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**Geometrical product specifications (GPS)  
— General concepts and requirements for  
GPS measuring equipment**

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## Foreword

This Japanese Industrial Standard has been revised by the Minister of Economy, Trade and Industry based on the provision of Article 14, paragraph (1) of the Industrial Standardization Act applied mutatis mutandis pursuant to the provision of Article 16 of the said Act in response to a proposal for revision of Japanese Industrial Standard with a draft being attached, submitted by Japanese Standards Association (JSA), an accredited standards development organization. This edition replaces the previous edition (**JIS B 0642** : 2010), which has been technically revised.

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# Geometrical product specifications (GPS) — General concepts and requirements for GPS measuring equipment

## Introduction

This Japanese Industrial Standard has been prepared based on **ISO 14978** : 2018, Edition 2, with some modifications of the technical contents.

The dotted underlines indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JA.

This Standard is a geometrical product specification (GPS) standard and is to be regarded as a general GPS standard (see **JIS B 0661**). It influences chain links F and G for measuring equipment and calibration in the general GPS matrix model (see Annex E).

The GPS matrix model given in **JIS B 0661** gives an overview of the GPS system of which this Standard is a part. The fundamental rules of GPS given in **JIS B 0024** apply to this Standard and the default decision rules given in this Standard apply to GPS specifications made in accordance with this Standard, unless otherwise indicated. See **JIS B 0641-1**, Annex JA for additional information on the selection of alternative decision rules.

For more detailed information of the relation of this Standard to other standards and the GPS matrix model, see Annex E.

This Standard contains guidance for writing the standards for specific GPS measuring equipment.

NOTE GPS measuring equipment includes, for example, micrometers, callipers, gauge blocks and rotary axis form measuring instruments.

This Standard is intended to give the user a basic understanding of the use of **JISs** for GPS measuring equipment. This Standard presents and defines general concepts to be used in connection with GPS measuring equipment to avoid multiple repetitions in the **JISs** for specific GPS measuring equipment. This Standard is also intended as guidance for the manufacturer/supplier to evaluate and present specifications for characteristics for GPS measuring equipment.

This Standard is necessary when reading and using **JISs** for specific GPS measuring equipment.

## 1 Scope

This Standard specifies the general requirements, calibration, terms and definitions of characteristics of GPS measuring equipment, for example micrometers, callipers, gauge blocks and rotary axis form measuring instruments. This Standard forms the