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Interested committees:

Title: Draft BS EN ISO 21011 Cryogenic vessels — Valves for cryogenic service.

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

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Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

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- All comments should be submitted online at <https://standardsdevelopment.bsigroup.com/>. You will need to register in order to comment.

Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/Figure/ Table/Note	Type of comment	Commend (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	

DRAFT INTERNATIONAL STANDARD

ISO/DIS 21011

ISO/TC 220

Secretariat: **AFNOR**

Voting begins on:
2021-03-22

Voting terminates on:
2021-06-14

Cryogenic vessels — Valves for cryogenic service

ICS: 23.020.40

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ISO/CEN PARALLEL PROCESSING



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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).

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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 21011:2008), which has been technically revised.

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

- Update of the scope;
- Clarification of the use of pressure units;
- Revision of the type approval tests;
- Revision of [Clause 7](#) Marking.

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.

Cryogenic vessels — Valves for cryogenic service

1 Scope

This document specifies the requirements for the design, manufacture and testing of valves for a rated temperature of $-40\text{ }^{\circ}\text{C}$ and below (cryogenic service), i.e. for operation with cryogenic fluids in addition to operation at temperatures from ambient to cryogenic.

It applies to all types of cryogenic valves, including vacuum jacketed cryogenic valves up to size DN 200. This document can be used as guidance for larger size valves. This document is not applicable to pressure relief valves covered by ISO 21013-1.

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 5208:2015, *Industrial valves — Pressure testing of metallic valves*

ISO 10434:2020, *Bolted bonnet steel gate valves for the petroleum, petrochemical and allied industries*

ISO 10497:2010, *Testing of valves — Fire type-testing requirements*

ISO 15761:2020, *Steel gate, globe and check valves for sizes DN 100 and smaller, for the petroleum and natural gas industries*

ISO 17292:2015, *Metal ball valves for petroleum, petrochemical and allied industries*

ISO 21010:2017, *Cryogenic vessels — Gas/material compatibility*

ISO 21028-1:2016, *Cryogenic vessels — Toughness requirements for materials at cryogenic temperature — Part 1: Temperatures below $-80\text{ }^{\circ}\text{C}$*

ISO 21028-2:2018, *Cryogenic vessels — Toughness requirements for materials at cryogenic temperature — Part 2: Temperatures between $-80\text{ }^{\circ}\text{C}$ and $-20\text{ }^{\circ}\text{C}$*

ISO 23208:2017, *Cryogenic vessels — Cleanliness for cryogenic service*

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 <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>