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## Rubber and plastics hoses and hose assemblies — Vocabulary

*Tuyaux et flexibles en caoutchouc et en plastiques — Vocabulaire*



Reference number  
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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](http://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](http://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 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](http://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 plastics 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 8330:2014), which has been technically revised.

The main changes are as follows:

- the structure of the document is now divided into subclauses as follows:
  - General [3.1](#);
  - Hose types [3.2](#);
  - Hose parts and components other than the reinforcement and end [3.3](#);
  - Hose reinforcement parts and components [3.4](#);
  - Hose end types [3.5](#);
  - Hose assembly terms [3.6](#);
  - Sizes and geometrical properties of hoses and hose assemblies [3.7](#);
  - Mechanical properties [3.8](#);
  - Hose production methods and tools [3.10](#);
  - Hose tests and operation conditions [3.11](#);

- Hose and hose assembly deformations and defects [3.12](#);
- 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;
  - socketshell (to ferrule);
  - spiralled wire cord;
  - tracer yarn;
- the following terms have been removed:
  - body wire;
  - brand;
  - design pressure;
  - dogleg;
  - helical cord;
  - lay;
  - mandrel-made hose;
  - nominal bore;
  - OSD hose;
  - protected hose;
  - quick-acting connection;
  - rated system pressure;
  - tolerance;
  - warp;
  - weft;
  - coupling adapter;

- shell clamp and split clamp;
- the definitions to 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;
  - 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](http://www.iso.org/members.html).

# 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

There are no normative references in this document.

## 3 Terms and definitions

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

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

*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 (including the conveyed fluid) to which a hose (assembly) may be subjected

#### 3.1.6

##### **compound**

DEPRECATED: rubber

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

[SOURCE: ISO 1382:2020, 3.105, modified — “for the finished product” is replaced by “that are combined to give the desired properties when used in the manufacture of a hose”.]