliary equipment when they are used as intended and under the conditions of misuse which are reasonably foreseeable by the manufacturer associated with the whole life time of the machine (see Clause 4).

The requirements of this part are complementary to the common requirements formulated in EN 16228-1:2014+A1:2021.

This document does not repeat the requirements from EN 16228-1:2014+A1:2021, but adds or replaces the requirements for application for interchangeable auxiliary equipment.

This document specifies the specific safety requirements for interchangeable auxiliary equipment to be used in drilling and foundation operations, connected with drilling and foundation equipment, agricultural equipment and/or earth moving machinery when they are used as intended and under the conditions of misuse which are reasonably foreseeable by the manufacturer.

Interchangeable auxiliary equipment includes pile installation and extraction equipment, impact hammers, extractors, vibrators, deep vibrators, static pile pushing/pulling devices, rotary percussion hammers, rotary drilling drives, drill mast equipment such as leaders equipped with a drill stem and gears attached to the boom of an excavator and casing oscillators/rotators.

Diaphragm wall cutting tools are dealt with in EN 16228-5:2014+A1:2021.

## SIST EN 16602-30-11:2022

2022-03 (po) (en;fr;de)

SIST EN 16602-30-11:2015 89 str. (M)

Zagotavljanje varnih proizvodov v vesoljski tehniki - Zmanjšanje števila komponent EEE

Space product assurance - Derating - EEE components

Osnova: EN 16602-30-11:2021 ICS: 49.140

This Standard applies to all parties involved at all levels in the realization of space segment hardware and its interfaces.

The objective of this Standard is to provide customers with a guaranteed performance and reliability up to the equipment end-of-life. To this end, the following are specified:

78 str. (L)

- Load ratios or limits to reduce stress applied to components;

- Application rules and recommendations.

# SIST EN 16602-70-80:2022

2022-03 (po) (en;fr;de)

Zagotavljanje kakovosti proizvodov v vesoljski tehniki - Zahteve za obdelavo in zagotavljanje kakovosti za fuzijske tehnologije kovinskega prahu za uporabo v vesoljski tehniki

Space product assurance - Processing and quality assurance requirements for metallic powder bed fusion technologies for space applications

Osnova: EN 16602-70-80:2021 ICS: 03.120.99, 49.140

The scope includes metallic Powder Bed Fusion technologies for space applications.

A clear definition and implementation of quality monitoring and control means is mandatory and shall address the full end to end metallic PBF process, encompassing:

Design / Simulation

• Materials management (Powder, shielding gases, other consumables, recycling, etc.)

- Processing
- Post Processing
- Testing

By developing a single standard which can be tailored in the Project definition phase, it will help the Space Industry in performing the following functions

related to metallic PBF technologies over the full end to end process:

(i) select and qualify metallic PBF processes for the appropriate application,

(ii) select and validate raw materials for the appropriate applications,

(iii) define monitoring and control means during production to ensure that metallic PBF parts are produced with the required quality,

(iv) define requirements for applying Non-Destructive Inspection methods for the different metallic PBF parts,

(v) define requirements to verify/qualify space parts produced by metallic PBF processes for the selected applications and associated environment,

(vi) define specific requirements for operators/inspectors/instructors certification,

(vii) define requirements for metallic PBF machines certification,

(viii) define requirements for metallic PBF Companies certification.

The Standard will be complemented with informative Annexes, listing guidelines and best practices on specific technical aspects.

SIST EN 16603-3	2-01:2022		SIST EN 16603-32-01:2014
2022-03	(ро)	(en;fr;de)	86 str. (M)
Vesoljska tehnika	- Kontrola r	azpok	
Space engineering	ı - Fracture d	control	
Osnova:	EN 16603-3	32-01:2021	
ICS:	49.140		

This ECSS Engineering Standard specifies the fracture control requirements to be imposed on space segments of space systems and their related GSE. The fracture control programme is applicable for space systems and related GSE when required by ECSS-Q-ST-40 or by the NASA document NST 1700.7, incl. ISS addendum. The requirements contained in this Standard, when implemented, also satisfy the fracture control requirements applicable to the NASA STS and ISS as specified in the NASA document NSTS 1700.7 (incl. the ISS Addendum). The NASA nomenclature differs in some cases from that used by ECSS. When STS/ISS-specific requirements and nomenclature are included, they are identified as such.

This standard may be tailored for the specific characteristic and constrains of a space project in conformance with ECSS-S-ST-00.

# SIST EN 16603-50-16:2022

2022-03	(ро)	(en;fr;de)	103 str. (N)
Vesoljska tehn	ika - Časovn	o proženi ethernet	
Space enginee	ring - Time tr	iggered Ethernet	
Osnova:	EN 1660	3-50-16:2021	
ICS:	49.140		

Using standard communication protocols for spacecraft communication links can provide interface compatibility between communication devices and components. Thus, it can improve the design and development process as well as integration and test activities at all levels and provide the potential of reusability across projects.

The aim of this space engineering standard is to define the interface services and to specify their corresponding network protocol elements for spacecraft using the Time-Triggered Ethernet data network. It also aims at defining requirements for the harmonisation of the physical interfaces and usage of the [IEEE 802.3] and [SAE AS6802] layer features.

This standard may be tailored for the specific characteristic and constraints of a space project in conformance with ECSS-S-ST-00.

# SIST EN 17478:2022

# 2022-03 (po) (en;fr;de) 59 str. (J)

Transportne storitve - Strankine komunikacije pri storitvah potniškega prometa - Pristop s splošno zasnovo

Transport Services - Customer communications for passenger transport services - A Universal Design approach

Osnova: EN 17478:2021 ICS: 35.240.60, 03.220.01

This document specifies requirements and recommendations for the planning, design, development and provision of communication services related to passenger transport so that this information can be accessed, understood and used by the widest range of users, including persons with disabilities and older persons.

These requirements and recommendations enable an organization to extend its range of users by identifying diverse characteristics, capabilities, and preferences.

The requirements set out in this standard are applicable to but not limited to passenger transport service providers including air-, bus, rail-, and waterborne passenger transport services.

## SIST EN 17616:2022

2022-03	(ро)	(en;fr;de)	17 str. (E)
Zunanje sveče	- Specifikac	ija za požarno varnost	
Outdoor candle	s - Specifica	ation for fire safety	
Osnova:	EN 1761	6:2021	
ICS:	13.220.0	01, 97.180	

This document specifies requirements and test methods for the fire safety of candles intended to be burned outdoors.

Sticks wrapped with fuel-soaked materials, such as paper, cardboard or fabric, oil lamps on a stick and products intended to be used professionally to protect vineyards or fruit orchards from frost damages are not covered by this document.

## SIST EN 17617:2022

2022-03	(ро)	(en;fr;de)	16 str. (D)
Zunanje sveč	ée - Varnostne	oznake	
Outdoor cand	lles - Product s	afety labels	
Osnova:	EN 1761	7:2021	
ICS:	01.080.1	0, 97.180	

This document specifies safety information for burning outdoor candles and includes requirements on how safety information will be displayed.

Sticks wrapped with fuel-soaked materials, such as paper, cardboard or fabric, as well as oil lamps on a stick and products intended to be used professionally to protect vineyards or fruit orchards from frost damages are not covered by this document.

 SIST EN 2854-002:2022
 SIST EN 2854-002:2009

 2022-03
 (po)
 (en;fr;de)
 9 str. (C)

 Aeronavtika - Električni kabli za splošno uporabo - Delovne temperature med -55 °C in 260 °C - 002.
 del: Splošno

 Aerospace series - Cables, electrical for general purpose - Operating temperatures between -55 °C and

 260 °C - Part 002: General

 Osnova:
 EN 2854-002:2021

 ICS:
 29.060.20, 49.060

This document specifies the list of product standards and common characteristics of electrical cables for use in the on-board electrical systems of aircraft at operating temperatures between -55 °C and 260 °C (except otherwise specified in product document).

 SIST EN 746-3:2022
 SIST EN 746-3:2000+A1:2009

 2022-03
 (po)
 (en;fr;de)
 72 str.
 (L)

 Industrijska termoprocesna oprema - 3. del: Varnostne zahteve za pridobivanje in uporabo atmosferskih plinov
 Industrial thermoprocessing equipment - Part 3: Safety requirements for the generation and use of atmosphere gases

 Osnova:
 EN 746-3:2021

 ICS:
 25.180.01

This part of EN 746 series specifies safety requirements for generation and use of protective and reactive atmosphere gases that are part of industrial thermo-processing equipment (TPE).

NOTE The general safety requirements common to TPE are provided in EN 746 1 (see Introduction).

This part of EN 746 series deals with significant hazards, hazardous situations and events relevant to the generation and use of protective and reactive atmosphere gases created by thermochemical reactions and their use in TPE that are part of TPE as listed in Clause 4 and Clause 5, when used as intended and under the conditions foreseen by the manufacturer.

This part of EN 746 series covers

- pipework downstream of and including the manual isolating valve,
- equipment for the generation of atmosphere gases,
- additional equipment for the use of atmosphere gases in TPE,
- safety devices, and
- functional requirements for safety related control system

for the generation and use of protective and reactive atmosphere gases.

It applies to the supply of atmosphere gas, source gas, inert gas and process liquids to TPE and their removal from TPE, confined to equipment integrated in the TPE.

This part of EN 746 series also details the anticipated significant hazards associated with atmosphere gas systems and their use in TPE and specifies the appropriate preventative measures for the reduction or elimination of these hazards.

The pressure hazard of the piping and components covered by this standard is within the maximum pressure/size relationship of group I as described in Annex C.

This part of EN 746 series

- specifies the requirements to be met to ensure the safety of persons and property during installation, commissioning, start up, operation, shutdown and maintenance,

- does not cover the relevant risks involved in the flue gas ducting system when it is not considered a part of TPE,

- is not applicable to utility supply upstream of the TPE main disconnects,
- does not apply to TPE for semi-conductor devices,

- does not apply to TPE with atmosphere, such as air and flue gas from an over stoichiometric combustion,

- does not cover the decommissioning of the TPE,
- does not cover vacuum furnaces,
  - does not deal with the hazard of noise which is covered in EN 746-1:2019,

- is not applicable to generation and use of atmosphere gas in TPE and associated plant which is manufactured before the date of its publication, and

gives the necessary requirements for the information for use.

A TPE designed according to this part of EN 746 series does not create any potentially explosive atmosphere in the area around the TPE and is not designed to be located in an area with a potentially explosive or hazardous atmosphere.

A table of typical protective and reactive gases is given in Annex B.

# SIST EN 9721:2022

2022-03	(ро)	(en;fr;de)	90 str. (M)	
Aeronavtika -	Splošno pripo	pročilo za arhitektu	ro BIT v integriranem sis	stemu
Aerospace sei	ies - General	recommendation fo	or the BIT Architecture in	an integrated system
Osnova:	EN 9721	:2021		
ICS:	49.020			

The purpose of this document is to harmonise the dialogue between manufacturers, prime contractors, owners and the customer in view of making it easier to draw up specifications, share BIT architecture models and the BIT technical configuration of systems during the operational use phase. This recommendation proposes adopting BIT operational efficiency and performance definitions, architecture design principles, and BIT specification or validation principles. It provides no recommendations regarding the numeric values for operational efficiency or performance. The diversity of situations, development of technological solutions and ever-changing operational requirements make it impossible to list general recommendations.

Clause 6 and Clause 9 set out the general context of use of the BIT.

Clause 7 lists the constraints to be taken into account to design a BIT architecture.

Clause 8 lists the various BIT types currently known and the definitions of performance and operational efficiency (metrics).

Clause 10 provides recommendations on the BIT architecture.

Clause 11 recommends a language for exchanging BIT architecture models for assembling the complete model of a system.

Clause 12 is an introduction to the prognosis.

This European standard is mainly intended for system designers.

Although it is based on examples of aeronautic systems, it is applicable to any type of system.

## SIST EN ISO 20714:2022

2022-03(po)(en;fr;de)14 str. (D)E-tekočine - Ugotavljanje deleža nikotina, propilenglikola in glicerola v tekočinah, ki se uporabljajo v<br/>elektronskih napravah za dovajanje nikotina - Metoda plinske kromatografije (ISO 20714:2019)E-liquid - Determination of nicotine, propylene glycol and glycerol in liquids used in electronic nicotine

delivery devices - Gas chromatographic method (ISO 20714:2019)Osnova:EN ISO 20714:2021ICS:65.160

This document specifies an analytical method to quantify the nicotine, propylene glycol and glycerol content in e-liquids by gas chromatography.

# SIST EN ISO 20768:2022

2022-03(po)(en;fr;de)15 str. (D)Hlapni proizvodi - Uparjalniki za kontrolne analize - Definicije in standardni pogoji (ISO 20768:2018)Vapour products - Routine analytical vaping machine - Definitions and standard conditions (ISO20768:2018)Osnova:EN ISO 20768:2021ICS:65.160

This document:

- defines the parameters and specifies the standard conditions for a vaping machine for vapour products (as defined in 3.1);

- specifies technical requirements for the machine for routine analytical vaping, conforming with the standard conditions stated within Clause 4;

- does not specify the vapour product, the vapour product operation or the liquid to be used;

- does not specify the means for aerosol trapping, subsequent sample preparation or analyses of components in the trapped aerosol.

## SIST EN ISO 21363:2022

# 2022-03 (po) (en;fr;de) 92 str. (M)

Nanotehnologije - Meritve porazdelitve velikosti in oblike delcev s transmisijsko elektronsko mikroskopijo (ISO 21363:2020)

Nanotechnologies - Measurements of particle size and shape distributions by transmission electron microscopy (ISO 21363:2020)

Osnova: EN ISO 21363:2022 ICS: 07.120 This document specifies how to capture, measure and analyse transmission electron microscopy images to obtain particle size and shape distributions in the nanoscale.

This document broadly is applicable to nano-objects as well as to particles with sizes larger than 100 nm. The exact working range of the method depends on the required uncertainty and on the performance of the transmission electron microscope. These elements can be evaluated according to the requirements described in this document.

SIST EN ISO 22044:2022SIST EN 16902:20172022-03(po)(en;fr;de)61 str.(K)Komercialni hladilniki pijač - Razvrstitev, zahteve in preskusni pogoji (ISO 22044:2021)Commercial beverage coolers - Classification, requirements and test conditions (ISO 22044:2021)Osnova:EN ISO 22044:2022ICS:97.130.20

The scope of this European Standard is to define the classification for commercial beverage coolers and to specify their requirements and test methods. This European Standard is applicable to integral refrigeration systems. This European Standard is not applicable to remote and secondary system cabinets.

# SIST EN ISO 35102:2022

2022-03

# (po) (en;fr;de) 116 str. (N)

Industrija za predelavo nafte in zemeljskega plina - Obratovanje v arktičnem okolju - Pobeg, evakuacija in reševanje iz objektov na morju (ISO 35102:2020)

Petroleum and natural gas industries - Arctic operations - Escape, evacuation and rescue from offshore installations (ISO 35102:2020)

Osnova: EN ISO 35102:2021 ICS: 75.180.10

This document establishes the principles, specifies the requirements and provides guidance for the development and implementation of an escape, evacuation and rescue (EER) plan. It is applicable to offshore installation design, construction, transportation, installation, offshore production/exploration drilling operation service life inspection/repair, decommissioning and removal activities related to petroleum and natural gas industries in the arctic and cold regions.

Reference to arctic and cold regions in this document is deemed to include both the Arctic and other locations characterized by low ambient temperatures and the presence or possibility of sea ice, icebergs, icing conditions, persistent snow cover and/or permafrost.

This document contains requirements for the design, operation, maintenance, and service-life inspection or repair of new installations and structures, and to modification of existing installations for operation in the offshore Arctic and cold regions, where ice can be present for at least a portion of the year. This includes offshore exploration, production and accommodation units utilized for such activities. To a limited extent, this document also addresses the vessels that support ER, if part of the overall EER plan.

While this document does not apply specifically to mobile offshore drilling units (MODUs, see ISO 19905-1) many of the EER provisions contained herein are applicable to the assessment of such units in situations when the MODU is operated in arctic and cold regions.

The provisions of this document are intended to be used by stakeholders including designers, operators and duty holders. In some cases, floating platforms (as a type of offshore installations) can be classified as vessels (ships) by national law and the EER for these units are stipulated by international maritime law. However, many of the EER provisions contained in this document are applicable to such floating platforms.

This document applies to mechanical, process and electrical equipment or any specialized process equipment associated with offshore arctic and cold region operations that impacts the performance of the EER system. This includes periodic training and drills, EER system maintenance and precautionary down-manning as well as emergency situations.

EER associated with onshore arctic oil and gas facilities are not addressed in this document, except where relevant to an offshore development.

# SIST-TP CEN/TR 17603-20-06:2022

2022-03 (po) (en;fr;de) 59 str. (J)

Vesoljski inženiring - Ocena priročnika za polnjenje v najslabšem primeru v vesolju Space engineering - Assessment of space worst case charging handbook Osnova: CEN/TR 17603-20-06:2022 ICS: 49.140

Common engineering practices involve the assessment, through computer simulation (with software like NASCAP [RD.4] or SPIS [RD.5]), of the levels of absolute and differential potentials reached by space systems in flight. This is usually made mandatory by customers and by standards for the orbits most at risk such as GEO or MEO and long transfers to GEO by, for example, electric propulsion.

The ECSS-E-ST-20-06 standard requires the assessment of spacecraft charging but it is not appropriate in a standard to explain how such an assessment is performed. It is the role of this document ECSS-E-HB-20-06, to explain in more detail important aspects of the charging process and to give guidance on how to carry out charging assessment by computer simulation.

The ECSS-E-ST-10-04 standard specifies many aspects of the space environment, including the plasma and radiation characteristics corresponding to worst cases for surface and internal charging. In this document the use of these environment descriptions in worst case simulations is described.

The emphasis in this document is on high level charging in natural environments. One aspect that is currently not addressed is the use of active sources e.g. for electric propulsion or spacecraft potential control. The tools to address this are still being developed and this area can be addressed in a later edition.

# SIST-TP CEN/TR 17603-20-07:2022

2022-03(po)(en;fr;de)226 str. (S)Vesoljska tehnika - Priročnik o elektromagnetni združljivostiSpace engineering - Electromagnetic compatibility handbookOsnova:CEN/TR 17603-20-07:2022ICS:33.100.01, 49.140

The objective of this EMC Handbook is to point out all the issues relevant to space systems EMC, to provide a general technical treatment and to address the interested reader to more thorough and indepth publications.

NOTE: It is possible to find fundamental and advanced treatment of many aspects related to EMC: many universities offer courses on EMC and a large number of textbooks, papers and technical documents are available. Therefore replicating in this Handbook the available knowledge is impractical and meaningless.

Emphasis is given to space systems EMC design, development and verification, and specifically to the practical aspects related to these issues.

NOTE: This has been possible thanks to the collaboration of space industry, especially on items which are not textbook issues and whose solution needs the widespread experience gained in large number of projects.

# SIST-TP CEN/TR 17603-20-20:2022

2022-03(po)(en;fr;de)77 str. (L)Vesoljska tehnika - Smernice za električno načrtovanje in zahteve vmesnikov za napajanjeSpace engineering - Guidelines for electrical design and interface requirements for power supplyOsnova:CEN/TR 17603-20-20:2022ICS:49.140

In general terms, the scope of the consolidation of LCLs power distribution interface requirements in the EN 16603-20-20 (equivalent to ECSS-E-ST-20-20) and the relevant explanation in the present handbook is to allow a more recurrent approach for the specific designs offered by power unit manufacturers, at the benefit of the system integrators and of the Agency, thus ensuring:

- better quality,

- stability of performances, and

- independence of the products from specific mission targets.

A recurrent approach enables power distribution manufacturing companies to concentrate on products and a small step improvement approach that is the basis of a high quality industrial output. In particular, the scope of the present handbook is:

- to explain the principles of operation of power distribution based on LCLs,

(en;fr;de)

- to identify important issues related to LCLs, and

- to give some explanations of the requirements set up in the ECSS-E-ST-20-20 for power distribution based on LCLs, for both source and load sides.

# SIST-TP CEN/TR 17603-20-21:2022

56 str. (J)

(po) Vesoljska tehnika - Smernice za električno načrtovanje in zahteve vmesnikov za prožilnike Space engineering - Guidelines for electrical design and interface requirements for actuators CEN/TR 17603-20-21:2022 Osnova: ICS: 49.140

In general terms, the scope of the consolidation of the electrical interface requirements for electrical actuators in the EN 16603-20-21 (equivalent to ECSS-E-ST-20-21) and the relevant explanation in the present handbook is to allow a more recurrent approach both for actuator electronics (power source) and electrical actuators (power load) offered by the relevant manufacturers, at the benefit of the system integrators and of the European space agencies, thus ensuring:

- Better quality

2022-03

- Stability of performances

- Independence of the products from specific mission targets.

A recurrent approach enables manufacturing companies to concentrate on products and a small step improvement approach that is the basis of a high quality industrial output.

In particular, the scope of the present handbook is:

- To explain the type of actuators, the principles of operation and the typical configuration of the relevant actuator electronics,

- To identify important issues relevant to electrical actuators interfaces, and

- To give some explanations of the requirements set up in the EN 16603-20-21.

# SIST-TP CEN/TR 17603-31-17:2022

2022-03	(ро)	(en;fr;de)	64 str. (K)
Vesoljska tehnika	<ul> <li>Priročnik o</li> </ul>	toplotni analizi	
Space engineering	- Thermal ar	alysis handbook	
Osnova:	CEN/TR 176	03-31-17:2022	
ICS:	49.140		

This handbook is dedicated to the subject of thermal analysis for space applications. Thermal analysis is an important method of verification during the development of space systems. The purpose of this handbook is to provide thermal analysts with practical guidelines which support efficient and high quality thermal modelling and analysis.

Specifically, the handbook aims to improve:

1.the general comprehension of the context, drivers and constraints for thermal analysis campaigns;

2.the general quality of thermal models through the use of a consistent process for thermal modelling; 3.the credibility of thermal model predictions by rigorous verification of model results and outputs;

4.long term maintainability of thermal models via better model management, administration and documentation;

5.the efficiency of inter-organisation collaboration by setting out best practice for model transfer and conversion.

The intended users of the document are people, working in the domain of space systems, who use thermal analysis as part of their work. These users can be in industry, in (inter)national agencies, or in academia. Moreover, the guidelines are designed to be useful to users working on products at every level of a space project - that is to say at system level, sub-system level, unit level etc.

In some cases a guideline could not be globally applicable (for example not relevant for very high temperature applications). In these cases the limitations are explicitly given in the text of the handbook.

## SIST-TP CEN/TR 17603-32-01:2022

2022-03

(po) (en;fr;de) 532 str. (2C)

Vesoljska tehnika - Priročnik o strukturnih materialih - 1. del: Pregled in lastnosti materialov ter aplikacije

Space engineering - Structural materials handbook - Part 1: Overview and material properties and applications

Osnova: CEN/TR 17603-32-01:2022 ICS: 49 140

The structural materials handbook, SMH, combines materials and design information on established polymer matrix composites with provisional information on the emerging groups of newer advanced materials and their composites. Design aspects are described, along with factors associated with joining and manufacturing. Where possible, these are illustrated by examples or case studies. The Structural materials handbook contains 8 Parts.

A glossary of terms, definitions and abbreviated terms for these handbooks is contained in Part 8. The parts are as follows:

Part 1 Overview and material properties and applications Clauses 1 - 9

Part 2 Design calculation methods and general design aspects Clauses 10 - 22

Part 3 Load transfer and design of joints and design of structures Clauses 23 - 32

Part 4 Integrity control, verification guidelines and manufacturing Clauses 33 - 45

Part 5 New advanced materials, advanced metallic materials, general design aspects and load transfer Clauses 46 - 63 and design of joints

Part 6 Fracture and material modelling, case studies and design and integrity control and inspection Clauses 64 - 81

Part 7 Thermal and environmental integrity, manufacturing aspects, in-orbit and health monitoring, soft materials, hybrid materials and nanotechnoligies Clauses 82 - 107 Part 8 Glossary

NOTE: The 8 parts will be numbered TR17603-32-01 to TR 17603-32-08

# SIST-TP CEN/TR 17603-32-02:2022

2022-03 (en;fr;de) 432 str. (2A) (po)

Vesoljska tehnika - Priročnik o strukturnih materialih - 2. del: Metode za izračun zasnove in splošni vidiki zasnove

Space engineering - Structural materials handbook - Part 2: Design calculation methods and general design aspects

Osnova: CEN/TR 17603-32-02:2022 ICS: 49.140

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Clauses 1 - 9 Part 2 Design calculation methods and general design aspects Clauses 10 - 22

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Part 6 Fracture and material modelling, case studies and design and integrity control and inspection Clauses 64 - 81

Part 7 Thermal and environmental integrity, manufacturing aspects, in-orbit and health monitoring, soft materials, hybrid materials and nanotechnoligies Clauses 82 - 107 Part 8 Glossary

NOTE: The 8 parts will be numbered TR17603-32-01 to TR 17603-32-08

# SIST-TP CEN/TR 17603-32-03:2022

2022-03 (po) (en;fr;de) 408 str. (2A)

Vesoljska tehnika - Priročnik o strukturnih materialih - 3. del: Prenos obremenitve ter projektiranje spojev in konstrukcij

Space engineering - Structural materials handbook - Part 3: Load transfer and design of joints and design of structures

Osnova: CEN/TR 17603-32-03:2022 ICS: 49.140

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Part 4 Integrity control, verification guidelines and manufacturing Clauses 33 - 45

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Clauses 1 - 9

Clauses 1 - 9

Part 6 Fracture and material modelling, case studies and design and integrity control and inspection Clauses 64 - 81

Part 7 Thermal and environmental integrity, manufacturing aspects, in-orbit and health monitoring, soft materials, hybrid materials and nanotechnoligies Clauses 82 - 107 Part 8 Glossary

NOTE: The 8 parts will be numbered TR17603-32-01 to TR 17603-32-08

# SIST-TP CEN/TR 17603-32-04:2022

2022-03 (po) (en;fr;de) 461 str. (2B)

Vesoljska tehnika - Priročnik o strukturnih materialih - 4. del: Nadzor integritete, smernice za preverjanje in proizvodnja

Space engineering - Structural materials handbook - Part 4: Integrity control, verification guidelines and manufacturing

Osnova: CEN/TR 17603-32-04:2022 ICS: 49.140

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Part 2 Design calculation methods and general design aspects Clauses 10 - 22

Part 3 Load transfer and design of joints and design of structures Clauses 23 - 32

Part 4 Integrity control, verification guidelines and manufacturing Clauses 33 - 45

Part 5 New advanced materials, advanced metallic materials, general design aspects and load transfer and design of joints Clauses 46 - 63

Part 6 Fracture and material modelling, case studies and design and integrity control and inspection Clauses 64 - 81

Part 7 Thermal and environmental integrity, manufacturing aspects, in-orbit and health monitoring, soft materials, hybrid materials and nanotechnoligies Clauses 82 - 107 Part 8 Glossary

NOTE: The 8 parts will be numbered TR17603-32-01 to TR 17603-32-08

# SIST-TP CEN/TR 17603-32-05:2022

# 2022-03 (po) (en;fr;de) 435 str. (2A)

Vesoljska tehnika - Priročnik o strukturnih materialih - 5. del: Novi napredni materiali, napredni kovinski materiali, splošni konstrukcijski vidiki ter prenos obremenitve in oblikovanje sklepov Space engineering - Structural materials handbook - Part 5: New advanced materials, advanced metallic materials, general design aspects and load transfer and design of joints Osnova: CEN/TR 17603-32-05:2022

ICS: 49.140

The structural materials handbook, SMH, combines materials and design information on established polymer matrix composites with provisional information on the emerging groups of newer advanced materials and their composites. Design aspects are described, along with factors associated with joining and manufacturing. Where possible, these are illustrated by examples or case studies. The Structural materials handbook contains 8 Parts.

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NOTE: The 8 parts will be numbered TR17603-32-01 to TR 17603-32-08

# SIST-TP CEN/TR 17603-32-06:2022

**2022-03** (po) (en;fr;de) **423 str. (2A)** Vesoljska tehnika - Priročnik o strukturnih materialih - 6. del: Modeliranje zlomov in materialov, študije primerov ter načrtovanje in nadzor integritete in inšpekcijski pregled

Space engineering - Structural materials handbook - Part 6: Fracture and material modelling, case studies and design and integrity control and inspection

Osnova: CEN/TR 17603-32-06:2022 ICS: 49.140

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Part 3 Load transfer and design of joints and design of structures Clauses 23 - 32

Part 4 Integrity control, verification guidelines and manufacturing Clauses 33 - 45

Part 5 New advanced materials, advanced metallic materials, general design aspects and load transfer and design of joints Clauses 46 - 63

Part 6 Fracture and material modelling, case studies and design and integrity control and inspection Clauses 64 - 81

Part 7 Thermal and environmental integrity, manufacturing aspects, in-orbit and health monitoring, soft materials, hybrid materials and nanotechnoligies Clauses 82 - 107 Part 8 Glossary

NOTE: The 8 parts will be numbered TR17603-32-01 to TR 17603-32-08

Clauses 1 - 9

# SIST-TP CEN/TR 17603-32-07:2022

2022-03 461 str. (2B) (po) (en;fr;de)

Vesoljska tehnika - Priročnik o strukturnih materialih - 7. del: Toplotna in okoljska celovitost, proizvodni vidiki, spremljanje stanja materialov v orbiti, mehki materiali, hibridni materiali in nanotehnologije

Space engineering - Structural materials handbook - Part 7: Thermal and environmental integrity, manufacturing aspects, in-orbit and health monitoring, soft materials, hybrid materials and nanotechnologies

Osnova: CEN/TR 17603-32-07:2022 ICS: 49.140

The structural materials handbook, SMH, combines materials and design information on established polymer matrix composites with provisional information on the emerging groups of newer advanced materials and their composites. Design aspects are described, along with factors associated with joining and manufacturing. Where possible, these are illustrated by examples or case studies. The Structural materials handbook contains 8 Parts.

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Part 1 Overview and material properties and applications Clauses 1 - 9 Part 2 Design calculation methods and general design aspects Clauses 10 - 22 Part 3 Load transfer and design of joints and design of structures Clauses 23 - 32 Part 4 Integrity control, verification guidelines and manufacturing Clauses 33 - 45

Part 5 New advanced materials, advanced metallic materials, general design aspects and load transfer and design of joints Clauses 46 - 63

Part 6 Fracture and material modelling, case studies and design and integrity control and inspection Clauses 64 - 81

Part 7 Thermal and environmental integrity, manufacturing aspects, in-orbit and health monitoring, soft materials, hybrid materials and nanotechnoligies Clauses 82 - 107 Part 8 Glossary

NOTE: The 8 parts will be numbered TR17603-32-01 to TR 17603-32-08

# SIST-TP CEN/TR 17603-32-08:2022

2022-03 (po) (en;fr;de) 116 str. (N) Vesoljska tehnika - Priročnik o strukturnih materialih - 8. del: Slovar Space engineering - Structural materials handbook - Part 8: Glossary Osnova: CEN/TR 17603-32-08:2022 ICS: 01.040.49, 49.140

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SIST-TP CEN/TR 17603-60:20222022-03(po)(en;fr;de)39 str. (H)Vesoljska tehnika - Priročnik o nadzornem inženiringuSpace engineering - Control engineering handbookOsnova:CEN/TR 17603-60:2022ICS:49.140

This Handbook deals with control systems developed as part of a space project. It is applicable to all the elements of a space system, including the space segment, the ground segment and the launch service segment. The handbook covers all aspects of space control engineering including requirements definition, analysis, design, production, verification and validation, transfer, operations and maintenance. It describes the scope of the space control engineering process and its interfaces with management and product assurance, and explains how they apply to the control engineering process.

SIST-TP CEN/TR 17603-60-10:20222022-03(po)(en;fr;de)118 str. (N)Vesoljska tehnika - Smernice za nadzor delovanjaSpace engineering - Control performance guidelinesOsnova:CEN/TR 17603-60-10:2022ICS:49.140

This Handbook deals with control systems developed as part of a space project. It is applicable to all the elements of a space system, including the space segment, the ground segment and the launch service segment. It addresses the issue of control performance, in terms of definition, specification, verification and validation methods and processes. The handbook establishes a general framework for handling performance indicators, which applies to all disciplines involving control engineering, and which can be declined as well at different levels ranging from equipment to system level. It also focuses on the specific performance indicators applicable to the case of closed-loop control systems. Rules and guidelines are provided allowing to combine different error sources in order to build up a performance budget and to assess the compliance with a requirement. This version of the handbook does not cover control performance issues in the frame of launch systems.

# SIST-TP CEN/TR 17739:2022

2022-03(po)(en;fr;de)54 str. (J)Alge in izdelki iz alg - Specifikacije za uporabo v kemijskem in bioenergetskem sektorjuAlgae and algae products - Specifications for chemicals and biofuels sector applicationsOsnova:CEN/TR 17739:2021ICS:13.020.55

This Technical Reports describes quality designations and indications for algae and directly derived products from algae production required for or by chemicals and biofuels producers and industry. It does not apply to Food and Feed sectors.

Note: This TRs does not provide instructions on existing handling of technical requirements in existing legislations.



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