
**Ships and marine technology — Safety
valve for cargo tanks of LNG carriers
— Design and testing requirements**

*Navires et technologie maritime — Soupape de sûreté pour les
réservoirs de cargaison des méthaniers — Exigences de conception
et d'essai*

Sample Document

get full document from standards.iteh.ai



Sample Document

get full document from standards.iteh.ai



COPYRIGHT PROTECTED DOCUMENT

© ISO 2017, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

	Page
Foreword	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Main valve components	2
4.1 Body	2
4.2 Nozzle	2
4.3 Disk	2
4.4 Cover	2
4.5 Diaphragm	2
5 Design	3
6 Materials	4
7 Production testing and inspection	4
7.1 Purpose	4
7.2 Impact test	4
7.3 Non-destructive inspection	4
7.4 Pressure test	5
7.4.1 General requirement	5
7.4.2 Fluid	5
7.4.3 Duration	5
7.4.4 Test equipment	5
7.5 Surface inspection	5
7.6 Visual inspection	5
8 Performance test	6
8.1 Performance test in ambient temperature	6
8.1.1 Purpose	6
8.1.2 Number of test times	6
8.1.3 Fluid	6
8.1.4 Acceptance criteria	6
8.2 Leakage test in ambient temperature	6
8.2.1 Purpose	6
8.2.2 Fluid	6
8.2.3 Test pressure	6
8.2.4 Duration	6
8.2.5 Acceptance leakage rate	6
8.2.6 Test equipment	7
8.3 Performance test in low temperature	7
8.3.1 Purpose	7
8.3.2 Number of test times	7
8.3.3 Fluid	7
8.3.4 Acceptance criteria	7
8.4 Preparation for the performance test in low temperature	7
8.4.1 Start temperature for the test	7
8.4.2 Safety requirement	7
8.4.3 Test system	7
8.5 Leakage test in low temperature	8
8.5.1 Purpose	8
8.5.2 Fluid	8
8.5.3 Test pressure	8
8.5.4 Duration	8
8.5.5 Acceptance tolerance	9
8.5.6 Test equipment	9

9	Vacuum test	9
9.1	Purpose.....	9
9.2	Vacuum condition.....	9
9.2.1	Test temperature	9
9.2.2	Vacuum set test.....	9
9.2.3	Number of test times.....	9
9.2.4	Fluid.....	9
10	Type test	9
11	Determination of pilot operated safety valve performance	9
12	Sizing of pilot operated safety valves	10
13	Marking and sealing	10
	Bibliography	11

Sample Document

get full document from standards.iteh.ai

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).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on 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: www.iso.org/iso/foreword.html.

This document was prepared by ISO Technical Committee ISO/TC 8, *Ships and marine technology*, Subcommittee SC 3, *Piping and machinery*.

get full document from standards.iteh.ai