INTERNATIONAL STANDARD

ISO 1502

Second edition
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ISO general-purpose metric screw threads — Gauges and gauging

Filetages métriques ISO pour usages généraux — Calibres à limites et vérification

Reference number
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Contents

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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.

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 1502 was prepared by Technical Committee ISO/TC 1, *Screw threads*, Subcommittee SC 4, *Verification*.

This second edition cancels and replaces the first edition (ISO 1502:1978), which has been technically revised.

Annex A of this International Standard is for information only.

ISO general-purpose metric screw threads — Gauges and gauging

1 Scope

This International Standard gives details for the manufacture and use of gauges for checking ISO general-purpose metric screw threads with a basic profile in accordance with ISO 68.

It specifies the features of the types of gauges (listed in 4.1 and 4.2) which are recommended for checking external and internal screw threads of workpieces and for the setting and checking of certain of the screw gauges.

It is recognized that other methods of checking may be used, for example measurements with indicating instruments. Checking with gauges in accordance with this International Standard is always decisive.

The aim of this International Standard is to provide means of distinguishing between workpiece threads that comply with the limits of size and those that do not.

In order to ensure the interchangeability of workpiece threads and to avoid disputes between the manufacturer and purchaser, the following principles should be applied:

a) the manufacturer should not deliver any workpiece thread whose actual thread size (e.g. pitch diameter and virtual pitch diameter) lies outside the specified limits;

b) the purchaser should not reject any workpiece thread whose actual thread size (e.g. pitch diameter and virtual pitch diameter) lies inside the specified limits.

In order to satisfy these two principles, this International Standard establishes requisite types and sizes of gauges for checking screw threads, the conditions under which these gauges are to be used, and rules for the inspection of the workpiece threads.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard 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 1:1975, *Standard reference temperature for industrial length measurements.*

ISO 68:—[1], *ISO general-purpose screw threads — Basic profile.*

ISO 1938-1:—[2], *Inspection of plain workpieces — Part 1: Plain limit gauges.*

3 Symbols and abbreviations

The symbols and abbreviations used in the text and figures in this International Standard are listed in table 1.

1) To be published. (Revision of ISO 68:1973)

2) To be published.