



**SLOVENSKI STANDARD**  
**SIST EN 62929:2014**

**01-november-2014**

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**Čistilni roboti za uporabo v gospodinjstvu - Suho čiščenje - Metode merjenja lastnosti (IEC 62929:2014)**

Cleaning robots for household use - Dry cleaning: Methods of measuring performance

Reinigungsroboter für den Hausgebrauch - Trockenreinigung: Verfahren zur Messung der Gebrauchseigenschaften

Robots de nettoyage à usage domestique - Nettoyage à sec: Méthodes de mesure de l'aptitude à la fonction

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Floor treatment appliances

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EUROPEAN STANDARD

**EN 62929**

NORME EUROPÉENNE

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## Cleaning robots for household use - Dry cleaning: Methods of measuring performance (IEC 62929:2014)

Robots de nettoyage à usage domestique - Nettoyage à sec: Méthodes de mesure de l'aptitude à la fonction  
(CEI 62929:2014)

Reinigungsroboter für den Hausgebrauch - Trockenreinigung: Verfahren zur Messung der Gebrauchseigenschaften  
(IEC 62929:2014)

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**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

## Foreword

The text of document 59F/258/FDIS, future edition 1 of IEC 62929, prepared by SC 59F "Surface cleaning appliances" of IEC/TC 59 "Performance of household and similar electrical appliances" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62929:2014.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2015-05-26
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2017-08-26

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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60335-1:2001 + A1:2004 + A2:2006	NOTE	Harmonized as EN 60335-1:2002 (modified) + A1:2004 (not modified) + A2:2006 (not modified).
IEC 60335-2-2:2009	NOTE	Harmonized as EN 60335-2-2:2010 (not modified).

## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60312-1 (mod) + A1	2010 2011	Vacuum cleaners for household use - Part 1: Dry vacuum cleaners - Methods for measuring the performance	EN 60312-1 -	2013 -
ISO 554	-	Standard atmospheres for conditioning and/or testing - Specifications	-	-
ISO 679	2009	Cement - Test methods - Determination of strength	- <a href="#">SIST EN 62929:2014</a>	-
ISO 2768-1	1989	General tolerances Part 1: Tolerances for linear and angular dimensions without individual tolerance indications	EN 22768-1	1993

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IEC 62929

Edition 1.0 2014-07

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**Cleaning robots for household use – Dry-cleaning: Methods of measuring performance**

(standards.iteh.ai)

**Robots de nettoyage à usage domestique – Nettoyage à sec: Méthodes de mesure de l'aptitude à la fonction**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**CLEANING ROBOTS FOR HOUSEHOLD USE –  
DRY-CLEANING: METHODS OF MEASURING PERFORMANCE**

## FOREWORD

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International Standard IEC 62929 has been prepared by subcommittee 59F: Surface cleaning appliances, of IEC technical committee 59: Performance of household and similar electrical appliances.

The text of this standard is based on the following documents:

FDIS	Report on voting
59F/258/FDIS	59F/262/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

In this standard, the following print types are used:

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The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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## INTRODUCTION

In addition to the performance measurement methods which are included in this International Standard, a few more performance items have been reviewed and considered. The list of the performance items which have been discussed over time but have not yet been included comprises corner/edge dust pick-up, noise, docking, fall-off prevention, fibre pick-up and emissions.

The performance items which have been left out in this edition will be continuously reviewed and will soon be included in future editions of this standard.

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## CLEANING ROBOTS FOR HOUSEHOLD USE – DRY-CLEANING: METHODS OF MEASURING PERFORMANCE

### 1 Scope

This International Standard is applicable to **dry cleaning robots** for household use in or under conditions similar to those in households.

The purpose of this standard is to specify the essential performance characteristics of dry **cleaning robots** and to describe methods for measuring these characteristics.

This standard is neither concerned with safety nor with performance requirements.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60312-1:2010, *Vacuum cleaners for household use – Part 1: Dry vacuum cleaners – Methods for measuring the performance*<sup>1</sup>

IEC 60312-1:2010/AMD1:2011

ISO 554, *Standard atmospheres for conditioning and/or testing* – Specifications

ISO 679:2009, *Cement – Test methods – Determination of strength*

ISO 2768-1:1989, *General tolerances -- Part 1: Tolerances for linear and angular dimensions without individual tolerance indications*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60312-1, as well as the following apply.

#### 3.1

##### **cleaning robot**

##### **automatic battery-powered cleaners**

automatic floor cleaner that operates autonomously without human intervention within a defined perimeter

Note 1 to entry: The **cleaning robot** consists of a mobile part and may have a **docking station** and/or other accessories to assist its operation.

#### 3.2

##### **dry cleaning robot**

**cleaning robot** that is intended to remove only non-liquid material from the floor using by means other than with the aid of solutions or liquids

<sup>1</sup> There is a consolidated edition 1.1 (2011), that includes IEC 60312-1:2010 and its amendment IEC 60312-1:2010/AMD1:2011.

Note 1 to entry: Typical means of cleaning include vacuum, brush(es), pad(s) and duster.

### 3.3

#### **cleaning head**

air intake nozzle at the bottom of the **cleaning robot**

Note 1 to entry: The width of the **cleaning head** is the width of the air intake nozzle in the direction of forward travel.

Note 2 to entry: It does not include any **agitation device**.

### 3.4

#### **agitation device**

motorized mechanical part or an air-blower attached to the **cleaning robot** used to assist dirt removal

### 3.5

#### **docking station**

##### **base unit**

unit that may provide manual or automatic battery charging facilities, dust removal from the robot, data processing facility or other robot support functions

### 3.6

#### **passive cleaning head**

cleaning head without agitation device

[SOURCE: IEC 60312-1:2010, 3.5, modified – "nozzle" has been replaced by "**cleaning head**".]

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### 3.7

#### **visual tracking system**

##### **VTS**

measurement system which enables the tracking of robot position and orientation

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### 3.8

#### **secondary collection system**

peripheral device outside of the robot that collects the dust from the **cleaning robot**

### 3.9

#### **dust receptacle**

container inside of the robot used to hold the collected dust

### 3.10

#### **test**

entirety / superset of all **(test) runs** and **(test) trials** of all samples to be measured for a single robot

### 3.11

#### **trial**

single instance of a performance measurement carried out under identical conditions that can be repeated multiple times

### 3.12

#### **run**

subset of a **trial** where one or more factors affecting the **test** results is (are) changed

### 3.13

#### **pass**

traverse of the **cleaning head** over the **test area**