IEC TS 62885-1

Edition 4.0 2026-02

Corrected version
2026-02

TECHNICAL SPECIFICATION

Surface cleaning appliances -
Part 1: General requirements on test material and test equipment

ICS 97.080

ISBN 978-2-8327-1027-2

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Surface cleaning appliances - Part 1: General requirements on test material and test equipment

FOREWORD

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IEC TS 62885-1 has been prepared by subcommittee 59F: Surface cleaning appliances, of IEC technical committee 59: Performance of household and similar electrical appliances. It is a Technical Specification.

This fourth edition cancels and replaces the third edition published in 2020. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) Almost all of the test equipment is adopted from IEC 62885-2:2021.
b) Test equipment and materials for wet cleaning is included.
c) A description of the verification of an in-house reference vacuum cleaner is added.
d) Information about the reference vacuum cleaner system RSB is added.

The text of this Technical Specification is based on the following documents:

Draft	Report on voting
59F/540/DTS	59F/554/RVDTS

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

The language used for the development of this Technical Specification is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all the parts in the IEC 62885 series, under the general title *Surface cleaning appliances*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

– reconfirmed,
– withdrawn, or
– revised.

This corrected version of IEC TS 62885-1:2026 incorporates the following correction:

– Addition of bibliographic reference numbers in the content

INTRODUCTION

IEC subcommittee 59F has agreed to make a collection of test material and test equipment used in standards for testing surface cleaning appliances and to publish this collection as a technical specification.

Regular maintenance of the technical specification ensures that other standards that refer to this TS always reference the current status regarding test material and test equipment.

The intention with this document is to ensure a minimum of test material types and common use of these materials in tests of various surface cleaning appliances.

For information on supplies of test materials and details of test equipment, see Annex A.

1 Scope

This part of IEC 62885, which is a Technical Specification, specifies the physical characteristics of test equipment and material used in tests common to several products covered by IEC 62885 (all parts) [1] for surface cleaning appliances. In addition, it provides guidance regarding the evaluation of Wilton and other types of carpets to determine their acceptability for testing and regarding the pre-treatment of test dust.

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.

IEC 60688, *Electrical measuring transducers for converting AC and DC electrical quantities to analogue or digital signals*

IEC 60704-2-1:2020, *Household and similar electrical appliances - Test code for the determination of airborne acoustical noise - Part 2-1: Particular requirements for dry vacuum cleaners*

IEC 60734:2012, *Household electrical appliances - Performance - Water for testing*

IEC 62885-2:2021, *Surface cleaning appliances - Part 2: Dry vacuum cleaners for household or similar use - Methods for measuring the performance*

IEC 62885-2, *Surface cleaning appliances - Part 2: Dry vacuum cleaners for household or similar use - Methods for measuring the performance*

IEC/ASTM 62885-7:2020, *Surface cleaning appliances - Part 7: Dry-cleaning robots for household or similar use - Methods for measuring the performance*

IEC/ASTM 62885-7:2020/AMD1:2022, *Amendment 1 - Surface cleaning appliances - Part 7: Dry cleaning robots for household or similar use - Methods for measuring the performance*

ISO 1763, *Textile floor coverings - Determination of number of tufts and/or loops per unit length and per unit area*

ISO 1765, *Machine-made textile floor coverings - Determination of thickness*

ISO 1766, *Textile floor coverings - Determination of thickness of pile above the substrate*

ISO 1833-1, *Textiles - Quantitative chemical analysis - General principles of testing*

ISO 2060, *Textiles - Yarn from packages - Determination of linear density (mass per unit length) by the skein method*

ISO 2061, *Textiles - Determination of twist in yarns - Direct counting method*

ISO 2424, *Textile floor coverings - Vocabulary*

ISO 2439, *Title missing - Legacy paper document*

ISO 3386-1, *Polymeric materials, cellular flexible — Determination of stress-strain characteristics in compression — Part 1: Low-density materials*

ISO 4032, *Hexagon nuts (style 1) - Product grades A and B*

ISO 4766, *Slotted set screws with flat point*

ISO 5011:2020, *Inlet air cleaning equipment for internal combustion engines and compressors — Performance testing*

ISO 5167-1:2022, *Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full — Part 1: General principles and requirements*

ISO 5167-1, *Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full — Part 1: General principles and requirements*

ISO 5167-2:2022, *Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full — Part 2: Orifice plates*

ISO 6989, *Textile fibres - Determination of length and length distribution of staple fibres (by measurement of single fibres)*

ISO 8543, *Textile floor coverings - Methods for determination of mass*

ISO 12103-1, *Road vehicles — Test contaminants for filter evaluation — Part 1: Arizona test dust*

ISO 13320, *Particle size analysis — Laser diffraction methods*

BS 4223, *Methods for determination of constructional details of carpets with yarn pile*

BS 8459, *Determination of extractable matter in textiles - Method*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

– IEC Electropedia: available at http://www.electropedia.org/
– ISO Online browsing platform: available at http://www.iso.org/obp

3.1
interlaboratory testing
testing the same samples in different laboratories, with different operators, and comparing the results

3.2
in-house reference vacuum cleaner
electrically operated laboratory equipment designated for internal comparison within a laboratory

3.3
reference vacuum cleaner system
RSB
electrically operated laboratory equipment intended to provide different laboratories with a similarly constructed vacuum cleaner to measure the reference dust removal ability on Wilton test carpets for passive and active nozzles to improve the reproducibility of results

Note 1 to entry: The reference vacuum cleaner system RSB can be used with active or passive nozzles.

Note 2 to entry: The reference vacuum cleaner system RSB is not intended for tests other than dust pick-up and motion resistance using Wilton test carpets.

Note 3 to entry: The reference vacuum cleaner system RSB is described in Annex B. Maintenance of the RSB is described in Annex C.

4 Test equipment for dry cleaning

4.1 Mechanical operator

4.1.1 General

The construction principle of a mechanical operator is indicated in Figure 1. It consists of a rigid support with a linear drive capable of carrying out single and double strokes over the test surface (carpet or hard floor), and is kept in position by hold-downs. As shown in Figure 1, the equipment can be adapted to tests of motion resistance as described in IEC 62885-2:2021 [2] (motion resistance), allowing its wooden plate a sufficient freedom of movement in the direction of the strokes.

NOTE The linear drive can be motorized or operated by hand.

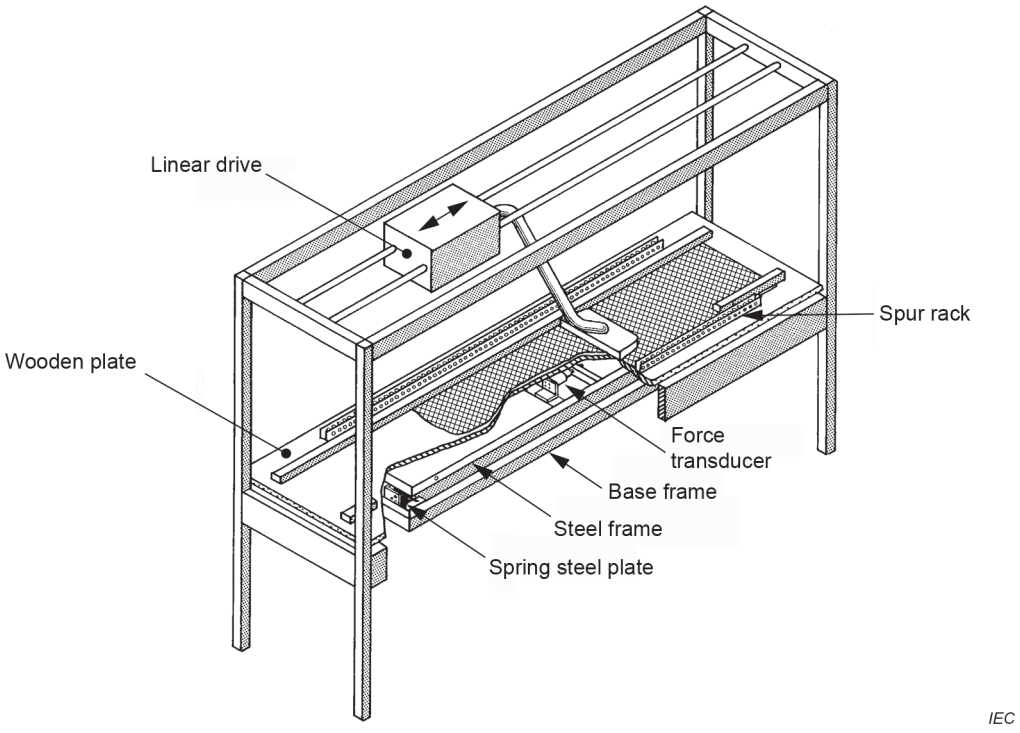


Figure 1 – Mechanical operator for tests of dust or debris removal from carpets or hard floors and of motion resistance

The spur racks, which suggest a way to bring about the vibratory action to the dust spreader depicted in Figure 1, have no function in the motion resistance test.