



BSI Standards Publication

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

Part 5: Fitness for purpose of the system

National foreword

This British Standard is the UK implementation of [EN ISO 15874-5:2013+A1:2018](#). It is identical to ISO 15874-5:2013, incorporating amendment 1:2018. It supersedes BS EN ISO 15874-5:2013, which is withdrawn.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.

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Amendments/corrigenda issued since publication

Date	Text affected
31 August 2014	Implementation of ISO corrected text 15 January 2014: Footnote added to Table 11
31 August 2018	Implementation of ISO amendment 1 with CEN endorsement A1:2018
30 April 2024	Correction to national foreword

English Version

Plastics piping systems for hot and cold water installations -
Polypropylene (PP) - Part 5: Fitness for purpose of the system
(ISO 15874-5:2013)

Systèmes de canalisations en plastique pour les
installations d'eau chaude et froide - Polypropylène (PP) -
Partie 5: Aptitude à l'emploi du système (ISO 15874-
5:2013)

Kunststoff-Rohrleitungssysteme für die Warm- und
Kaltwasserinstallation - Polypropylen (PP) - Teil 5:
Gebrauchstauglichkeit des Systems (ISO 15874-5:2013)

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

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Foreword

This document (EN ISO 15874-5:2013) 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 15874-5:2003.

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 15874-5:2013/A1:2018) 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 Amendment to the European Standard EN ISO 15874-5:2013 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2019, and conflicting national standards shall be withdrawn at the latest by February 2019.

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Endorsement notice

The text of ISO 15874-5:2013/Amd 1:2018 has been approved by CEN as EN ISO 15874-5:2013/A1:2018 without any modification.

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