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Preparation of steel substrates before application of paints and related products — Test methods for non-metallic blast-cleaning abrasives —

Part 1: Sampling

Préparation des subjectiles d'acier avant application de peintures et de produits assimilés — Méthodes d'essai pour abrasifs non métalliques destinés à la préparation par projection —

Partie 1: Échantillonnage

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 12, *Preparation of steel substrates before application of paints and related products*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 139, *Paints and Varnishes*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 11127-1:2011), which has been technically revised. The main changes to the previous edition are as follows:

— Clause 2, normative references, has been added and subsequent clauses renumbered;

— Annex B has been technically and editorially revised.

A list of all parts in the ISO 11127 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Preparation of steel substrates before application of paints and related products — Test methods for non-metallic blast-cleaning abrasives —

Part 1: Sampling

1 Scope

This document specifies a method for the sampling of non-metallic blast-cleaning abrasives from consignments and for the subdivision of the sample into quantities suitable for undertaking the appropriate test methods specified in ISO 11127-2, ISO 11127-3, ISO 11127-4, ISO 11127-5, ISO 11127-6 and ISO 11127-7.

This document is a part of the ISO 11127 series dealing with the sampling and testing of non-metallic abrasives for blast-cleaning.

The types of non-metallic abrasive and requirements for each are contained in the ISO 11126 series.

The ISO 11126 and ISO 11127 series have been drafted as a coherent set of International Standards on non-metallic blast-cleaning abrasives. Information on all parts of both series is given in Annex B.

2 Normative references

There are no normative references in this document.

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:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
total quantity
overall quantity of the abrasive to be tested for which the sampling procedure is to be considered as representative

3.2
single sample
sample obtained from the total quantity by a single sampling operation

Note 1 to entry: This sample is not immediately used for testing.

3.3
mixed sample
sample obtained by mixing a number of single samples

3.4
reduced sample
sample obtained by reduction of a mixed sample

Note 1 to entry: In order to obtain a sample quantity which is suitable for testing, all reduced samples but one are discarded after each reduction; the reduction procedure is then repeated, if necessary, on the sample retained.

3.5
test sample
reduced sample that comprises a mass or volume sufficient for testing, portions of which are immediately used for testing

4 Apparatus

4.1 Sample thief, made from seamless steel tubing of inside diameter approximately 25 mm and length approximately 800 mm. The tube shall be pointed at one end and have a "T" handle at the other end. Holes shall be bored in a straight line, lengthways along the tube, and spaced at 50 mm intervals. The diameter of the holes shall be determined by the size of the particles to be sampled and shall be approximately three times the size of the largest particle.

NOTE It is normally sufficient to use holes 10 mm in diameter for non-metallic abrasives.

4.2 Sample divider, riffler or other equipment suitable for splitting a sample into parts.

5 Procedure

5.1 Sampling of consignments

Depending on the quantity of abrasive to be tested and the condition of the consignment (packaged or unpackaged), the sampling procedure may be carried out manually or mechanically. Take samples as uniformly distributed as possible over the total quantity of the consignment, where appropriate, using the sample thief. The number of single samples to be taken shall be as specified in Table 1.

Table 1 — Number of single samples to be taken from a consignment

Total quantity tonnes	Number of single samples
<50	5
50 to 100	10
>100	15

Guidance on sampling from stockpiles and transportation units is given in Annex A.

5.2 Preparation of the mixed sample

Pour all the single samples obtained as described in 5.1 into a suitable container and mix them until a uniform distribution of all particle sizes within the mixed sample can be expected.

5.3 Reduction of sample size

Subdivide the mixed sample either mechanically, for example using a riffle-type sample divider, or manually. Unless otherwise specified or agreed, discard one of the reduced samples obtained after each subdivision (see Figure 1). Continue the operation until a test sample of appropriate size is obtained.