



BSI Standards Publication

Fixed firefighting systems — Water mist systems

Part 8: Test protocol for machinery in enclosures
exceeding 260 m³ for open nozzle systems

National foreword

This British Standard is the UK implementation of EN 14972-8:2020.

The UK participation in its preparation was entrusted to Technical Committee FSH/18/5, Watermist systems.

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

BSI, as a member of CEN, is obliged to publish the EN 14972 series as British Standards. However, attention is drawn to the fact that during the development of this European Standard, the UK committee voted against its approval.

At the time of publication, the design and installation standard EN 14972-1 remains unpublished, so the UK committee highlights the position that installations to that standard cannot yet be achieved.

The UK committee is of the opinion that these standards may lead to avoidably poorer outcomes in the event of fire (e.g. avoidable losses of property, injury and deaths).

Whilst properly designed, installed and maintained water mist system can be highly effective in specific applications, experience has shown that poorly implemented water mist systems have given rise to injury, fatalities and disproportionate damage to property. At this time documentary evidence is confidential due to ongoing litigation and other confidentiality considerations. However, UK experts remain available to share their experience in these regards in generic terms.

It is the opinion of the UK Committee that, in the haste to publish the documents in the EN 14972 series, many of the fundamental and technical comments and concerns submitted by the UK to the CEN organisation have not been fully evaluated and given due consideration.

As an example, the UK Committee draws users' attention to fundamental issues within prEN 14972-1 Table 1, which have not been adequately linked to the fire test protocols of the EN 14972 series. This is a significant omission as the limits of application of the fire tests and other constraints are therefore unclear.

Intended scope and clear limits of application are fundamental to the safe implementation of these standards. These were originally planned as an annex but the UK understands they have now been set aside by CEN, as a proposed future document of uncertain status. The UK Committee believes that these need to be a core part of the EN 14972 series and in the absence of this, National Annex Part 1 contains the UK requirements.

Clear exchange of data and information is essential to all those involved in assessing the suitability and performance of a water mist system. Whilst this information is normally recorded in the fire test reports and manufacturer's design, installation, operation and maintenance manual (DIOM), experience has shown that it is often difficult for stakeholders to access all of the necessary information. In order to facilitate this essential exchange of information, templates have been created in the Manufacturer's Declarations of Conformity (MDOCs), contained in National Annex Part 2.

UK experience has shown the importance of using critical system components that have been subjected to independent component testing

and assessment to demonstrate that they are suitable for use in water mist applications and are more likely to be reliable during their service life. Detailed information about this should be recorded in the MDOC contained in National Annex Part 2.

UK experience, at this time has shown that water mist systems are generally proprietary to each manufacturer and as such there is usually limited or no interoperability. This may give rise to through-life system reliability, maintainability and maintenance strategy concerns.

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Amendments/corrigenda issued since publication

Date	Text affected
31 July 2022	Correction to national foreword

English Version

**Fixed firefighting systems - Water mist systems - Part 8-
Test protocol for machinery in enclosures exceeding 260
m³ for open nozzle systems**

Installations fixes de lutte contre l'incendie - Systèmes
à brouillard d'eau - Partie 8 : Protocole d'essai des
systèmes à buses ouvertes pour machines situées dans
des enceintes de plus de 260 m³

Ortsfeste Brandbekämpfungsanlagen - Feinsprüh-
Löschanlagen - Teil 8: Prüfprotokoll für Maschinen in
Gehäusen über 260 m³ für offene Düsensysteme

This European Standard was approved by CEN on 11 November 2019.

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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.

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European foreword

This document (EN 14972-8:2020) has been prepared by Technical Committee CEN/TC 191 “Fixed firefighting systems”, 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 July 2020 and conflicting national standards shall be withdrawn at the latest by July 2020.

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.

EN 14972, *Fixed firefighting systems — Water mist systems* consists of the following parts:

- *Part 1: Design, installation, inspection and maintenance;*
- *Part 2: Test protocol for shopping areas for automatic nozzle systems;*
- *Part 3: Test protocol for office, school and hotel for automatic nozzle systems;*
- *Part 4: Test protocol for non-storage occupancies for automatic nozzle systems;*
- *Part 5: Test protocol for car garages for automatic nozzle systems;*
- *Part 6: Test protocol for false floors and false ceilings for automatic nozzle systems;*
- *Part 7: Test protocol for commercial low hazard occupancies for automatic nozzle systems;*
- *Part 8: Test protocol for machinery in enclosures exceeding 260 m³ for open nozzle systems;*
- *Part 9: Test protocol for machinery in enclosures not exceeding 260 m³ for open nozzle systems;*
- *Part 10: Test protocol for atrium protection with sidewall nozzles for open nozzle systems;*
- *Part 11: Test protocol for cable tunnels for open nozzle systems;*
- *Part 12: Test protocol for commercial deep fat cooking fryers for open nozzle systems;*
- *Part 13: Test protocol for wet benches and other similar processing equipment for open nozzle systems;*
- *Part 14: Test protocol for combustion turbines in enclosures exceeding 260 m³ for open nozzle systems;*
- *Part 15: Test protocol for combustion turbines in enclosures not exceeding 260 m³ for open nozzle systems;*
- *Part 16: Test protocol for industrial oil cookers for open nozzle systems;*
- *Part 17: Test protocol for residential occupancies for automatic nozzle systems.*

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