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STN	**Kryogénne nádoby Odstredivé čerpadlá na kryogénnu prevádzku (ISO 24490: 2025)**	**STN EN ISO 24490** 69 7275

Cryogenic vessels - Centrifugal pumps for cryogenic service (ISO 24490:2025)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 02/26

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Oznámením tejto normy sa ruší
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EUROPEAN STANDARD
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EN ISO 24490

November 2025

ICS 23.020.40 Supersedes EN ISO 24490:2016

English Version

Cryogenic vessels - Centrifugal pumps for cryogenic service (ISO 24490:2025)

Récipients cryogéniques - Pompes centrifuges pour service cryogénique (ISO 24490:2025)

Kryo-Behälter - Pumpen für den Kryo-Betrieb (ISO 24490:2025)

This European Standard was approved by CEN on 4 November 2025.

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Ref. No. EN ISO 24490:2025 E

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European foreword

This document (EN ISO 24490:2025) has been prepared by Technical Committee ISO/TC 220 "Cryogenic vessels" in collaboration with Technical Committee CEN/TC 268 “Cryogenic vessels and specific hydrogen technologies applications” 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of an identical text or by endorsement, at the latest by May 2026, and conflicting national standards shall be withdrawn at the latest by May 2026.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 24490:2016.

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Endorsement notice

The text of ISO 24490:2025 has been approved by CEN as EN ISO 24490:2025 without any modification.

International Standard

ISO 24490

Cryogenic vessels — Centrifugal pumps for cryogenic service

Récipients cryogéniques — Pompes centrifuges pour service cryogénique

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Foreword

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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 www.iso.org/directives).

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For an explanation of 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 220, *Cryogenic vessels*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 268, *Cryogenic vessels*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 24490:2016), which has been technically revised.

The main changes are as follows:

— Title and Scope have been modified to only include centrifugal pumps;

— descriptions in 4.1 have been updated;

— description in 4.3.9 have been updated.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

International Standard **ISO 24490:2025(en)**

Cryogenic vessels — Centrifugal pumps for cryogenic service

1 Scope

This document specifies the minimum requirements for the design, manufacture and testing of centrifugal pumps for cryogenic service.

This document does not apply to reciprocating pumps.

This document also gives guidance on the design of installations.

It does not specify requirements for operation or maintenance.

NOTE For general requirements for materials used in cryogenic fluid service, see ISO 21029-1, ISO 20421-1 or ISO 21009-1.

2 Normative references

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 21010, *Cryogenic vessels — Gas/material compatibility*

ISO 21028-1, *Cryogenic vessels — Toughness requirements for materials at cryogenic temperature — Part 1: Temperatures below –80 °C*

ISO 21028-2, *Cryogenic vessels — Toughness requirements for materials at cryogenic temperature — Part 2: Temperatures between –80 degrees C and –20 degrees C*

ISO 23208, *Cryogenic vessels — Cleanliness for cryogenic service*

1) 1 bar = 0,1 MPa = 10^5 Pa; 1 MPa = 1 N/mm^2.