INTERNATIONAL STANDARD

ISO 2808

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Paints and varnishes — Determination of film thickness

Peintures et vernis — Détermination de l'épaisseur du feuil

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

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.

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.

ISO 2808 was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 9, *General test methods for paints and varnishes*.

This fourth edition cancels and replaces the third edition (ISO 2808:1997), which has been technically revised. The main changes are as follows:

a) The structure of the standard has been changed into four main clauses:

   1) determination of wet-film thickness;

   2) determination of dry-film thickness;

   3) determination of the thickness of uncured powder layers; and

   4) measurement of film thickness on rough surfaces.

b) Methods using photothermal, radiological and acoustic techniques have been added.

c) The split-beam method has been deleted as such instruments are no longer manufactured.

Introduction

Measurement of film thickness depends on the following steps:

a) calibration of the measurement instrument, typically performed by the manufacturer or by any qualified laboratory;

b) verification of the instrument (an accuracy check performed by the user at regular intervals, typically before each series of measurements);

c) subsequent adjustment, if necessary, of the instrument so that the thickness readings it gives match those of a specimen of known thickness. For a dry-film thickness gauge this would mean zeroing it on the uncoated surface, using devices of known thickness such as shims, or using a coated specimen of known film thickness;

d) measurement.