
Polimerni materiali in ebonit - Preverjanje merilnikov trdote po Shoru (ISO 21509:2006)

Plastics and ebonite - Verification of Shore durometers (ISO 21509:2006)

Kunststoffe und Hartgummi - Prüfung der Shore-Härtemessgeräte (ISO 21509:2006)

Plastiques et ébonite - Vérification des duromètres Shore (ISO 21509:2006)

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ICS:

83.080.01	Polimerni materiali na splošno	Plastics in general
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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 21509

July 2015

ICS 83.080.01

English Version

Plastics and ebonite - Verification of Shore durometers (ISO 21509:2006)

Plastiques et ébonite - Vérification des duromètres Shore
(ISO 21509:2006)

Kunststoffe und Hartgummi - Prüfung der Shore-
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European foreword

The text of ISO 21509:2006 has been prepared by Technical Committee ISO/TC 61 “Plastics” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 21509:2015 by Technical Committee CEN/TC 249 “Plastics” the secretariat of which is held by NBN.

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Plastics and ebonite — Verification of Shore durometers

Plastiques et ébonite — Vérification des duromètres Shore

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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.

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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ISO 21509 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 2, *Mechanical properties*.

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Plastics and ebonite — Verification of Shore durometers

1 Scope

This International Standard concerns the verification of type A and D Shore durometers used to conduct hardness tests as described in ISO 868.

2 Normative references

The following referenced documents are indispensable for the application 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.

ISO 291, *Plastics — Standard atmospheres for conditioning and testing*

ISO 868:2003, *Plastics and ebonite — Determination of indentation hardness by means of a durometer (Shore hardness)*

3 Terms and definitions

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

3.1

verification

all of the operations carried out in order to determine compliance of the device with the requirements of this International Standard

3.2

durometer

apparatus allowing the determination of hardness by forcing an indenter into a material

4 Measuring instruments and temperature of verification

The verification methods described in this document require the use of both dimensional and dynamometric instruments.

NOTE Usually, the measurement uncertainty should be 1/5 of the tolerance on the value to be verified.

The verification shall be conducted at an ambient temperature of 21 °C to 25 °C or 25 °C to 29 °C for tropical countries if agreed on by all parties (see ISO 291).

5 Verification of the durometer

5.1 Elements to be verified

— geometry of the indenter;