

<b>STN</b>	<b>Stabilné hasiace zariadenia Systémy na vodnú hmlu Časť 14: Protokol o skúške systémov s otvorenými dýzami pre spaľovacie turbíny s krytom s objemom nad 260 m<sup>3</sup></b>	<b>STN EN 14972-14</b>  92 0440
------------	--	---

Fixed firefighting systems - Water mist systems - Part 14: Test protocol for combustion turbines in enclosures exceeding 260 m for open nozzle systems

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/21

Obsahuje: EN 14972-14:2021

**133871**

EUROPEAN STANDARD

**EN 14972-14**

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2021

ICS 13.220.20

English Version

## Fixed firefighting systems - Water mist systems - Part 14: Test protocol for combustion turbines in enclosures exceeding 260 m<sup>3</sup> for open nozzle systems

Installations fixes de lutte contre l'incendie - Systèmes à brouillard d'eau - Partie 14 : Protocole d'essai des systèmes à buses ouvertes pour turbines à combustion situées dans des enceintes de plus de 260 m<sup>3</sup>

Ortsfeste Brandbekämpfungsanlagen - Wassernebelsysteme - Teil 14: Prüfprotokoll für Verbrennungsturbinen in Gehäusen über 260 m<sup>3</sup> für offene Düsensysteme

This European Standard was approved by CEN on 2 August 2021.

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**

**EN 14972-14:2021 (E)**

<b>Contents</b>	<b>Page</b>
European foreword.....	3
<b>1 Scope</b> .....	<b>5</b>
<b>2 Normative references</b> .....	<b>5</b>
<b>3 Terms and definitions</b> .....	<b>5</b>
<b>4 General requirements</b> .....	<b>5</b>
<b>5 Test enclosure requirements</b> .....	<b>6</b>
<b>6 Combustion turbine mock-up requirements</b> .....	<b>8</b>
6.1 Combustion turbine mock-up unit.....	8
6.2 Combustion turbine spray cooling mock-up unit.....	11
<b>7 Test equipment requirements</b> .....	<b>13</b>
<b>8 Instrumentation requirements</b> .....	<b>14</b>
<b>9 Fire test requirements</b> .....	<b>16</b>
9.1 General.....	16
9.2 Low pressure, exposed, diesel spray fire.....	16
9.3 Low pressure, angled, diesel spray fire.....	16
9.4 Low pressure, concealed, diesel spray fire.....	17
9.5 High pressure, exposed, diesel spray fire.....	17
9.6 Low pressure-low flow, concealed, diesel spray and pool fires.....	18
9.7 Concealed, heptane pool fire.....	18
9.8 Flowing fire.....	19
9.9 Wood crib and heptane pool fire.....	19
9.10 Spray cooling (optional test).....	20
9.11 Saturated insulation mat and spray fire (optional test).....	20
9.12 Saturated insulation mat fire (optional test).....	21
<b>10 Test report</b> .....	<b>21</b>

## European foreword

This document (EN 14972-14:2021) 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 March 2022, and conflicting national standards shall be withdrawn at the latest by March 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.

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 class rooms 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 m<sup>3</sup> for open nozzle systems;*
- Part 9: *Test protocol for machinery in enclosures not exceeding 260 m<sup>3</sup> 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 m<sup>3</sup> for open nozzle systems;*
- Part 15: *Test protocol for combustion turbines in enclosures not exceeding 260 m<sup>3</sup> 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.*

**EN 14972-14:2021 (E)**

NOTE This list includes standards that are in preparation and other standards may be added. For current status of published standards refer to [www.cen.eu](http://www.cen.eu).

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

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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.

## **1 Scope**

This document specifies the evaluation of the fire performance for water mist systems used for fire protection of combustion turbines in enclosures with volumes exceeding 260 m<sup>3</sup>.

## **2 Normative references**

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 14972-1:2020, *Fixed firefighting systems — Water mist systems — Part 1: Design, installation, inspection and maintenance*

EN 10025-2, *Hot rolled products of structural steels — Part 2: Technical delivery conditions for non-alloy structural steels*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**