SLOVENSKI STANDARD
SIST EN 671-3:2001

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Vgrajeni gasilni sistemi - Cevni sistemi - 3. del: Vzdrževanje cevnih kolutov s poltogo in plosko cevjo

Fixed firefighting systems - Hose systems - Part 3: Maintenance of hose reels with semi-rigid hose and hose systems with lay-flat hose

Ortsfeste Löschanlagen - Wandhydranten - Teil 3: Instandhaltung von Schlauchhaspeln mit formstabilem Schlauch und Wandhydranten mit Flachschlauch

Installations fixes de lutte contre l'incendie - Systèmes équipés de tuyaux - Partie 3: Maintenance des robinets d'incendie armés équipés de tuyaux semi-rigides et des postes d'eau muraux équipés de tuyaux plats

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13.220.10	Gašenje požara	Fire-fighting
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EUROPEAN STANDARD

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Fixed firefighting systems — Hose systems — Part 3: Maintenance of hose reels with semi-rigid hose and hose systems with lay-flat hose

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Ortsfeste Löschanlagen — Wandhydranten — Teil 3: Instandhaltung von Schlauchhaspeln mit formstabilem Schlauch und Wandhydranten mit Flachschlauch

This European Standard was approved by CEN on 17 December 1999.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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Foreword

This European Standard 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 August 2000, and conflicting national standards shall be withdrawn at the latest by August 2000.

EN 671 has the general title *Fixed firefighting systems — Hose systems*, and is in three parts:

Part 1: *Hose reels with semi-rigid hose*;

Part 2: *Hose systems with lay-flat hose*;

Part 3: *Maintenance of hose reels with semi-rigid hose and hose systems with lay-flat hose.*

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

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Introduction

Hose reels and hose systems in proper condition provide a very effective firefighting facility with a continuous supply of water available immediately. They are especially valuable in an early stage of fire and can be operated efficiently by an untrained person. Hose reels and hose systems will have a long service life but it should be realized that their usefulness depends on maintenance to ensure instant readiness when required.

1 Scope

This European Standard gives recommendations for inspection and maintenance of hose reels and hose systems such that they continue to provide the service for which they were manufactured, supplied or installed, i.e. to ensure a first emergency intervention to fight a fire before more powerful means can be implemented.

This standard is applicable to hose reel and hose system installations in all types of buildings irrespective of the nature of use of the buildings.

2 Normative references

This European Standard incorporates by dated or undated references, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 671-1, *Fixed firefighting systems — Hose systems — Part 1: Hose reels with semi-rigid hose.*

EN 671-2, *Fixed firefighting systems — Hose systems — Part 2: Hose systems with lay-flat hose.*

3 Terms and definitions

For the purposes of this standard the following terms and definitions apply.

3.1

automatic fire hose reel

automatic hose reel

firefighting appliance consisting of a reel with water supplied through the centre, automatic inlet stop valve adjacent to the reel, semi-rigid hose, shut-off nozzle and, where required, a hose guide [EN 671-1]

3.2

automatic stop valve

on/off valve operating automatically

3.3

competent person

person with the necessary training and experience with access to the relevant tools, equipment and information, manuals and knowledge of any special procedures recommended by the manufacturer, to be capable of carrying out the relevant maintenance procedures of this standard

3.4

coupling

device used to connect the hose to the valve and to the shut-off nozzle [EN 671-2]

3.5

fire hose system

hose system

firefighting appliance consisting essentially of cabinet or cover, hose support, manual stop valve, lay-flat hose with couplings, shut-off nozzle [EN 671-2]

3.6

hose support

device used to hold the hose [EN 671-2]

3.7

lay-flat hose

hose which is flat-sectioned except when it is internally pressurized [EN 671-2]

3.8

maintenance

combination of all technical and administrative actions including supervision actions, intended to retain an item, or restore it to a state in which it can perform a required function

3.9

manual fire hose reel

manual hose reel

firefighting appliance consisting of a reel with water supplied through the centre, manual inlet stop valve adjacent to the reel, semi-rigid hose, shut-off nozzle and, where required, a hose guide [EN 671-1]

3.10

manual stop valve

isolating manually operated valve installed adjacent to the hose reel or hose system

3.11

responsible person

person(s) responsible for or having effective control over fire safety provisions adopted in or appropriate to the premises or the building

NOTE Due to national regulations the responsible person could either be the user or the owner of the premises.

3.12

semi-rigid hose

hose which maintains its round cross-section even when not pressurized

3.13

shut-off nozzle

component at the end of the hose used to direct and control the discharge of water [EN 671-1]

3.14

supplier

party responsible for the product, process or service and able to ensure that the quality assurance is exercised. The definition may apply to manufacturers, distributers, importers, assemblers, and service organizations

3.15

swinging fire hose reel

swinging hose reel

hose reel capable of rotating in more than one plane and mounted on one of the following:

— swinging arm; or

— swinging pipe; or

— swinging door [EN 671-1]

4 Routine checks by the responsible person

Regular checks of all hose reels and hose systems should be carried out by the responsible person or his representative at intervals depending on environmental circumstances and/or fire risk/hazard, to make sure that each hose reel or hose system:

— is located in the designated place;

— is unobstructed, visible and has legible operating instructions;

— is not obviously defective, corroded or leaking.

The responsible person should arrange for immediate corrective action, where necessary.

5 Records of hose reels and hose systems

In order to check conformity with the manufacturer's instructions of the hose reel or hose system installation, the responsible person should keep records of a plan showing the exact location and technical data of the installation.

6 Inspection and maintenance

6.1 Annual inspection and maintenance

The inspection and maintenance should be carried out by the competent person.

The hose should be fully run out, put under pressure and the following points checked.

a) The appliance is unobstructed and free from damage and components not corroded or leaking.

b) Operating instructions are clear and legible.

c) The location is clearly marked.

d) Brackets for wall mounting are suitable for their purpose and are fixed and firm.

e) The flow of water is steady and sufficient (the use of flow indicator and pressure gauge is recommended).

f) Pressure gauge (if fitted) is working satisfactorily and within its operating range.

g) The entire length of hose should be inspected for signs of cracking, distortion, wear or damage. If the hose shows any signs of defect it shall be replaced or proof tested to maximum permissable working pressure.

h) Hose clips or bindings are of the correct type and are securely fastened.

i) Hose drum rotates freely in both directions.

j) For swinging reels, check that the pivot rotates easily and that the reel swings through 180°.

k) On manual reels, check the stop valve is of correct type and that it operates easily and correctly.

l) On automatic reels, check the correct operation of the automatic valve and check for the correct operation of the isolating service valve.

m) Check the condition of the water supply pipework; particular attention should be paid to any flexible pipework for signs of damage or wear.

n) If fitted with a cabinet, check for signs of damage and check that the cabinet doors open freely.

o) Check that the nozzle is of the correct type and easy to operate.

p) Check the operation of any hose guide and ensure they are correctly and firmly fixed.

q) Leave the hose reel and hose system ready for immediate use. If any extensive maintenance is necessary the hose reel or hose system should be labelled **OUT OF ORDER** and the competent person should inform the user/owner.

6.2 Periodic inspection and maintenance for all hoses

Every 5 years all hoses should be pressurized to maximum working pressure according to EN 671-1 and/or EN 671-2.

7 Records of inspection and maintenance

After inspection and necessary corrective measures (see clause **6.1** and **6.2**), hose reels and hose systems should be marked **CHECKED** by the competent person. A permanent record of all inspections, checks and tests should be kept by the responsible person. The record should include:

— date (year and month) of inspection and tests;

— test result noted;

— extent and date of installation of replacement parts;

— if any further test is required;

— date (year and month) for the next inspection and test;

— identification of each hose reel and/or hose system.

8 Fire safety during inspection and maintenance

Because inspection and maintenance can temporarily reduce the effectiveness of fire protection:

— depending on the estimated fire hazard, only a limited number of hose reels and hose systems should undergo extensive maintenance simultaneously in one particular area;

— the provision of additional fire safety precautions and safety instructions should be considered during the maintenance period and during periods when water supplies are shut down.

9 Rectification of defects

Only components, for example hoses, nozzles, inlet stop valves, complying with the required standard supplied or approved by the hose reel or hose system supplier, should be used to replace those found to be unsuitable for continued use.

NOTE It is essential that all defects are rectified in the shortest possible time to ensure that the firefighting installation is restored in a satisfactory condition.

10 Maintenance and inspection label

Maintenance and inspection data should be recorded on a label which shall not cover any of the manufacturer's markings.

The following data should be provided on the label:

— the wording **CHECKED** (see clause **7**);

— name and address of the hose reel or hose system supplier (see **3.14**);

— mark clearly identifying the competent person (see **3.3**);

— date (year and month) when the maintenance was carried out (see clause **6.1** and **6.2**).