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Cryogenic vessels — Cryogenic insulation performance

Réipients cryogéniques — Performances d'isolation cryogénique



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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 www.iso.org/directives).

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 www.iso.org/patents).

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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*.

This second edition cancels and replaces the first edition (ISO 21014:2006), which has been technically revised.

The main changes compared to the previous edition are as follows:

- [Clause 2](#) has been added and subsequent clauses and cross-references updated.
- For clarity, “set pressure of the pressure-limiting device” has been reworded to “set pressure of the lowest set pressure-limiting device on stream” in subclauses [3.5](#), [3.5.3](#), and [3.6](#).
- “(100 % for helium)” has been added to [7.2 b\) 1](#)).
- In subclause [7.2 c\)](#), the denominator in the formula for m_{ig} has been corrected from v_{el} to v_{il} .

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.

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Introduction

Traditionally, there have been different methods of defining the insulation performance of cryogenic vessels. It is therefore necessary to harmonize such methods for different cryogenic vessels.

[Figure 1](#) shows a logic diagram to help in the understanding of this document.

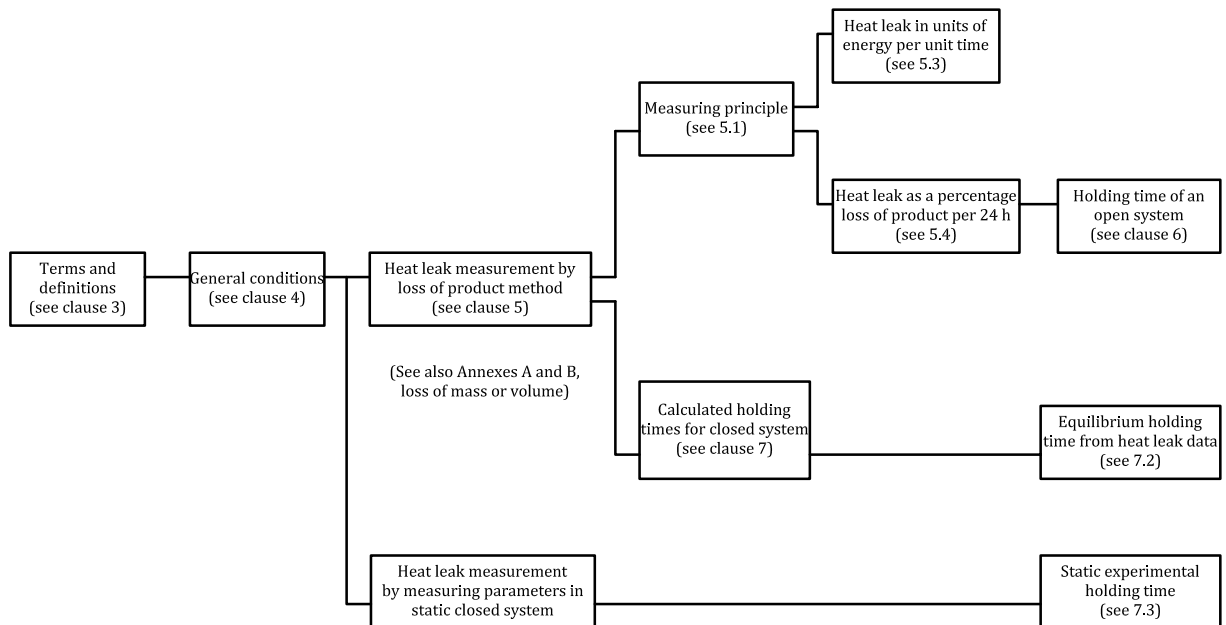


Figure 1 — Logic diagram