

# JIS

**JAPANESE INDUSTRIAL STANDARD**

**General tolerances — Part 2.  
Geometrical tolerances for  
features without individual  
tolerance indications**

**JIS B 0419**<sup>—1991</sup>

(ISO 2768-2 : 1989)

**Translated and Published**

**by**

**Japanese Standards Association**

In the event of any doubt arising,  
the original Standard in Japanese is to be final authority.

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**General tolerances — Part 2: Geometrical**  
**tolerances for features without**  
**individual tolerance indications**

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**B 0419-1991**  
**(ISO 2768-2: 1989)**

### **Foreword as the Japanese Industrial Standard**

This Standard is the Japanese Industrial Standard drawn up without changing the technical contents and the form of copy of Standard, translating the ISO 2768-2 (General tolerances-Part 2: Geometrical tolerances for features without individual tolerance indications) published on 1989 as the first edition.

Furthermore, "Informative References" being attached with side lines (dotted lines) in this Standard are the matters not included in the original International Standard.

### **Introduction**

All features on component parts always have a size and a geometrical shape. For the deviation of size and for the deviations of the geometrical characteristics (form, orientation and location) the function of the part requires limitations which, when exceeded, impair this function.

The tolerancing on the drawing should be complete to ensure that the elements of size and geometry of all features are controlled, i.e. nothing shall be implied or left to judgement in the workshop or in the inspection department.

The use of general tolerances for size and geometry simplifies the task of ensuring that this prerequisite is met.

#### **1. Scope**

This Japanese Industrial Standard is intended to simplify drawing indications and specifies general geometrical tolerances to control those features on the drawing which have no respective individual indication. It specifies general geometrical tolerances in three tolerance classes.

This Standard mainly applies to features which are produced by removal of material. Its application to features manufactured by other processes is possible; however special examination is required to ascertain whether the customary workshop accuracy lies within the general geometrical tolerances specified in this Standard.

#### **2. General**

When selecting the tolerance class, the respective customary workshop accuracies have to be taken into consideration. If smaller geometrical tolerances are required or larger geometrical tolerances are permissible and more economical for any individual feature, such tolerances should be indicated directly in accordance with ISO 1101 (see A.2 of Annex).

Informative reference: The contents of specification of ISO 1101 are equal to JIS B 0021-1984 (Indication of geometrical tolerances on drawings).