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Geometrical Product Specifications (GPS)—Acceptance and reverification tests for coordinate measuring machines (CMM)—Part 1 : Vocabulary

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Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal of establishing a Japanese Industrial Standard from Japanese Standards Association (JSA), with a draft of Industrial Standard based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

This Standard has been made based on **ISO 10360-1** : 2000 *Geometrical Product Specifications (GPS)—Acceptance and reverification tests for coordinate measuring machines (CMM)—Part 1 : Vocabulary* 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.

JIS B 7440 consists of the following 6 parts under the general title *Geometrical Product Specifications (GPS)—Acceptance and reverification tests for coordinate measuring machines (CMM).*

Part 1 : Vocabulary
Part 2 : CMMs used for measuring size
Part 3 : CMMs with the axis of a rotary table as the fourth axis
Part 4 : CMMs used in scanning measuring mode
Part 5 : CMMs using multiple-stylus probing systems
Part 6 : Estimation of errors in computing Gaussian associated features

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

Contents

Geometrical Product Specifications (GPS)—Acceptance and reverification tests for coordinate measuring machines (CMM)—Part 1 : Vocabulary

Introduction This Standard is the Japanese Industrial Standard prepared based on **ISO 10360-1** *Geometrical Product Specifications (GPS)—Part 1 : Vocabulary* published in 2000 as the first edition without modifying their technical contents.

The "information" underlined with dots are the matters not stated in the original International Standard.

This Standard is a geometrical product specification (GPS) standard and is to be regarded as a general GPS standard (see **TR B 0007**). It influences link 5 of the chains of standards on size, distance, radius, angle, form, orientation, location, run-out and datums.

For more detailed information of the relation of this Standard to other standards and the GPS matrix model see annex B.

1 Scope This Standard specifies a vocabulary for coordinate measuring machines (CMM), and their acceptance and reverification tests.

Remarks : The International Standards corresponding to this Standard are given below.

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 10360-1 : 2000 *Geometrical product specifications (GPS)—Acceptance and reverification tests for coordinate measuring machines (CMM)—Part 1 : Vocabulary* (IDT)

2 General terms

2.1 coordinate measuring machine (CMM) measuring system with the means to move a **probing system (2.6)** and capability to determine spatial coordinates on a workpiece surface

NOTE : For a description of some common CMMs and their physical axes, see annex A.

Information : Coordinate measuring machine is normally call as three dimensional measuring machine, although in this Standard it will be called as coordinate measuring machine taking into account its generic nature.

2.2 coordinate measurement measurement of spatial coordinates carried out by **CMM (2.1)**