New and Updated Environmental Standards Notified During 2023

Listed below are international standard documents, relating to environmental aspects, which are either new or which supersede existing documents. The list does not include standards confirmed to continue without change or standards for which corundum's have been recently issued. It includes some, but not necessarily all, standards which are recently amended, when less than 10% of the content is changed. The marker that "No current standard is superseded" mostly refers to International standards, although in some instances, a national standard may already exist. In such instances reference should be made to your National standards agency to determine whether any existing standards will be withdrawn.

New Documents

Environmental Conditions

ISO 16750 Road vehicles. Environmental conditions and testing for electrical and electronic equipment.

- -1 Genera
- -5 Chemical loads

ISO 22009 Space environment (natural and artificial). Model of the Earth's magnetospheric magnetic field.

EN IEC 60721-2-6 Classification of environmental conditions. Environmental conditions appearing in nature. Earthquake vibration and shock.

Environmental Testing

ISO 4666-3 Rubber, vulcanized. Determination of temperature rise and resistance to fatigue in flexometer testing. Compression flexometer (constant-strain type).

ISO 9022-23 Optics and photonics. Environmental test methods. Low pressure combined with cold, ambient temperature and dry or damp heat.

EN 16603-10-03 Space engineering. Testing.

ISO 24412 Space systems. Thermal vacuum environmental testing. (no current standard is superseded)

IEC 60068-2-17 Environmental testing. Tests. Test Q. Sealing.

IEC 60068-3 Environmental testing. Supporting documentation and guidance.

- -1 Cold and dry heat tests.
- -4 Damp heat tests.

IEC 62047-37 Semiconductor devices. Micro-electromechanical devices. Environmental test methods of MEMS piezoelectric thin films for sensor application. (no current standard is superseded)

Acoustics

ISO 226 Acoustics. Normal equal-loudness-level contours.

ISO 532-3 Acoustics. Methods for calculating loudness. Moore-Glasberg-Schlittenlacher method. (no current standard is superseded)

ISO/PAS 1996-3 Acoustics. Description, measurement and assessment of environmental noise. Objective method for the measurement of prominence of impulsive sounds and for adjustment of LAeq.

EN ISO 11819-1 Acoustics. Measurement of the influence of road surfaces on traffic noise. Statistical pass-by method.

ISO/TS 20065 Acoustics. Objective method for assessing the audibility of tones in noise. Engineering method.

EN ISO 20270 Acoustics. Characterization of sources of structure-borne sound and vibration. Indirect measurement of blocked forces.

Contamination

ISO 18589-2 Measurement of radioactivity in the environment. Soil. Guidance for the selection of the sampling strategy, sampling and pre-treatment of samples.

ISO 20044 Measurement of radioactivity in the environment. Air: aerosols. Test method using sampling by filter media. (no current standard is superseded)

Corrosion

ISO 4212 Corrosion of metals and alloys. Method of oxalic acid etching test for intergranular corrosion of austenitic stainless steel. (no current standard is superseded)

ISO 4215 Corrosion of metals and alloys. Test method for high-temperature corrosion testing of metallic materials by thermogravimetry under isothermal or cyclic conditions. (no current standard is superseded)

ISO 4680 Corrosion of metals and alloys. Uniaxial constant-load test method for evaluating susceptibility of metals and alloys to stress corrosion cracking in high-purity water at high temperatures. (no current standard is superseded)

ISO 4905 Corrosion of metals and alloys. Electrochemical test methods for high-temperature corrosion testing of metallic materials in molten salts. (no current standard is superseded)

ISO 5156 Corrosion of metals and alloys. Corrosion test method for disinfectant. Total immersion method. (no current standard is superseded)

EN ISO 10062 Corrosion tests in artificial atmosphere at very low concentrations of polluting gas(es).

Climatic

ISO 6612 Windows and doors. Resistance to wind load. Test method. (no current standard is superseded)

ISO 9847 Solar energy. Calibration of pyranometers by comparison to a reference pyranometer. (no current standard is superseded)

PD CEN/TR 17909 Hydrometry. On-site measurement of snow depth and depth of snowfall. (no current standard is superseded)

PD ISO/TS 19392: Paints and varnishes. Coating systems for wind-turbine rotor blades.

- -5 Measurement of transmittance properties of UV protective coatings. (no current standard is superseded)
- -6 Determination and evaluation of ice adhesion using centrifuge (no current standard is superseded)

ISO 23032 Meteorology. Ground-based remote sensing of wind. Radar wind profiler. (no current standard is superseded)

Shock and Vibration

ISO 5109 Evaluation method for the resonance frequency of the multi-copter UA (unmanned aircraft) by measurement of rotor and body frequencies.

IEC 63150-1 Semiconductor devices. Measurement and evaluation methods of kinetic energy harvesting devices under practical vibration environment. Arbitrary and random mechanical vibrations. (no current standard is superseded)

Electro-Magnetic

ISO 7582 Metallic coatings for electromagnetic interference shielding. Designation and characterization method. (no current standard is superseded)

EN ISO 10605 Road vehicles. Test methods for electrical disturbances from electrostatic discharge.

ISO 11451-5 Road vehicles. Vehicle test methods for electrical disturbances from narrowband radiated electromagnetic energy. Reverberation chamber. (no current standard is superseded)

PD IEC TR 61000 Electromagnetic compatibility (EMC).

- -1-1 General. Application and interpretation of fundamental definitions and terms. (no current standard is superseded)
- -4-6 Testing and measurement techniques. Immunity to conducted disturbances, induced by radio-frequency fields.
- -5-1 Installation and mitigation guidelines. General Considerations.

Sustainable Energy

EN 17522 Design and construction of backfilled and grouted borehole heat exchangers. (no current standard is superseded)

EN 17669 Energy Performance Contracts. Minimum requirements, (no current standard is superseded)

EN IEC 61400 Wind energy generation systems.

- -8-301 Energy storage systems using fuel cell modules in reverse mode. Power-to-methane energy systems based on solid oxide cells including reversible operation. Performance test methods.
- -12 Power performance measurements of electricity producing wind turbines. Overview
- -21-2 Measurement and assessment of electrical characteristics. Wind power plants.
- -50-1 Wind measurement. Application of meteorological mast, nacelle and spinner mounted instruments. *(no current standard is superseded)*

EN IEC 62282-4-102 Fuel cell technologies. Fuel cell power systems for electrically powered industrial trucks. Performance test methods.

EN IEC 62282-8-301 Fuel cell technologies. Energy storage systems using fuel cell modules in reverse mode. Power-to-methane energy systems based on solid oxide cells including reversible operation. Performance test methods.

IEC SRD 62913-1 Generic smart grid requirements. Specific application of the use case methodology for defining generic smart grid requirements according to the IEC systems approach.

PD IEC TS 62933-3-1: Electrical energy storage (EES) systems. Planning and performance assessment of electrical energy storage systems. General specification. (no current standard is superseded)

EN IEC 63027 Photovoltaic power systems. DC arc detection and interruption. (no current standard is superseded)

IEC/IEEE 63198-2775 Technical guidelines for smart hydroelectric power plant. (no current standard is superseded)

PD IEC TS 63265 Photovoltaic power systems. Reliability practices for operation. (no current standard is superseded)

PD IEC TS 63397 Photovoltaic (PV) modules. Qualifying guidelines for increased hail resistance.

Process

EN ISO 14020: Environmental statements and programmes for products. Principles and general requirements.

EN 61124 Reliability testing. Compliance tests for constant failure rate and constant failure intensity.

Material Testing and Characterisation

EN ISO 179-1 Plastics. Determination of Charpy impact properties. Non-instrumented impact test.

EN ISO 180 Plastics. Determination of Izod impact strength.

EN ISO 4761 Non-destructive testing of welds. Phased array ultrasonic testing (PAUT) for thin-walled steel components. Acceptance levels. *(no current standard is superseded)*

EN ISO 5173 Destructive tests on welds in metallic materials. Bend tests. (no current standard is superseded)

ISO 11346 Rubber, vulcanized or thermoplastic. Estimation of life-time and maximum temperature of use.

ISO 11359-1 Plastics. Thermomechanical analysis (TMA). General principles.

EN ISO 14556 Metallic materials. Charpy V-notch pendulum impact test. Instrumented test method.

ISO 18251-2 Non-destructive testing. Infrared thermography. Test method for integrated performance of system and equipment. (no current standard is superseded)

ISO 20567-4 Paints and varnishes. Determination of stone- chip resistance of coatings. Mobile multi-impact testing on a small testing area. (no current standard is superseded)

ISO 22183 Plastics. Validation of force-time curves obtained from high-speed tensile tests. (*no current standard is superseded*).

ISO 24647 Non-destructive testing. Robotic ultrasonic test systems. General requirements. (no current standard is superseded)

PD ISO/TS 28660 Plastics. Determination of J-R curves. Fracture toughness. (no current standard is superseded)

PD CEN ISO/ASTM TR 52905 Additive manufacturing of metals. Non-destructive testing and evaluation. Defect detection in parts. (no current standard is superseded)

Sustainability

EN ISO 14002-2 Environmental management systems. Guidelines for using ISO 14001 to address environmental aspects and conditions within an environmental topic area. Water. (no current standard is superseded)

ISO 14030-3 Environmental performance evaluation. Green debt instruments. Taxonomy. (*no current standard is superseded*)

PD CEN/TR 17910 Biodegradable plastics. Status of standardization and new prospects. (no current standard is superseded)

ISO 21928-2 Sustainability in buildings and civil engineering works. Sustainability indicators. Framework for the development of indicators for civil engineering works. (no current standard is superseded)

ISO 22526-4 Plastics. Carbon and environmental footprint of biobased plastics. Environmental (total) footprint (Life cycle assessment). (no current standard is superseded)

ISO 37184 Sustainable mobility and transportation. Framework for transportation services by providing meshes for 5G communication. (no current standard is superseded)

Miscellaneous

EN IEC 62819 Live working. Eye, face and head protectors against the effects of electric arc. Performance requirements and test methods. (no current standard is superseded)

ISO/IEC 30179: Internet of Things (IoT). Overview and general requirements of IoT system for ecological environment monitoring. (no current standard is superseded)

IEC 61124 Reliability testing. Compliance tests for constant failure rate and constant failure intensity.

EN IEC 63287-2 Semiconductor devices. Guidelines for reliability qualification plans. Concept of mission profile. (no current standard is superseded)

EN ISO 80000-1: Quantities and units. General.

New Standards Work

New work has been notified on the international standards listed below. It may be possible to support this new work through your relevant national standards committee. The international Technical Committee responsible for a particular document can usually be identified from the ISO/ IEC or EN website. In many cases the nations participating in the maintenance and generation of the document can also be identified. To participate within an international Technical Committee, normally nomination by your relevant national standards committee is required. It should be noted that the standards are identified by their originating standards organisation, many may also be adopted by CEN, CENELEC or ETSI as EN standards and /or by your relevant national standards organisation.

New Standards Work Notified in January 2023

EN ISO 7965-1 Packaging. Drop test of sacks. Paper sacks.

CEN/TR 12349 Mechanical vibration. Guide to the health effects of vibration on the human body. (will supersede none)

ISO 14072 Environmental management. Life cycle assessment. Requirements and guidelines for organizational life cycle assessment. (will supersede none)

EN IEC 62788-7-3 Accelerated stress tests. Methods of abrasion of PV module external surfaces.

New Standards Work Notified in February 2023

EN 1793 Road traffic noise reducing devices. Test method for determining the acoustic performance.

ISO/TR 8547 Corrosion of metals and alloys. Exposure test site results in the Asian Monsoon region. (will supersede none)

ISO/TS 14069 Greenhouse gases. Quantification and reporting of greenhouse gas emissions for organizations. Guidance for the application of ISO14064-1. (will supersede none)

EN ISO 16032 Acoustics. Measurement of sound pressure level from service equipment in buildings. Engineering method.

EN ISO 18081 Non-destructive testing. Acoustic emission testing (AT). Leak detection by means of acoustic emission.

ISO 19691 Measurement Method of Corrosion for Weathering Steel Structures. (will supersede none)

EN 60068-2 Environmental testing. Tests.

- -1 Test A. Cold.
- -2 Test B. Dry heat.
- -30 Test Db. Damp heat, cyclic (12 h + 12 h cycle).
- -78 Damp heat, steady state.
- -87 UV-C Exposure of Materials and Components to Simulate Ultraviolet GermicidalIr radiation or Other Applications. (will supersede none)

New Standards Work Notified in March 2023

EN IEC 62282-3Fuel cell technologies. Stationary fuel cell power systems.

- -200 Performance test methods.
- -201 Performance test methods for small fuel cell power system.

EN 60068-3-6 Environmental testing. Supporting documentation and guidance. Confirmation of the performance of temperature/humidity chambers.

EN 60721-2-2 Classification of environmental conditions. Environmental conditions appearing in nature. Precipitation and wind.

IEC/TS 60721-4-3 Classification of environmental conditions. Guidance for the correlation and transformation of environmental condition classes of IEC 60721-3-3 to the environmental tests of IEC 60068. Stationary use at weather-protected locations.

New Standards Work Notified in April 2023

ISO 2631-1 Mechanical vibration and shock. Evaluation of human exposure to whole-body vibration. General requirements.

ISO 9846 Solar energy. Calibration of a pyranometer using a pyrheliometer. (will supersede none)

ISO 14019-2 Validation and verification of sustainability information. Verification process. (will supersede none)

ISO 18997 Water reuse in urban areas. Guidelines for the urban reclaimed water for scenic environmental uses. (will supersede none)

IEC 63211-2-23 Durability test methods for electronic displays. Environmental tests. Outdoor weathering. (will supersede none)

New Standards Work Notified in May 2023

BS 10175 Investigation of potentially contaminated sites. Code of Practice.

EN ISO 17635 Non-destructive testing of welds. General rules for metallic materials.

EN 17990 Thermal insulation and energy economy in buildings. Method to determine the durability of bondings with adhesive tapes and adhesive masses for the establishment of airtight layers under climatic conditions representative for indoor environments. (will supersede none)

ISO 18717-1 Corrosion of metals and alloys—Performance test method for volatile corrosion inhibitor materials. Vapor inhibiting ability (will supersede none)

EN ISO/ASTM 52941 Additive manufacturing. System performance and reliability. Acceptance tests for laser metal powder-bed fusion machines for metallic materials for aerospace application.

EN 60068-3-11 Environmental testing. Supporting documentation and guidance. Calculation of uncertainty of conditions in climatic test chambers. (

EN 60721-3-6 Classification of environmental conditions. Classification of groups of environmental parameters and their severities. Ship environment.

New Standards Work Notified in June 2023

EN ISO 3095 Railway applications. Acoustics. Measurement of noise emitted by rail bound vehicles.

EN ISO 14505-2 Ergonomics of the thermal environment. Evaluation of thermal environments in vehicles. Determination of equivalent temperature.

ISO 16063-31 Methods for the calibration of vibration and shock transducers. Testing of transverse vibration sensitivity. (will supersede none)

EN ISO 16831 Non-destructive testing. Ultrasonic testing. Characterization and verification of ultrasonic thickness measuring equipment. (will supersede none)

ISO 20734 Building Environment Design. Daylighting design procedure for indoor visual environment. (will supersede none)

ISO 21055 Corrosion of metals and alloys. Test method for microbiologically influenced corrosion of oil and gas transmission pipelines. (will supersede none)

New Standards Work Notified in July 2023

EN ISO 7539-6 Corrosion of metals and alloys. Stress corrosion testing. Preparation and use of precracked specimens for tests under constant load or constant displacement. (ISENFE/8)

EN ISO 11997 Paints and varnishes. Determination of resistance to cyclic corrosion conditions.

- -1 Wet (salt fog)/dry/humid. (STI/10)
- -2 Wet (salt fog)/dry/humidity/UV light (STI/10)

EN ISO 15708 Non-destructive testing. Radiation methods for computed tomography. (will supersede none) (WEE/46/5)

ISO/TR 22785 Coatings on plastics and composites. (will supersede none) (STI/10)

EN 60721-3-5 Classification of environmental conditions. Classification of groups of environmental parameters and their severities.

- -5 Ground vehicle. (GEL/104)
- -7 Portable and non-stationary use (GEL/104)

EN IEC 60794-1-205 Optical fibre cables. Generic specification. Basic optical cable test procedures. Environmental test methods. Water penetration, Method F5. (will supersede none) (GEL/86/1)

EN 61400-24 Wind energy generation systems. Lightning protection. (will supersede none) (PEL/88)

EN 61810-7-14 Electrical relays. Tests and Measurements. Mould growth. (will supersede none) (W/-)

EN IEC 61853-2 Photovoltaic (PV) module performance testing and energy rating. Spectral responsivity, incidence angle and module operating temperature measurements. ($will\ supersede\ none$) (GEL/86/1)