

Third edition
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Paints and varnishes — Determination of resistance to abrasion —

Part 3: Method with abrasive-paper covered wheel and linearly reciprocating test specimen

*Peintures et vernis — Détermination de la résistance à l'abrasion —
Partie 3: Méthode utilisant une roue revêtue de papier abrasif et une
éprouvette animée d'un mouvement de va-et-vient linéaire*



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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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This document was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 9, *General test methods for paints and varnishes*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 139, *Paints and varnishes*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 7784-3:2016), which has been technically revised.

The main changes are as follows:

- details of the materials for the precision data have been added in [Table 2](#);
- ISO 7823-1 has been moved from [Clause 2](#) to the Bibliography;
- the percentage of the repeatability and reproducibility limits have been removed from [9.2](#) and [9.3](#), respectively.

A list of all parts in the ISO 7784 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.

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Introduction

This document is one of the three parts of the ISO 7784 series dealing with test methods for the determination of the resistance to abrasion of coatings using abrasive wheels. The characteristics and differences of these methods are summarized in [Table 1](#).

Table 1 — Types of method

Standard	Abrasive wheel		Test specimen movement
	Type	Degree of freedom	
ISO 7784-1	Abrasive paper on rubber wheel	Freely rotatable	Rotation
ISO 7784-2	Abrasive rubber wheel		
ISO 7784-3	Abrasive paper on metal wheel	Rigid – with stroke-dependent rotation ^a	Linear reciprocation

^a A mechanism rotates the abrasive wheel by a small angle after each double stroke so that a new area of the abrasive paper is effective.

It is preferable that the methods using abrasive-paper covered wheels (ISO 7784-1 and ISO 7784-3) are applied.