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**Cylindrical gears for general engineering
and for heavy engineering — Part 2:
Module**

ICS 21.200

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In the event of any doubts arising as to the contents,
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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 Gear Manufacturers Association (JGMA)/Japanese Standards Association (JSA) 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 1701-2:1999** is replaced with this Standard.

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JIS B 1701 series consist of the following 2 parts under the general title “*Cylindrical gears for general engineering and for heavy engineering*” :

Part 1 : Standard basic rack tooth profile

Part 2 : Module

Cylindrical gears for general engineering and for heavy engineering — Part 2 : Module

Introduction

This Japanese Industrial Standard has been prepared based on the second edition of ISO 54 published in 1996, with some modifications of the technical contents such as alteration of the definition of module to clearly identify the object of this Standard as normal module, and updating of the values of small module gears which were added to JIS in response to the domestic demand.

The vertical lines on both sides and dotted underlines indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JA.

1 Scope

This Standard specifies the values of normal modules for involute spur gears and helical gears for general engineering and heavy engineering.

This Standard is not applicable to gears used in automotive field.

NOTE : The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 54 : 1996 *Cylindrical gears for general engineering and for heavy engineering — Modules (MOD)*

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 21-1.

2 Term and definition

For the purposes of this Standard, the following term and definition apply.

2.1 normal module

quotient of the pitch at the normal plane of a basic rack defining the tooth profile, to the number π

For the definition of standard basic rack tooth profile, see JIS B 1701-1.

NOTE : Transverse module, as opposed to normal module, is the quotient of the reference diameter divided by the number of teeth (module at the transverse plane). Normal and transverse modules values are different for helical gears, while they are the same for spur gears.

3 Values

Normal modules are shown in Table 1. Preference should be given to the use of the