ICS 71.120.99, 83.140.40 SLOVENSKÁ TECHNICKÁ NORMA August 2024

STN	**Gumové hadice a hadice s koncovkami na dopravu bezvodého amoniaku Špecifikácia (ISO 5771: 2024)**	**STN EN ISO 5771** 63 5413

Rubber hoses and hose assemblies for transferring anhydrous ammonia - Specification (ISO 5771:2024)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 07/24

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Oznámením tejto normy sa ruší
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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 5771

April 2024

ICS 71.120.99; 83.140.40 Supersedes EN ISO 5771:2008

English Version

Rubber hoses and hose assemblies for transferring anhydrous ammonia - Specification (ISO 5771:2024)

Tuyaux et flexibles en caoutchouc pour le transfert d'ammoniac anhydre - Spécifications (ISO 5771:2024)

Gummischläuche und -schlauchleitungen für den Transport von wasserfreiem Ammoniak - Anforderungen (ISO 5771:2024)

This European Standard was approved by CEN on 19 April 2024.

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

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European foreword

This document (EN ISO 5771:2024) has been prepared by Technical Committee ISO/TC 45 "Rubber and rubber products" in collaboration with 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of an identical text or by endorsement, at the latest by October 2024, and conflicting national standards shall be withdrawn at the latest by October 2024.

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

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Endorsement notice

The text of ISO 5771:2024 has been approved by CEN as EN ISO 5771:2024 without any modification.

International Standard

ISO 5771

Rubber hoses and hose assemblies for transferring anhydrous ammonia — Specification

Tuyaux et flexibles en caoutchouc pour le transfert d'ammoniac anhydre — Spécifications

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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 document 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 45, *Rubber and rubber products*, Subcommittee SC 1, *Rubber and plastics hoses and hose assemblies,* in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 218, *Rubber and plastic hoses and hose assemblies,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This fourth edition cancels and replaces the third edition (ISO 5771:2008), which has been technically revised.

The main changes are as follows:

— the scope has been updated to include the working pressure of the hose;

— the normative references in Clause 2 have been updated: ISO 188 has been changed to the latest edition and reference to ISO 10619-2 has been added;

— the expression of pressure units throughout the document (MPa, bar) has been updated;

— the type, frequency and routine testing clause has been modified in accordance with the current layout (see Clause 9);

— the marking clause has been updated (see Clause 10);

— proof pressure and change of length tests as routine tests on finished hose have been changed (see Annex A);

— Annexes A and B have been combined into one Annex A.

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.

International Standard **ISO 5771:2024(en)**

Rubber hoses and hose assemblies for transferring anhydrous ammonia — Specification

WARNING — Persons using this document should be familiar with normal laboratory practice. This document does not purport to address all the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate health and safety practices and to determine any applicable national regulatory conditions.

CAUTION — All personnel working with anhydrous ammonia and its delivery systems should be familiar with and utilize the necessary safety precautions to minimize the potential for personal injury and property damage. Do not use anhydrous-ammonia hose assemblies at temperatures or pressures above those recommended by the hose manufacturer. Never recouple an anhydrous-ammonia hose. Hoses manufactured to this specification are suitable for use with anhydrous ammonia only.

1 Scope

This document specifies the minimum requirements for rubber hoses used for transferring ammonia, in liquid or in gaseous form, at ambient temperatures from −40 °C up to and including +55 °C at a working pressure of 2,5 MPa (25 bar). It does not include specifications for end fittings and is limited to the performance of the hoses and hose assemblies.

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

ISO 188:2023, *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 4671, *Rubber and plastics hoses and hose assemblies — Methods of measurement of the dimensions of hoses and the lengths of hose assemblies*

ISO 7326:2016, *Rubber and plastics hoses — Assessment of ozone resistance under static conditions*

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

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

ISO 10619-2, *Rubber and plastics hoses and tubing — Measurement of flexibility and stiffness — Part 2: Bending tests at sub-ambient temperatures*