

INTERNATIONAL STANDARD

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Draughting instruments with or without graduation —

Part 1: **Draughting scale rules**

*Instruments de dessin avec ou sans graduation —
Partie 1: Règles graduées de dessinateurs*



Reference number
ISO 9960-1:1992(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 9960-1 was prepared by Technical Committee ISO/TC 10, *Technical drawings, product definition and related documentation*, Sub-Committee SC 9, *Media and equipment for drawing and related documentation*.

ISO 9960 consists of the following parts, under the general title *Draughting instruments with or without graduation*:

- *Part 1: Draughting scale rules*
- *Part 2: Protractors*
- *Part 3: Set squares*

Annex A of this part of ISO 9960 is for information only.

Draughting instruments with or without graduation —

Part 1:

Draughting scale rules

1 Scope

This part of ISO 9960 specifies the main requirements and the accuracy of draughting scale rules, and their graduations in SI units (International System of Units).

Two types of draughting scale rule are covered: those for hand use and those for manually operated draughting machines, both for professional use only. Scale rules for use in schools are not included.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 9960. 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 9960 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 554:1976, *Standard atmospheres for conditioning and/or testing — Specifications*.

ISO 3098-1:1974, *Technical drawings — Lettering — Part 1: Currently used characters*.

ISO 9962-3:—¹⁾, *Manually operated draughting machines — Part 3: Dimensions of scale rule chuck plates*.

3 Definitions

For the purposes of this part of ISO 9960, the following definitions apply.

3.1 graduation: Division lines and figuring. The graduation may be engraved in black.

3.2 major divisions: Lines along the edge of a scale rule defining the major units.

3.3 figuring: Numbering and lettering on a scale rule identifying the values of the major divisions.

3.4 division lines: Lines along the edge of a scale rule, including both the major divisions and the lines subdividing the major divisions.

3.5 (draughting) scale rule: Parallel-sided draughting instrument on which graduations are applied.

Draughting scale rules are used to draw straight lines and/or to measure distances on drawings which can be either full scale, reduced or enlarged with respect to the object to be shown.

3.6 scale: Ratio of the linear dimension of an element of an object as represented in the original drawing²⁾ to the real linear dimension of the same element of the object itself.

NOTE 1 The scale of a print may be different from that of the original drawing (see ISO 5455^[1]).

3.7 nominal length (of the scale rule): Graduated length of the scale rule.

1) To be published.

2) Term defined in ISO 10209-1^[5].