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Clothes washing machines for commercial use - Methods for measuring the performance

S.R. CLC/TS 50640:2015

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Clothes washing machines for commercial use - Methods for measuring the performance

Waschmaschinen für den gewerblichen Gebrauch -
Verfahren zur Messung der Gebrauchseigenschaften

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Contents	Page
Foreword	6
1 Scope	7
2 Normative references	7
3 Terms, definitions and symbols	8
3.1 Terms and definitions	8
3.2 Symbols	11
3.2.1 Symbols relating to 9.2 – washing performance	11
3.2.2 Symbols relating to 9.3 – water extraction (spinning)	12
3.2.3 Symbols relating to 9.4 – energy, water and time	12
3.2.4 Symbols relating to Annex F	12
3.2.5 Symbols relating to Annex G	12
4 Requirements	13
4.1 General	13
4.2 Rated Capacity	13
4.3 Dimensions	14
5 Test conditions, materials, equipment and instrumentation	14
5.1 General	14
5.2 Reference machine	15
5.3 Ambient conditions	15
5.3.1 Electricity supply	15
5.3.2 Water supply	15
5.3.3 Ambient temperature and humidity	16
5.4 Test materials	17
5.4.1 General	17
5.4.2 Base load	17
5.4.3 Stain test strips	17
5.4.4 Detergents	18
5.5 Equipment	18
5.5.1 General	18
5.5.2 Reference machine	18
5.5.3 Spectrophotometer	19
5.5.4 Equipment for conditioning the base load	19
5.5.5 Iron for preparation of stain test strips after washing	20
5.5.6 Other equipment	20
5.6 Instrumentation and accuracy	20
5.6.1 General	20
5.6.2 Instruments	21
5.6.3 Measurements	22
6 Preparation for testing	22
6.1 General	22
6.2 Test washing machine and reference machine preparation	22
6.2.1 Test washing machine	22
6.2.2 Reference machine	23
6.3 Detergent	23

6.3.1	General.....	23
6.3.2	Detergent dose	24
6.3.3	Mixing detergent.....	24
6.3.4	Detergent placement	24
6.3.5	Placing detergent into the drum base	24
6.4	Test loads	25
6.4.1	General.....	25
6.4.2	Pre-treatment of new base load items prior to use.....	26
6.4.3	Requirements regarding the maximum age of base load items	26
6.4.4	Normalization of base load items before a new test series	26
6.4.5	Conditioning of base load items before a new test series	26
6.4.6	Test load composition.....	27
6.4.7	Calculation of loads not shown in Table 3	29
6.4.8	Addition of stain test strips to the base load.....	29
7	Performance measurements – general requirements	30
8	Tests for performance	30
8.1	General	30
8.2	Test procedure for performance tests.....	31
8.2.1	Test conditions, materials and preparation for testing	31
8.2.2	Test load and loading.....	31
8.2.3	Programme.....	31
8.2.4	Test procedure.....	31
8.2.5	Test series	32
8.3	Measurements to determine washing performance	32
8.3.1	General.....	32
8.3.2	Removal and drying of stain test strips	33
8.3.3	Assessment of stain test strips	33
8.4	Measurements to determine maximum spin speed.....	34
8.5	Measurements to determine water extraction performance	34
8.5.1	General.....	34
8.5.2	Washing machines	34
8.5.3	Spin extractors	34
8.6	Measurement to determine the bath temperature	34
8.7	Measurements to determine water and energy consumption and programme time	35
8.7.1	General.....	35
8.7.2	Procedure.....	35
8.7.3	Measurement of energy supplied by electricity	35
8.7.4	Measurement of energy supplied by steam.....	35
8.7.5	Measurement of energy supplied by gas.....	35
8.7.6	Measurement of energy consumed via compressed air	35
9	Assessment of performance	36
9.1	General	36
9.2	Evaluation of washing performance	36
9.3	Evaluation of water extraction performance	38
9.4	Evaluation of water and energy consumption and programme time.....	39
9.4.1	General.....	39
9.4.2	Water volumes	39
9.4.3	Bath temperature	39

9.4.4	Programme time	39
9.4.5	Energy consumption	39
10	Data to be reported.....	41
Annex A (normative)	Specification of stain test strips with standardized soiling.....	42
Annex B (normative)	Reference detergents — Reference detergent A*	46
Annex C (normative)	Specifications for base load — Cotton/synthetics base loads	48
Annex D (normative)	Reference machine specification — Specification of the reference washing machines and method of use.....	50
Annex E (normative)	Reference machine programme definitions	53
Annex F (normative)	The bone-dry method of conditioning	56
Annex G (normative)	Folding and loading the test load	58
Annex H (normative)	Measuring the bath temperature	69
Annex I (informative)	Performance testing of gas fired washing machines	71
Annex J (normative)	Performance testing of steam heated washing machines	72
Annex K (normative)	Procedure to determine test load size when rated capacity is not declared	82
Annex L (informative)	Uncertainty of measurements in the present document	86
Annex M (normative)	Test report – Data to be reported.....	90
Annex N (informative)	Sources of materials and supplies.....	96
	Bibliography.....	97
Figure 1	— Load item preparation prior to a test series	25
Figure 2	— Attached test strip	29
Figure 3	– Positions for measuring soiled test pieces.....	33
Figure G.1	— Folding medium sheet with a stain test strip attached.....	59
Figure G.2	— Folding small sheet.....	59
Figure G.3	— Folding medium sheets.....	60
Figure G.4	— Folding large sheets.....	60
Figure G.5	— Illustration of horizontal axis washing machine	61
Figure G.6	— Illustration of vertical axis washing machine	61
Figure G.7	— Horizontal axis washing machine: placement of items in the drum	62
Figure G.8	— Vertical axis washing machine: placement of items in the drum.....	63
Figure G.9	— Schematic view of part loads within a large drum.....	66
Figure J.1	— Schematic installation of the measurement equipment for direct steam heated washing machines	75
Figure J.2	— Schematic installation of the measurement equipment for indirect steam heated washing machine (Alternative 1)	76
Figure J.3	— Schematic installation of the measurement equipment for indirect steam heated washing machine (Alternative 2)	77
Figure K.1	— Cross section of drum and lifter	83
Figure K.2	— Figure showing how the drum diameter d shall be measured for different kind of drum perforation	84
Figure K.3	— Definition of volumes V_3 to V_6	85
Figure K.4	— Definition of volume V_1 and V_2	85

Table 1 — Size and mass of the different base load items	17
Table 2 — Detergent Dose	24
Table 3 — Number of different load items in the test load for various test load masses	28
Table A.1 — Ratios and tolerances of standardized soils: Reference Machine CLS	45
Table B.1 — Composition of the reference detergent A*	46
Table C.1 — Specification of the Cotton/synthetics base loads	48
Table D.1 — Description of the reference washing machine and method of use	51
Table E.1 — Specification of reference washing programme	54
Table E.2 — Tolerances given for some procedure parameters	55
Table G.1 — Orientation of test load items within a part load	63
Table G.2 — Part load items for a 15 kg test load	64
Table G.3 — Part load items for a 5 kg test load	65
Table G.4 — Part load items for a 10 kg test load	65
Table G.5 — Part load items for a 20 kg test load	65
Table G.6 — Part load items for a 100 kg test load	66
Table H.1 — Specification of temperature logger suitable for temperature measurement for both washing and drying	69
Table H.2 — Number of temperature loggers for bath temperature measurement	70
Table M.1 — Data for test washing machine	90
Table M.2.1 — Data, parameters and results	91
Table M.2.2 — Performance results of the test washing machine	94
Table M.3 — Materials	94
Table M.4 — Equipment	95

Foreword

This document (CLC/TS 50640:2015) has been prepared by CLC/TC 59X "Performance of household and similar electrical appliances".

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association.

This is a new Technical Specification, but it is based on portions from EN 60456:2011.

This Technical Specification is the main body of a forthcoming European Standard for measuring the performance of non-household washing machines. The content of this Technical Specification will be added with the Annex ZZ when the details regarding Ecodesign regulations are defined.

The procedures described in this Technical Specification are modified substantially compared to the procedures described in EN 60456. Therefore, results of tests according to this Technical Specification cannot and are bound not to be compared to results of similar procedures of EN 60456.

Significant technical differences from EN 60456 are:

- a) test procedures for washing machines of any size on the market;
- b) the method includes procedures for measuring steam heated and gas heated washing machines;
- c) the introduction of a new type of base load;
- d) a new reference programme.

NOTE CLC/TS 50640:2015 is planned to be a European Standard for the energy measurement of gas heated laundry equipment.

A bilingual version of this publication may be issued at a later date.

1 Scope

This Technical Specification specifies methods for measuring the performance of clothes **washing machines** for **commercial** use utilizing cold and/or hot water supply and without heating or with heating devices for electricity, steam or gas. It also deals with appliances for both washing and drying textiles (**washer-dryers**) with respect to their washing related functions. This Technical Specification covers top, front and side loaded non household **washing machines** with horizontal or vertical axis and with one or more wash compartments.

NOTE 1 Non household tumble dryer performance is assessed to CLC/TS 50594.

The object is to state and define the principal performance characteristics of non-household **washing machines** and to describe the test methods for measuring these characteristics.

NOTE 2 This Technical Specification does not apply to continuous batch **washing machines** (e.g. tunnel washers) or **washing machines** only possible to operate with automatic loading and unloading.

NOTE 3 This Technical Specification does not specify safety requirements for **non-household washing machines**. Safety requirements are specified in EN 50571 and the EN ISO 10472 series.

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.

EN 12127, *Textiles — Fabrics — Determination of mass per unit area using small samples*

EN 12953-10, *Shell boilers — Part 10 : Requirements for feedwater and boiler water quality*

EN 50571, *Household and similar electrical appliances — Safety — Particular requirements for commercial electric washing machines*

EN 60734, *Household electrical appliances — Performance — Water for testing (IEC 60734)*

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

EN ISO 2061, *Textiles — Determination of twist in yarns — Direct counting method (ISO 2061)*

EN ISO 3759, *Textiles — Preparation, marking and measuring of fabric specimens and garments in tests for determination of dimensional change (ISO 3759)*

EN ISO 11664-2, *Colorimetry — Part 2: CIE standard illuminants (ISO 11664-2)*

EN ISO 80000-1:2013, *Quantities and units — Part 1: General (ISO 80000-1:2009 + Cor 1:2011)*

IEC 60456, *Clothes washing machines for household use — Methods for measuring the performance*

DIN 53923, *Testing of textiles; determination of water absorption of textile fabrics*

CIE 015:2004¹⁾, *Colorimetry (3rd edition)*

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