

DIN EN ISO 2808



ICS 87.040

Supersedes
DIN EN ISO 2808:2007-05

**Paints and varnishes –
Determination of film thickness (ISO 2808:2019);
English version EN ISO 2808:2019,
English translation of DIN EN ISO 2808:2019-12**

Beschichtungsstoffe –
Bestimmung der Schichtdicke (ISO 2808:2019);
Englische Fassung EN ISO 2808:2019,
Englische Übersetzung von DIN EN ISO 2808:2019-12

Peintures et vernis –
Détermination de l'épaisseur du feuil (ISO 2808:2019);
Version anglaise EN ISO 2808:2019,
Traduction anglaise de DIN EN ISO 2808:2019-12

Document comprises 61 pages

Translation by DIN-Sprachendienst.

In case of doubt, the German-language original shall be considered authoritative.

A comma is used as the decimal marker.

National foreword

This document (EN ISO 2808:2019) has been prepared by Technical Committee ISO/TC 35 “Paints and varnishes”, in collaboration with Technical Committee CEN/TC 139 “Paints and varnishes” (Secretariat: DIN, Germany).

The responsible German body involved in its preparation was *DIN-Normenausschuss Beschichtungsstoffe und Beschichtungen* (DIN Standards Committee Coatings and Coating Materials), Working Group NA 002-00-07-10 AK “Film thickness” of Working Committee NA 002-00-07 AA “General test methods for coating materials and coatings”.

The measurement of the film thickness of a coating system consisting of base coat and clear coat may result in a higher film thickness due to the swelling of the base coat. It is a different matter when the film thickness of the baked base coat is measured first and the film thickness of the clear coat is measured subsequently and both values are added. If the film thickness of such a coating system is measured under different methods, attention should be paid to ensuring that the sample preparation is equal.

The German translations of the terms “calibration” (3.11), “verification” (3.12), “reference material” (3.13), “adjustment of a measuring system” (3.14) and “accuracy” (3.15) have been taken from: Burghart Brinkmann: *International vocabulary of metrology — Basic and general concepts and associated terms (VIM)*, Bilingual German-English version ISO/IEC Guide 99:2007, corrected version 2012, 4. Auflage 2012, Beuth Verlag GmbH.

The DIN documents corresponding to the international documents referred to in this document are as follows:

ISO 463	DIN EN ISO 463
ISO 1463	DIN EN ISO 1463
ISO 2178	DIN EN ISO 2178
ISO 2360	DIN EN ISO 2360
ISO 2811-1	DIN EN ISO 2811-1
ISO 2811-2	DIN EN ISO 2811-2
ISO 2811-3	DIN EN ISO 2811-3
ISO 2811-4	DIN EN ISO 2811-4
ISO 3233-1	DIN EN ISO 3233-1
ISO 3233-2	DIN EN ISO 3233-2
ISO 3233-3	DIN EN ISO 3233-3
ISO 3543	DIN EN ISO 3543
ISO 3611	DIN EN ISO 3611
ISO 3892	DIN EN ISO 3892
ISO 4518	DIN EN ISO 4518
ISO 4618	DIN EN ISO 4618
ISO 8130-2	DIN EN ISO 8130-2
ISO 8130-3	DIN EN ISO 8130-3
ISO 8503-1	DIN EN ISO 8503-1
ISO 13102	DIN EN ISO 13102
ISO 15189:2007	DIN EN ISO 15189:2014-11
ISO/TS 19397	DIN CEN ISO/TS 19397, DIN SPEC 55661
ISO 19399	DIN EN ISO 19399
ISO 25178-604	DIN EN ISO 25178-604

Amendments

This standard differs from DIN EN ISO 2808:2007-05 as follows:

- a) the definitions have been brought in line with the current editions of ISO 4618 and ISO Guide 99;
- b) the principle has been revised;
- c) white-light interferometry has been added as method 6C;
- d) the terahertz method has been added as method 11;
- e) the existing methods have been brought in line with the current state of metrology;
- f) the characterization of the methods and procedures in Annex A have been revised;
- g) information on the precision of the individual methods in Annex A has been adapted to current standards;
- h) the references to test standards and apparatus standards in Annex A have been updated;
- i) Clause 7 on the measurement of the film thickness on rough surfaces has been moved to an informative annex (Annex B);
- j) a new informative annex (Annex C) on factors which influence measuring accuracy when measurements are performed on wood has been added.

Previous editions

DIN EN ISO 2808: 1999-10, 2007-05

National Annex NA
(informative)

Bibliography

DIN CEN ISO/TS 19397, DIN SPEC 55661, *Determination of the film thickness of coatings using an ultrasonic gage*

DIN EN ISO 463, *Geometrical Product Specifications (GPS) — Dimensional metrological — Design and metrological characteristics of mechanical dial gauges*

DIN EN ISO 1463, *Metallic and oxide coatings — Measurement of coating thickness — Microscopical method*

DIN EN ISO 2178, *Non-magnetic coatings on magnetic substrates — Measurement of coating thickness — Magnetic method*

DIN EN ISO 2360, *Non-conductive coatings on non-magnetic electrically conductive basis materials — Measurement of coating thickness — Amplitude-sensitive eddy current method*

DIN EN ISO 2811-1, *Paints and varnishes — Determination of density — Part 1: Pycnometer method*

DIN EN ISO 2811-2, *Paints and varnishes — Determination of density — Part 2: Immersed body (plummet) method*

DIN EN ISO 2811-3, *Paints and varnishes — Determination of density — Part 3: Oscillation method*

DIN EN ISO 2811-4, *Paints and varnishes — Determination of density — Part 4: Pressure cup method*

DIN EN ISO 3233-1, *Paints and varnishes — Determination of percentage volume of non-volatile matter — Part 1: Method using a coated test panel to determine non-volatile matter and to determine dry-film density by the Archimedes principle*

DIN EN ISO 3233-2, *Paints and varnishes — Determination of percentage volume of non-volatile matter — Part 2: Method using the determination of non-volatile-matter content in accordance with ISO 3251 and determination of dry film density on coated test panels by the Archimedes principle*

DIN EN ISO 3233-3, *Paints and varnishes — Determination of percentage volume of non-volatile matter — Part 3: Determination by calculation from the non-volatile-matter content determined in accordance with ISO 3251, the density of the coating material and the density of the solvent in the coating material*

DIN EN ISO 3543, *Metallic and non-metallic coatings — Measurement of thickness — Beta backscatter method*

DIN EN ISO 3611, *Geometrical Product Specifications (GPS) — Dimensional measuring equipment: Micrometers for external measurements — Design and metrological characteristics*

DIN EN ISO 3892, *Conversion coatings on metallic materials — Determination of coating mass per unit area — Gravimetric methods*

DIN EN ISO 4518, *Metallic coatings — Measurement of coating thickness — Profilometric method*

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

DIN EN ISO 8130-2, *Coating powders — Part 2: Determination of density by gas comparison pyknometer (referee method)*

DIN EN ISO 8130-3, *Coating powders — Part 3: Determination of density by liquid displacement pyknometer*

DIN EN ISO 8503-1, *Preparation of steel substrates before application of paints and related products — Surface roughness characteristics of blast-cleaned steel substrates — Part 1: Specifications and definitions for ISO surface profile comparators for the assessment of abrasive blast-cleaned surfaces*

DIN EN ISO 13102, *Geometrical Product Specifications (GPS) — Dimensional measuring equipment: Electronic digital-indicator gauge — Design and metrological characteristics*

DIN EN ISO 15189:2014-11, *Medical laboratories — Requirements for quality and competence (ISO 15189:2012, corrected version 2014-08-15)*

DIN EN ISO 19399, *Paints and varnishes — Wedge-cut method for determination of film thickness (scribe and drill method)*

DIN EN ISO 25178-604, *Geometrical product specifications (GPS) — Surface texture: Areal — Part 604: Nominal characteristics of non-contact (coherence scanning interferometry) instruments*

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English Version

Paints and varnishes -
Determination of film thickness
(ISO 2808:2019)

Peintures et vernis -
Détermination de l'épaisseur du feuil
(ISO 2808:2019)

Beschichtungsstoffe -
Bestimmung der Schichtdicke
(ISO 2808:2019)

This European Standard was approved by CEN on 21 July 2019.

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