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Gauge blocks

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Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee, as the result of proposal for revision of Japanese Industrial Standard submitted by Japan Precision Measuring Instruments Association (JMA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently **JIS B 7506:1997** is replaced with this Standard.

This Standard has been made based on **ISO 3650:1998** *Geometrical Product Specifications (GPS) — Length standards — Gauge blocks* for the purposes of making it easier to compare this Standard with International Standard; to prepare Japanese Industrial Standard conforming with International Standard; and to propose a draft of an International Standard which is based on Japanese Industrial Standard. Attention is drawn to the possibility that some parts of this Standard may conflict with a patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have technical properties. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying the patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have the said technical properties.

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In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

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Gauge blocks

Introduction This Japanese Industrial Standard has been prepared based on the first edition of **ISO 3650 Geometrical Product Specifications (GPS) — Length standards — Gauge blocks** published in 1998, the corresponding parts of which are adopted without modification in the technical contents. On the other hand, the items not specified in the International Standard have been added, main contents of which are shown in **a)** to **c)** below.

In this Standard, the portions with sidelines or dotted underlines are the items not contained in the original International Standard or items added. A list of modifications with the explanation is shown in annex 5 (informative).

- a) Reference condition: standard water vapour pressure and standard carbon dioxide content
- b) Correction items for interferometry: carbon dioxide content
- c) Length inspection certificate or grade inspection certificate for gauge blocks

1 Scope This Standard specifies the gauge blocks with rectangular cross section, nominal length ranging from 0.5 mm to 1 000 mm and of calibration grade K and of grade 0, 1 and 2.

The accessories of gauge blocks are specified in annex 1.

Remarks : The International Standard corresponding to this Standard is as follows.

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standard and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21**.

ISO 3650:1998 *Geometrical Product Specifications (GPS) — Length standards — Gauge blocks* (MOD)

2 Normative references The following standards contain provision which, through reference in this Standard, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS B 0021 *Geometrical product specifications (GPS) — Geometrical tolerancing — Tolerancing of form, orientation, location and run-out*

Remarks : **ISO/DIS 1101:1996 Geometrical Product Specifications (GPS) — Geometrical tolerancing — Tolerancing of form, orientation, location and run-out** is identical with the said standard.

JIS B 0641-1 *Geometrical Product Specifications (GPS) — Inspection by measurement of workpieces and measuring equipment — Part 1: Decision rules for proving conformance or nonconformance with specifications*

Remarks : **ISO 14253-1:1998 Geometrical Product Specifications (GPS) — Inspection by measurement of workpieces and measuring equipment — Part 1: Decision rules for proving conformance or non-conformance with specifications** is identical with the said standard.