
Plastics piping systems — Mechanical joints between fittings and pressure pipes — Test method for leaktightness under internal pressure

Systèmes de canalisations en plastique — Assemblages mécaniques entre raccords et tubes sous pression — Méthode d'essai pour l'étanchéité sous pression interne

Sample Document

get full document from standards.iteh.ai



Sample Document

get full document from standards.iteh.ai



COPYRIGHT PROTECTED DOCUMENT

© ISO 2015

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
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
1 Scope	1
2 Principle	1
3 Test parameters and requirements	1
4 Apparatus	1
5 Test pieces	3
6 Procedure	3
7 Test report	3
Annex A (normative) Test parameters	5

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 WTO principles in the Technical Barriers to Trade (TBT), see the following URL: [Foreword — Supplementary information](#).

The committee responsible for this document is ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*, Subcommittee SC 5, *General properties of pipes, fittings and valves of plastics materials and their accessories — Test methods and basic specifications*.

This second edition cancels and replaces the first edition (ISO 3458:1976), which has been technically revised. The reason for modification is for applicability to other plastics materials, other sizes and/or other test conditions and alignment with texts of other International Standards on test methods. This edition of ISO 3458 is prepared under Vienna Agreement, so that the content is also aligned with the EN 715:1994, which will be replaced.

The modifications are the following:

- no material is mentioned;
- test parameters are omitted, although the original test parameters can be found in [Annex A](#);
- the diameter limit is removed;
- no requirements are given;
- editorial changes have been introduced.

Plastics piping systems — Mechanical joints between fittings and pressure pipes — Test method for leaktightness under internal pressure

WARNING — Users of this International Standard should be familiar with normal laboratory practice, if applicable. The use of this International Standard might involve hazardous materials, operations, and equipment. This International Standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this International Standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

1 Scope

This International Standard specifies the method of test for checking the leak tightness of assembled joints between mechanical fittings and plastic pressure pipes. The test applies regardless of the design and material of the fitting used for jointing plastic pipe.

This test method is not applicable to fusion-welded joints.

2 Principle

The leak tightness of an assembled joint is checked while the joint is subjected to an internal test pressure greater than the nominal pressure for which the pipe is rated with the pieces joined subject to the longitudinal force, induced by the hydrostatic end thrust.

3 Test parameters and requirements

The test parameters of the standard which refers to this test standard shall be used and the requirements shall be fulfilled. If one or more parameters are not given in the referring International Standard, the ones given in [Annex A](#) shall apply.

The following test parameters should be given by the standard which refers to this test standard:

- a) test medium;
- b) test pressure (bar or MPa);
- c) test duration (h);
- d) test temperature (°C);
- e) free length (mm).

4 Apparatus

4.1 A suitable apparatus is shown in [Figure 1](#).

4.2 Pressure source connected to the test specimens, capable of maintaining for at least 1 h a minimum water or air pressure to an accuracy of ± 2 %.

4.3 Pressure measuring device (7), capable of checking performance of the test pressure with [4.2](#).