



BSI Standards Publication

Plastics piping systems for hot and cold water installations — Polypropylene (PP)

Part 1: General

National foreword

This British Standard is the UK implementation of EN ISO 15874-1:2013+A1:2022. It is identical to ISO 15874-1:2013, incorporating amendment 1:2022. It supersedes BS EN ISO 15874-1:2013 and BS 4991:1974, which are withdrawn.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to ISO text carry the number of the ISO amendment. For example, text altered by ISO amendment 1 is indicated by A1 A1.

The UK participation in its preparation was entrusted to Technical Committee PRI/88/2, Plastics piping for pressure applications.

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

As the scope of this standard does not cover polypropylene (PP) piping systems for installations having service conditions in excess of those in Table 1 of BS EN ISO 15874-1:2013+A1:2022, the UK committee advises users to consult BS 7291-1:2010+A1:2023 when applying this standard.

BS 7291-1:2010+A1:2023 gives the Class “S” service conditions for sealed central heating systems and indirect hot water primary circuits in which the maximum system service temperature is 105 °C and the system malfunction temperature is 114 °C. As both of these temperatures are significantly in excess of those specified in Table 1 of BS EN ISO 15874-1:2013+A1:2022, and sealed central heating systems and indirect hot water primary circuits are therefore not covered by it, the UK committee advises that PP piping systems conforming to the requirements of this standard should also be subjected to the temperatures given in Table 1 of BS 7291-1:2010+A1:2023.

The UK committee also advises users that:

- a) The normal maximum operating cold water supply pressure in the UK is 12.5 bar (1 bar = 100 kPa), which some categories of piping systems in the BS EN ISO 15874 series of standards do not meet.
- b) There is a disparity between the malfunction temperature quoted in Table 1 of BS EN ISO 15874-1:2013+A1:2022 (100 °C) and the malfunction temperatures applicable to boilers conforming to the requirements of BS EN 15502-1:2021+A1:2023, BS EN 15502-2-1:2022+A1:2023 and BS EN 15502-2-2:2014 (110 °C). Consequently, piping systems used with these gas-fired central heating boilers could be subjected to temperatures in service for which they have not been tested.
- c) Piping systems conforming to the requirements of the BS EN ISO 15874 series of standards are designed for hot and cold water installations and are not suitable for waste discharge from unvented hot water systems (i.e. downstream pipe D2).
- d) Continuously operated recirculating domestic hot water systems (known as recirculating, secondary hot circulation, return or ring main systems) carry pumped hot potable water to outlets where the temperature is between 60 °C and 70 °C, and is replenished by an incoming water supply to replace the water drawn to outlets. Piping systems conforming to the requirements of the BS EN ISO 15874 series of standards are not suitable for this use.

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 2024
Published by BSI Standards Limited 2024

ISBN 978 0 539 29789 8

ICS 23.040.01; 23.040.20; 91.140.60

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 March 2013.

Amendments/corrigenda issued since publication

Date	Text affected
31 August 2022	Implementation of ISO amendment 1:2022 with CEN endorsement A1:2022
31 August 2022	Correction to supersession details in national foreword
30 April 2024	Correction to national foreword. Corrections to amendment tags in Contents and in Clause 5

English Version

Plastics piping systems for hot and cold water installations -
Polypropylene (PP) - Part 1: General (ISO 15874-1:2013)

Systèmes de canalisations en plastique pour les
installations d'eau chaude et froide - Polypropylène (PP) -
Partie 1: Généralités (ISO 15874-1:2013)

Kunststoff-Rohrleitungssysteme für die Warm- und
Kaltwasserinstallation - Polypropylen (PP) - Teil 1:
Allgemeines (ISO 15874-1:2013)

This European Standard was approved by CEN on 5 January 2013.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

European foreword

This document (EN ISO 15874-1:2013) has been prepared by Technical Committee CEN/TC 155 “Plastics piping systems and ducting systems” the secretariat of which is held by NEN, in collaboration with Technical Committee ISO/TC 138 “Plastics pipes, fittings and valves for the transport of fluids”.

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 August 2013, and conflicting national standards shall be withdrawn at the latest by August 2013.

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 15874-1:2003.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

European foreword to amendment A1

This document (EN ISO 15874-1:2013/A1:2022) has been prepared by Technical Committee ISO/TC 138 “Plastics pipes, fittings and valves for the transport of fluids” in collaboration with Technical Committee CEN/TC 155 “Plastics piping systems and ducting systems” the secretariat of which is held by NEN.

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 December 2022, and conflicting national standards shall be withdrawn at the latest by December 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.

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 15874-1:2013/Amd 1:2022 has been approved by CEN as EN ISO 15874-1:2013/A1:2022 without any modification.