



SLOVENSKI STANDARD
SIST EN 50632-1:2015/oprA2:2021
01-maj-2021

**Elektromotorna orodja - Postopek meritve prahu - 1. del: Splošne zahteve -
Dopolnilo A2**

Electric motor-operated tools - Dust measurement procedure - Part 1: General requirements

Motorbetriebene Elektrowerkzeuge - Staubmessverfahren - Teil 1: Allgemeine Anforderungen

Outils électriques à moteur - Procédure de mesure de la poussière - Partie 1: Exigences générales

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Ta slovenski standard je istoveten z: EN 50632-1:2015/prA2

ICS:

25.140.20 Električna orodja Electric tools

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
EN 50632-1:2015

prA2

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ICS 25.140.20

English Version

Electric motor-operated tools - Dust measurement procedure - Part 1: General requirements

Outils électriques à moteur - Procédure de mesure de la
poussière - Partie 1: Exigences générales

Motorbetriebene Elektrowerkzeuge - Staubmessverfahren -
Teil 1: Allgemeine Anforderungen

This draft amendment prA2, if approved, will modify the European Standard EN 50632-1:2015; it is submitted to CENELEC members for enquiry.

Deadline for CENELEC: 2021-06-18.

It has been drawn up by CLC/TC 116.

If this draft becomes an amendment, CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

This draft amendment was established by CENELEC in three official versions (English, French, German).

A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 50632-1:2015/prA2:2021) has been prepared by CLC/TC 116 “Safety and environmental aspects of motor-operated electric tools”.

This document is currently submitted to the Enquiry.

The following dates are proposed:

- latest date by which the existence of this document has to be announced at national level (doa) dor + 6 months
- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) dor + 12 months
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) dor + 36 months (to be confirmed or modified when voting)

This amendment was developed to include improvements and clarifications suggested by practical tests.

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1 Modification to 4.2, “Test room and equipment”

Replace the existing NOTE in the first paragraph with the following:

“NOTE 1 A smaller distance can lead to higher values of the measured **dust** concentration.”

Replace the existing second, third and fourth paragraphs with the following:

“During the test, **dust samplers** are carried by the operator on the upper chest zone. If the **inhalable dust** or the **respirable dust** is measured, one **dust sampler** shall be used on each side of the upper chest zone, see Figure 1. In case that during the measurement of the **respirable dust** also the **inhalable dust** fraction shall be evaluated, an additional **dust sampler** for the **inhalable dust** shall be used and placed as close as possible below one of the other two **dust samplers** for **respirable dust**, see Figure 2. If the tests are done by robotic means, the **dust sampler(s)** shall be placed at a place to replicate the upper chest zone of an operator. The **dust sampler(s)** shall remain working throughout the entire time of each test as defined in 4.3.

For those tools, where the workpiece is placed on a bench, as specified in the relevant Part 2 or Part 3, the vertical distance between the upper surface of the workpiece and the intake openings of the **dust samplers** carried by the standing operator on the upper chest zone shall be $h = (600 \pm 50)$ mm, see Figure 1 and Figure 2. The distance is to be established and measured before the tests are started.

NOTE 2 The required vertical distance is influenced by the height of the operator (e.g. use of a support for the operator), height of the table, thickness of the workpiece and the position of the **dust samplers** on the operator.”

The **dust samplers** shall comply with EN 13205 (all parts) and shall be suitable for the determination of the concentration of **inhalable dust** and, if required, for **respirable dust**, as specified in EN 481. The material of the filters used in the dust samplers shall be of cellulose nitrate with a mesh size of 8 µm. Alternatively, the material for filters for **inhalable dust** may be glass fibre grade 85/90.

NOTE 3 Glass fibre filters can help to ensure the necessary volume flow since their flow resistance is lower than that of cellulose nitrate filters.”

Add the following NOTE after the last paragraph:

“NOTE 4 Whether the air in the test room is clean, typically can be monitored by using an appropriate optical dust monitor (e.g. a laser particle counter).”

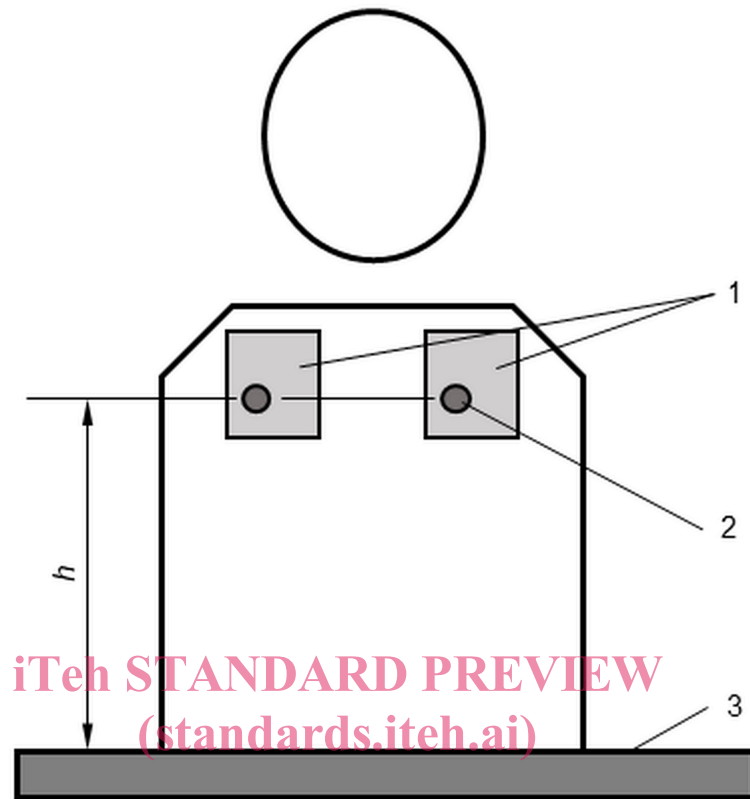
2 Modification to 4.3, “Operating conditions”

Replace the existing third paragraph with the following:

“Every test consists of five test cycles of 10 min working time and 2 min rest time each, in total a test time of 1 h. Every 1 h test shall start with an empty dust extraction unit equipped with a new filter. During each test, a given task shall be achieved as specified in the relevant Part 2 or Part 3. Depending on the detection limit of the used **dust sampler(s)** and of the **dust** concentration to be determined, a total test time longer than 1 h may be necessary. This shall be achieved by adding a sufficient number of additional test cycles, so that the relative detection limit of the **dust sampler(s)** is lower than the **dust** concentration to be determined. The task specified in the relevant Part 2 or Part 3 shall be adapted to the altered test time.”

3 Addition of Figures 1 and 2

After Clause 6, **add** the following new figures:



Key

- 1 **dust samplers** for **inhalable dust** or **respirable dust** on upper chest area
- 2 intake opening of **dust sampler**
- 3 workpiece
- h vertical distance between the upper surface of the workpiece on a bench and the intake openings of the **dust samplers**

Figure 1 — Positions of dust samplers and workpiece for the measurement of only one dust fraction