BS EN ISO 8330:2022

BSI Standards Publication

Rubber and plastics hoses and hose assemblies — Vocabulary

Documents
Document Sharing Hub

National foreword

This British Standard is the UK implementation of EN ISO 8330:2022. It is identical to ISO 8330:2022. It supersedes BS EN ISO 8330:2014, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PRI/66, Rubber and plastics tubing, hoses and hose assemblies.

A list of organizations represented on this committee can be obtained on request to its committee manager.

Contractual and legal considerations

This publication has been prepared in good faith, however no representation, warranty, assurance or undertaking (express or implied) is or will be made, and no responsibility or liability is or will be accepted by BSI in relation to the adequacy, accuracy, completeness or reasonableness of this publication. All and any such responsibility and liability is expressly disclaimed to the full extent permitted by the law.

This publication is provided as is, and is to be used at the recipient's own risk.

The recipient is advised to consider seeking professional guidance with respect to its use of this publication.

This publication is not intended to constitute a contract. Users are responsible for its correct application.

© The British Standards Institution 2022
Published by BSI Standards Limited 2022

ISBN 978 0 539 12777 5

ICS 01.040.23; 23.040.70

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 May 2022.

Amendments/corrigenda issued since publication

Date	Text affected

Documents
Document Sharing Hub

Full document details: BS EN ISO 8330:2022

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 8330

April 2022

ICS 01.040.23; 23.040.70

Supersedes EN ISO 8330:2014

English Version

Rubber and plastics hoses and hose assemblies - Vocabulary (ISO 8330:2022)

Tuyaux et flexibles en caoutchouc et en plastiques - Vocabulaire (ISO 8330:2022)

Gummi- und Kunststoffschläuche und -schlauchleitungen - Vokabular (ISO 8330:2022)

This European Standard was approved by CEN on 24 March 2022.

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-CENELEC 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-CENELEC Management Centre has the same status as the official versions.

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

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

© 2022 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN ISO 8330:2022 E

Documents
Document Sharing Hub

Full document details: BS EN ISO 8330:2022

Contents

Page

European foreword **3**

Documents
Document Sharing Hub

Full document details: BS EN ISO 8330:2022

European foreword

This document (EN ISO 8330:2022) 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 2022, and conflicting national standards shall be withdrawn at the latest by October 2022.

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.

This document supersedes EN ISO 8330:2014.

Any feedback and questions on this document should be directed to the users’ national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 8330:2022 has been approved by CEN as EN ISO 8330:2022 without any modification.

Documents
Document Sharing Hub
Full document details: BS EN ISO 8330:2022

This page deliberately left blank

Documents
Document Sharing Hub

INTERNATIONAL STANDARD

ISO 8330

Fourth edition
2022-03

Rubber and plastics hoses and hose assemblies — Vocabulary

Tuyaux et flexibles en caoutchouc et en plastiques — Vocabulaire

Reference number
ISO 8330:2022(E)

Documents
Document Sharing Hub

© ISO 2022

Full document details: BS EN ISO 8330:2022

COPYRIGHT PROTECTED DOCUMENT

© ISO 2022

All rights reserved. Unless otherwise specified, or required in the context of its implementation, 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
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

© ISO 2022 – All rights reserved

Documents
Document Sharing Hub

Full document details: BS EN ISO 8330:2022

Contents

Page

Foreword ..... **iv**

1 Scope **1**

2 Normative references **1**

3 Terms and definitions **1**

3.1 General 1
3.2 Hose types 2
3.2.1 Hose types based on shape and properties 2
3.2.2 Hose types based on reinforcement and other components 3
3.2.3 Hose types based on production method 3
3.2.4 Hose types based on material 4
3.3 Hose parts and components other than the reinforcement and end 4
3.4 Hose reinforcement parts and components 5
3.5 Hose end types 7
3.6 Hose assembly terms 8
3.6.1 General hose assembly terms 8
3.6.2 Connections 9
3.6.3 Types of fittings 9
3.6.4 Parts of hose fittings, couplings and other components 10
3.6.5 Methods of assembling 11
3.7 Sizes and geometrical properties of hoses and hose assemblies 12
3.7.1 Sizes 12
3.7.2 Bending dimensions 12
3.7.3 Reinforcement angles and spacing 13
3.8 Mechanical properties 13
3.9 Electrical aspects 16
3.10 Hose production methods and tools 17
3.11 Hose tests and operation conditions 18
3.12 Hose and hose assembly deformations and defects 19

Bibliography **21**

Index **22**

© ISO 2022 – All rights reserved

Documents
Document Sharing Hub

Full document details: BS EN ISO 8330:2022

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 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 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;

© ISO 2022 – All rights reserved
Documents
Document Sharing Hub
Full document details: BS EN ISO 8330:2022

  - 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;

© ISO 2022 – All rights reserved

Documents
Document Sharing Hub
Full document details: BS EN ISO 8330:2022

  - 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.

© ISO 2022 – All rights reserved
Documents
Document Sharing Hub
Full document details: BS EN ISO 8330:2022