

### SLOVENSKI STANDARD SIST EN ISO 16647:2021

01-oktober-2021

Jedrski objekti - Merila za projektiranje in delovanje zadrževalnih sistemov za jedrska delovišča in jedrske naprave, ki so v razgradnji (ISO 16647:2018)

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

Kerntechnische Anlagen - Kriterien für die Planung und den Betrieb von Rückhaltesystemen und Lüftungssysteme für kurzzeitige Arbeitsplätze und für kerntechnische Anlagen, die rückgebaut werden (ISO 16647:2018)

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Installations nucléaires - Critères pour la conception et l'exploitation des systèmes de confinement des chantiers nucléaires et des installations nucléaires en démantèlement (ISO 16647:2018) https://standards.iteh.ai/catalog/standards/sist/65e1d5d8-86a2-4fad-9613-e409aacbd495/sist-en-iso-16647-2021

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EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM **EN ISO 16647** 

August 2021

ICS 27.120.20

#### **English Version**

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

Installations nucléaires - Critères pour la conception et l'exploitation des systèmes de confinement des chantiers nucléaires et des installations nucléaires en démantèlement (ISO 16647:2018)

Kerntechnische Anlagen - Kriterien für die Planung und den Betrieb von Einschlusssystemen für Arbeitsplätze in der Kerntechnik und in stillgelegten kerntechnischen Anlagen (ISO 16647:2018)

This European Standard was approved by CEN on 25 July 2021.

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#### **European foreword**

The text of ISO 16647:2018 has been prepared by Technical Committee ISO/TC 85 "Nuclear energy, nuclear technologies, and radiological protection" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 16647:2021 by Technical Committee CEN/TC 430 "Nuclear energy, nuclear technologies, and radiological protection" the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2022, and conflicting national standards shall be withdrawn at the latest by February 2022.

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### INTERNATIONAL STANDARD

ISO 16647

First edition 2018-09

### Nuclear facilities — Criteria for design and operation of confinement systems for nuclear worksite and for nuclear installations under decommissioning

Installations nucléaires — Critères pour la conception et l'exploitation des systèmes de confinement des chantiers nucléaires et iTeh ST des installations nucléaires en démantèlement

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ISO 16647:2018(E)

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#### Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="www.iso.org/directives">www.iso.org/directives</a>).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>. <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>. <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

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# Nuclear facilities — Criteria for design and operation of confinement systems for nuclear worksite and for nuclear installations under decommissioning

#### 1 Scope

This document specifies the requirements applicable to the design and use of airborne confinement systems that ensure safety and radioprotection functions in nuclear worksites and in nuclear installations under decommissioning to protect from radioactive contamination produced: aerosol or gas.

The purpose of confinement systems is to protect the workers, members of the public and environment against the spread of radioactive contamination resulting from operations in nuclear worksites and from nuclear installations under decommissioning.

The confinement of nuclear worksites and of nuclear installations under decommissioning is characterized by the temporary and evolving (dynamic) nature of the operations to be performed. These operations often take place in area not specifically designed for this purpose.

This document applies to maintenance or upgrades at worksites which fit the above definition.

NOTE The requirements for the design and use of ventilation and confinement systems and for liquid confinement in nuclear reactors or in nuclear installations other than nuclear worksites and nuclear installations under decommissioning are developed in other ISO standards.

#### 2 Normative references SIST EN ISO 16647:2021 https://standards.iteh.ai/catalog/standards/sist/65e1d5d8-86a2-4fad-9613-

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 16170, In situ test methods for high efficiency filter systems in industrial facilities

#### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at <a href="http://www.electropedia.org/">http://www.electropedia.org/</a>

#### 3.1

#### climatic shelter

shelter whose function is to provide suitable protection against the weather (sun, rain, wind, snow and extreme temperatures), usually structurally separated from radiological containment

#### 3.2

#### aerosol

solid particles and liquid droplets of all dimensions in suspension in a gaseous fluid