

Paints and varnishes - Determination of image clarity
(degree of sharpness of reflected or transmitted image)
(ISO 20266:2018)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 20266:2020 sisaldab Euroopa standardi EN ISO 20266:2020 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 20266:2020 consists of the English text of the European standard EN ISO 20266:2020.
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English Version

Paints and varnishes - Determination of image clarity
(degree of sharpness of reflected or transmitted image)
(ISO 20266:2018)

Peintures et vernis - Détermination de la netteté de
l'image (degré de netteté de l'image réfléchie ou
transmise) (ISO 20266:2018)

Beschichtungsstoffe - Bestimmung der
Abbildungsschärfe (Grad der Schärfe von reflektierten
oder durchscheinenden Bildern) (ISO 20266:2018)

This European Standard was approved by CEN on 30 November 2020.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

The text of ISO 20266:2018 has been prepared by Technical Committee ISO/TC 35 "Paints and varnishes" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 20266:2020 by Technical Committee CEN/TC 139 "Paints and varnishes" the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2021, and conflicting national standards shall be withdrawn at the latest by June 2021.

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Endorsement notice

The text of ISO 20266:2018 has been approved by CEN as EN ISO 20266:2020 without any modification.

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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).

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For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 9, *General test methods for paints and varnishes*.

Introduction

Visual assessment of the image clarity of paint films (coatings) is carried out by evaluating the sharpness of an image reflected from a surface, using a specified incident angle, for reflection. For transmission, image sharpness is evaluated by viewing a suitable target through the paint films. The degree of image clarity is influenced by the clearness, surface irregularities and haziness of a surface(s). Gloss values and haze values do not correctly assess this phenomenon. Image clarity is not the same as, and should not be confused with, gloss or haze. Therefore, standardized methods for determining the optical parameter of image clarity are needed.

Paints and varnishes — Determination of image clarity (degree of sharpness of reflected or transmitted image)

1 Scope

This document specifies an instrumental method for determining the image clarity on paint films (coatings) by measuring reflection from the specimen surface or transmission through the specimen.

The method can be applied only to a flat surface.

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.

ISO 1513, *Paints and varnishes — Examination and preparation of test samples*

ISO 1514, *Paints and varnishes — Standard panels for testing*

ISO 2808, *Paints and varnishes — Determination of film thickness*

ISO 4618, *Paints and varnishes — Terms and definitions*

ISO 15528, *Paints, varnishes and raw materials for paints and varnishes — Sampling*

ISO 17221, *Plastics — Determination of image clarity (degree of sharpness of reflected or transmitted image)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4618 and the following 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

image clarity

degree of sharpness of an image reflected by a specimen or transmitted through a specimen

Note 1 to entry: Image clarity is expressed as a percentage (%).

[SOURCE: ISO 17221:2014, 3.1]

4 Principle

For the measurement of image clarity, a lamp illuminates the narrow source aperture-slit. The collimating lens projects a parallel beam upon the specimen. The image is either reflected from or transmitted through the specimen, as appropriate. The image is received by the de-collimating lens and focused upon the optical mask. The light passing through the optical mask is received by the light receptor. This resultant signal is processed yielding image clarity values.