

INTERNATIONAL STANDARD

ISO
3160-3

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Watch cases and accessories — Gold alloy coverings —

Part 3:

Abrasion resistance tests of a type of coating on standard gauges

Boîtes de montres et leurs accessoires — Revêtements d'alliage d'or —

Partie 3: Essais de résistance à l'abrasion d'un type de revêtement sur éprouvettes normalisées



Reference number
ISO 3160-3:1993(E)

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.

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.

International Standard ISO 3160-3 was prepared by Technical Committee ISO/TC 114, *Horology*, Sub-Committee SC 6, *Precious metal coverings*.

ISO 3160 consists of the following parts, under the general title *Watch cases and accessories — Gold alloy coverings*:

- *Part 1: General requirements*
- *Part 2: Determination of fineness, thickness, corrosion resistance and adhesion*
- *Part 3: Abrasion resistance tests of a type of coating on standard gauges*

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Watch cases and accessories — Gold alloy coverings —

Part 3:

Abrasion resistance tests of a type of coating on standard gauges

1 Scope

This part of ISO 3160 specifies two test methods for wear and tear to be applied to a gold alloy coating in order to determine the degree of resistance to wear of this type of coating. The test methods are applicable to a standard gauge and not directly to objects treated with the tested type of coating. The quality level is compared to that of a standard gauge.

This part of ISO 3160 describes:

- dimensions and characteristics of the standard gauge,
- standard coating,
- test methods,
- determination of wear, and
- qualitative comparison scales.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 3160. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 3160 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 2361:1982, *Electrodeposited nickel coatings on magnetic and non-magnetic substrates — Measurement of coating thickness — Magnetic method.*

ISO 2819:1980, *Metallic coatings on metallic substrates — Electrodeposited and chemically deposited coatings — Review of methods available for testing adhesion.*

ISO 3160-1:1982, *Watch cases and accessories — Gold alloy coverings — Part 1: General requirements.*

ISO 3160-2:1992, *Watch cases and accessories — Gold alloy coverings — Part 2: Determination of fineness, thickness, corrosion resistance and adhesion.*

ISO 3497:1990, *Metallic coatings — Measurement of coating thickness — X-ray spectrometric methods.*

ISO 3543:1981, *Metallic and non-metallic coatings — Measurement of thickness — Beta backscatter method.*

ISO 4516:1980, *Metallic and related coatings — Vickers and Knoop microhardness tests.*

ISO 4524-5:1985, *Metallic coatings — Test methods for electrodeposited gold and gold alloy coatings — Part 5: Adhesion tests.*

3 Definitions

For the purposes of this part of ISO 3160, the following definitions apply.