INTERNATIONAL STANDARD

ISO 6370-2

Third edition
2020-02

Vitreous and porcelain enamels — Determination of the resistance to abrasion —

Part 2: Loss in mass after sub-surface abrasion

Émaux vitrifiés — Détermination de la résistance à l'abrasion — Partie 2: Perte de masse après abrasion de la couche superficielle

Reference number
ISO 6370-2:2020(E)

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

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 107, *Metallic and other inorganic coatings*.

This third edition cancels and replaces the second edition (ISO 6370-2:2011), which has been technically revised. The main changes compared with the previous edition are as follows:

— terms and definitions have been added;

— sanidine (potassium feldspar) has been included as an additional abrasive option for testing;

— the requirements for steel balls have been amended.

A list of all parts in the ISO 6370 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.

Introduction

Extensive tests have shown that, with the comparative method described in this document, the uncertainty of measurement of test results is ± 5 %. Furthermore, absolute quantities for the amount of wear give little information, because abrasives used in practice differ considerably in their effect on enamelled surfaces. Each abrasion test with a standardized method can only be carried out with the aim of providing a general classification of various vitreous and porcelain enamels in relation to each other. Absolute quantities for the amount of wear are therefore not required.

Numerous tests have shown that the three required test periods of 30 min were sufficient to obtain comparable results. If the vitreous and porcelain enamel coat to be tested is thicker than 0,2 mm, it is not necessary to determine the loss in mass after each 30 min test period, because the abrasion under the conditions described in this document is directly proportional to the test duration.