

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN ISO 5774:2009

<https://standards.iteh.ai/catalog/standards/sist/flc800d6-f52b-4425-983c-8e4bcc8d79ed/sist-en-iso-5774-2009>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 5774

January 2008

ICS 23.040.70

Supersedes EN ISO 5774:2000

English Version

Plastics hoses - Textile-reinforced types for compressed-air applications - Specification (ISO 5774:2006)

Tuyaux en plastique - Types armés de textile pour applications avec de l'air comprimé - Spécifications (ISO 5774:2006)

Kunststoffschläuche - Textilverstärkte Typen für Druckluftanwendungen - Spezifikation (ISO 5774:2006)

This European Standard was approved by CEN on 26 December 2007.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

[SIST EN ISO 5774:2009](https://standards.iteh.ai/catalog/standards/sist/flc800d6-f52b-4425-983c-8e4bcc8d79ed/sist-en-iso-5774-2009)

<https://standards.iteh.ai/catalog/standards/sist/flc800d6-f52b-4425-983c-8e4bcc8d79ed/sist-en-iso-5774-2009>



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

EN ISO 5774:2008 (E)**Foreword**

The text of ISO 5774:2006 has been prepared by Technical Committee ISO/TC 45 "Rubber and rubber products" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 5774:2008 by Technical Committee CEN/TC 218 "Rubber and plastics hoses and hose assemblies", the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by July 2008, and conflicting national standards shall be withdrawn at the latest by July 2008.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 5774:2000.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

<https://standards.iteh.ai/catalog/standards/sist/flc800d6-f52b-4425-983c->

The text of ISO 5774:2006 has been approved by CEN as EN ISO 5774:2008 without any modifications.

INTERNATIONAL
STANDARD

ISO
5774

Third edition
2006-07-01

**Plastics hoses — Textile-reinforced types
for compressed-air applications —
Specification**

*Tuyaux en plastique — Types armés de textile pour applications avec
de l'air comprimé — Spécifications*

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 5774:2009](https://standards.iteh.ai/catalog/standards/sist/flc800d6-f52b-4425-983c-8e4bcc8d79ed/sist-en-iso-5774-2009)

<https://standards.iteh.ai/catalog/standards/sist/flc800d6-f52b-4425-983c-8e4bcc8d79ed/sist-en-iso-5774-2009>



Reference number
ISO 5774:2006(E)

© ISO 2006

ISO 5774:2006(E)**PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 5774:2009](https://standards.iteh.ai/catalog/standards/sist/flc800d6-f52b-4425-983c-8e4bcc8d79ed/sist-en-iso-5774-2009)

<https://standards.iteh.ai/catalog/standards/sist/flc800d6-f52b-4425-983c-8e4bcc8d79ed/sist-en-iso-5774-2009>

© ISO 2006

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing 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
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions.....	2
4 Classification.....	2
5 Couplings and end fittings	2
6 Materials and construction	2
7 Dimensions and tolerances	2
7.1 Inside diameter, tolerances and minimum wall thickness	2
7.2 Concentricity	3
7.3 Tolerances on length.....	3
8 Physical properties.....	4
8.1 Plastic compounds.....	4
8.1.1 Tensile strength and elongation at break of lining and cover	4
8.1.2 Resistance to ageing	4
8.1.3 Loss in mass on heating.....	4
8.1.4 Resistance to liquids	4
8.1.5 Hydrolysis test	4
8.2 Performance requirements on finished hoses	5
8.2.1 Hydrostatic requirements	5
8.2.2 Adhesion.....	5
8.2.3 Exposure to a xenon arc lamp.....	5
8.2.4 Bending test	6
8.2.5 Low-temperature flexibility	6
9 Frequency of testing.....	6
10 Marking	7
11 Recommendations for packaging and storage	7
12 Test report	7
Annex A (normative) Hydrolysis test	8
Annex B (normative) Type approval and routine tests	10
Annex C (informative) Production acceptance tests	11
Annex D (informative) Couplings and end fittings.....	12
Bibliography	13

ISO 5774:2006(E)

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 5774 was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 1, *Hoses (rubber and plastics)*.

This third edition cancels and replaces the second edition (ISO 5774:1997), which has been technically revised.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN ISO 5774:2009

<https://standards.iteh.ai/catalog/standards/sist/flc800d6-f52b-4425-983c-8e4bcc8d79ed/sist-en-iso-5774-2009>

Introduction

This International Standard has been prepared to provide minimum acceptable requirements for the satisfactory performance of flexible thermoplastics hoses, textile reinforced, for compressed-air applications.

Maximum working pressures of each hose type are specified with two operating temperatures.

Some hose materials will require a hydrolysis test (given in Annex A).

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 5774:2009](https://standards.iteh.ai/catalog/standards/sist/flc800d6-f52b-4425-983c-8e4bcc8d79ed/sist-en-iso-5774-2009)

<https://standards.iteh.ai/catalog/standards/sist/flc800d6-f52b-4425-983c-8e4bcc8d79ed/sist-en-iso-5774-2009>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 5774:2009](#)

<https://standards.iteh.ai/catalog/standards/sist/flc800d6-f52b-4425-983c-8e4bcc8d79ed/sist-en-iso-5774-2009>

Plastics hoses — Textile-reinforced types for compressed-air applications — Specification

1 Scope

This International Standard specifies the requirements for four types of flexible thermoplastic hose, textile reinforced, for compressed-air applications in the temperature range from – 10 °C to + 60 °C.

The four types are classified as light service for a maximum working pressure of 7 bar at 23 °C and 4,5 bar at 60 °C, medium service for a maximum working pressure of 10 bar at 23 °C and 6,5 bar at 60 °C, heavy service for a maximum working pressure of 16 bar at 23 °C and 11 bar at 60 °C, and heavy service for use in mining for a maximum working pressure of 25 bar at 23 °C and 13 bar at 60 °C.

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 37, *Rubber, vulcanized or thermoplastic — Determination of tensile stress-strain properties*

ISO 105-A02, *Textiles — Tests for colour fastness — Part A02: Grey scales for assessing change in colour*

ISO 176:2005, *Plastics — Determination of loss of plasticizers — Activated carbon method*

ISO 188, *Rubber, vulcanized or thermoplastic — Accelerated ageing and heat resistance tests*

ISO 1307, *Rubber and plastics hoses — Hose sizes, minimum and maximum inside diameters, and tolerances on cut-to-length hoses*

ISO 1402, *Rubber and plastics hoses and hose assemblies — Hydrostatic testing*

ISO 1746, *Rubber or plastics hoses and tubing — Bending tests*

ISO 1817, *Rubber, vulcanized — Determination of the effect of liquids*

ISO 4671, *Rubber and plastics hoses and hose assemblies — Methods of measurement of dimensions*

ISO 4672:1997, *Rubber and plastics hoses — Sub-ambient temperature flexibility tests*

ISO 8033, *Rubber and plastics hoses — Determination of adhesion between components*

ISO 8330, *Rubber and plastics hoses and hose assemblies — Vocabulary*

ISO 8331, *Rubber and plastics hoses and hose assemblies — Guide to selection, storage, use and maintenance*

ISO 11758:1995, *Rubber and plastics hoses — Exposure to a xenon arc lamp — Determination of changes in colour and appearance*