



SLOVENSKI STANDARD
oSIST prEN ISO 8330:2021
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Gumene in polimerne cevi ter cevni priključki - Slovar (ISO/DIS 8330:2021)

Rubber and plastics hoses and hose assemblies - Vocabulary (ISO/DIS 8330:2021)

Gummi- und Kunststoffschläuche und -schlauchleitungen - Vokabular (ISO/DIS 8330:2021)

Tuyaux et flexibles en caoutchouc et en plastique - Vocabulaire (ISO/DIS 8330:2021)

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Rubber and plastics hoses and hose assemblies — Vocabulary

Tuyaux et flexibles en caoutchouc et en plastique — Vocabulaire

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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).

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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*.

This fourth edition cancels and replaces the third edition (ISO 8330:2014), which has been technically revised.

The main changes compared to the previous edition are as follows:

— the structure of the document is now divided into sections as follows:

General;

Hose types;

Hose types based on shape and properties;

Hose types based on production method;

Hose parts and components other than the reinforcement and end;

Hose reinforcement parts and components;

Hose end types;

Hose assembly terms;

General hose assembly terms;

Methods of assembling;

Sizes and geometrical properties of hoses and hose assemblies;

Sizes;

Mechanical properties;

Electrical aspects;

Hose production methods and tools;

Hose tests and operation conditions;

Hose and hose assembly deformations and defects;

- the numbering and order of the terms has been revised;
- alphabetical index has been added;
- the following terms have been added:
 - barb;
 - burst;
 - cure (with vulcanization);
 - helix wire;
 - identification yarn;
 - OS&D hose;
 - rigid mandrel;
 - semi-rigid hose;
 - socket and shell (to ferrule);
 - spiralled cord;
 - tracer yarn;
- the following terms have been removed:
 - body wire;
 - brand;
 - collapsible hose;
 - design pressure;
 - dogleg;
 - helical cord;
 - helix wire or spiral;
 - lay;
 - mandrel-made hose;
 - nominal bore;
 - OSD hose;
 - permeation (from hose terms);
 - protected hose;

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- quick-acting connection;
- quick-release connection;
- rated system pressure;
- tolerance;
- warp;
- weft;
- coupling adapter;
- shell clamp and split clamp;
- the following terms have been amended:
 - carcass;
 - compound;
 - embedded helix;
 - end reinforcement;
 - female;
 - flexural stiffness;
 - helix;
 - hose deformation;
 - hybrid hose;
 - hydraulic hose;
 - hydrostatic stability test;
 - knitted hose;
 - male;
 - mandrel-built hose;
 - marker yarn;
 - marking;
 - moulded hose;
 - plain end;
 - quick connection;
 - reusable hose fitting;
 - sleeve;
 - straight end;
 - twin hose;
 - vacuum test;

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- vulcanization;
- wire.

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.

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Rubber and plastics hoses and hose assemblies — Vocabulary

1 Scope

This document defines terms used in the hose industry.

Recommended terminology for electrical conductivity and resistance of rubber and plastics hoses and hose assemblies can be found in ISO 8031:2020, Annex A.

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 8031, *Rubber and plastics hoses and hose assemblies — Determination of electrical resistance and conductivity*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1 General

3.1.1

hose

flexible tube consisting of a *lining* (3.3.2), *reinforcement* (3.4.1) and, usually, a *cover* (3.3.6)

3.1.2

hose assembly

length of *hose* (3.1.1) with a *hose fitting* (3.6.4.1) attached to one or both ends

3.1.3

hydraulic hose

hose (3.1.1) with a *braid* (3.4.10) or spiral *reinforcement* (3.4.1) designed for systems which transfer power via fluid under pressure

3.1.4

tubing

flexible polymeric tube without *reinforcement* (3.4.1)

3.1.5

operating conditions

pressure, temperature, motion and environment to which a hose (assembly) may be subjected

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3.1.6

compound

intimate mixture of a rubber or rubbers or other polymer-forming materials with all the ingredients necessary that are combined to give the desired properties when used in the manufacture of a hose

Note 1 to entry: The term rubber is sometimes used to mean compound, but this use is deprecated.

[SOURCE: ISO 1382:2012, 2.96, modified — “for the finished product” is replaced by “that are combined to give the desired properties when used in the manufacture of a hose”]

3.2 Hose types

3.2.1 Hose types based on shape and properties

3.2.1.1

hardwall hose

hose (3.1.1) with a built-in wall *reinforcement* (3.4.1) or with a solid elastomer wall of sufficient thickness to prevent the hose to flatten during *bending* (3.7.2.1) or coiling when empty

3.2.1.2

softwall hose

hose (3.1.1) without a supporting helix of rigid or semi-rigid material

3.2.1.3

rough bore hose

hose (3.1.1) in which a reinforcing *helical wire* (3.4.2.5), or its shape, is exposed in the *bore* (3.3.1)

3.2.1.4

smooth-bore hose

hose (3.1.1) in which no reinforcing wire ~~helix or its shape is~~ exposed on the inner surface of the *lining* (3.3.2)

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3.2.1.5

oil suction and discharge hose

OS&D hose

hose used for oil suction and discharge in many types of operation

3.2.1.6

layflat hose

collapsible hose

softwall hose (3.2.1.2) which, when unpressurized internally, collapses to such an extent that the inner faces of the *bore* (3.3.1) make contact and the hose cross-section appears flat

3.2.1.7

convoluted hose

hose (3.1.1) fluted helically (externally and/or internally)

3.2.1.8

externally convoluted hose

hose (3.1.1) containing a reinforcing *helix* (3.4.2) in which the outer cover has been formed into corrugations between the turns of the helix

Note 1 to entry: Such hoses may be *rough bore* (3.2.1.3), semi-embedded bore or *smooth bore* (3.2.1.4).

3.2.1.9

corrugated hose

hose (3.1.1) with a *cover* (3.3.6) fluted circumferentially with bellows-like corrugations (externally and/or internally)

Note 1 to entry: Hoses are in production today with internal circumferential corrugations.