



DPC: 22/30407231 DC

BSI Group Headquarters

389 Chiswick High Road London W4 4AL

Tel: +44 (0)20 8996 9000

Fax: +44 (0)20 8996 7400

www.bsigroup.com

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Responsible committee: FSH/22/-/14 High Intensity Fires

Interested committees:

Title: Draft BS ISO 20902-2 Fire test procedures for divisional elements that are typically used in oil, gas and petrochemical industries. Part 2: Additional procedures for pipe penetration and cable transit sealing systems.

Please notify the secretary if you are aware of any keywords that might assist in classifying or identifying the standard or if the content of this standard

- i) has any issues related to 3rd party IPR, patent or copyright
- ii) affects other national standard(s)
- iii) requires additional national guidance or information

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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.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

UK Vote

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 Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.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

- **Annotated drafts are not acceptable and will be rejected.**
- 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	Comment (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 20902-2

ISO/TC 92/SC 2

Secretariat: ANSI

Voting begins on:
2022-03-29

Voting terminates on:
2022-06-21

Fire test procedures for divisional elements that are typically used in oil, gas and petrochemical industries —

Part 2:

Additional procedures for pipe penetration and cable transit sealing systems

ICS: 13.220.50

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This document is circulated as received from the committee secretariat.



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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
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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 92, *Fire safety*, Subcommittee SC 2, *Fire containment*.

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.

ISO 20902 consists of the following parts, under the general title *Hydrocarbon fire test procedures for divisional elements that are typically used in oil & gas installations*:

— *Part 1: General requirements*

Introduction

This document describes a test procedure to assess the protection afforded by fire protection materials and systems to divisional elements. It gives an indication of how fire protection materials will perform when exposed to a set of specified fire conditions.

The classification of divisional elements (bulkheads & decks) in the marine industry (i.e. ships as defined by IMO, SOLAS) is primarily undertaken in accordance with classification society procedures through testing to the FTP codes IMO resolution 307(88), formerly IMO A.754(18). Historically FTP code compliant test evidence has been used to support non-marine applications by implementing hydrocarbon time temperature regime profiles. To reduce the burden on industry, this document is compatible with MSC 307(88) where relevant, allowing testing to both IMO and ISO test procedures for specific classification ratings.

Fire test procedures for divisional elements that are typically used in oil, gas and petrochemical industries —

Part 2:

Additional procedures for pipe penetration and cable transit sealing systems

1 Scope

ISO 20902-1 specifies a test methodology for determining the fire resistance of divisional elements with a fire protection system when subjected to cellulosic or hydrocarbon-pool type fire exposure conditions. This subsequent part describes additional test procedure for penetration and cable transit sealing systems intended for non-marine applications but suitable for offshore fixed and mobile installations. The test data thus obtained may permit subsequent classification on the basis of the duration for which the performance of the divisional element under these conditions satisfies specified criteria.

2 Normative references

The following referenced documents are indispensable for the application 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 13943-1, *Fire safety — Vocabulary*

IEC 60598-1:1995, *Thermocouples — Part 1: Reference table*

ISO 834-1:1999, *Fire-resistance tests — Elements of building construction — Part 1: General requirements*

ISO 20902-1:2018, [add title]

3 Terms and definitions

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

3.1

penetration

aperture within a fire separating element usually present to accommodate the passage of a service through that element

3.2

penetration seal

single component or system used to maintain the fire resistance of the fire separating element at the position where services pass through the element

3.3

penetration sealing system

assembly for test consisting of the penetrating service or services and the penetration seal, materials or devices, together with any service support construction, designed to maintain the integrity and insulation performance of the separating element for the duration of the fire test