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**Solid hardmetal ball-nosed end
mills with cylindrical shanks—
Dimensions**

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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 The Japan Solid Cutting Tools' Association (JSCTA)/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 4118:2005** is replaced with this Standard.

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Solid hardmetal ball-nosed end mills with cylindrical shanks— Dimensions

Introduction

This Japanese Industrial Standard has been prepared based on the second edition of **ISO 15917** published in 2012 with some modifications of the technical contents to conform to the actual situation in Japan.

The portions with continuous sidelines or dotted underlines are the matters not given in the corresponding International Standard. A list of modifications with the explanations is given in Annex JA.

1 Scope

This Standard specifies shapes and dimensions of solid hardmetal ball-nosed end mills with cylindrical shanks (hereafter referred to as “ball-nosed end mills”).

The applicable material shall be super hard alloy, which is a generic term for hardmetal, cermet, ultrafine particle hardmetal, and alloy obtained by covering them with carbides, nitrides, oxides, etc., specified in **JIS B 4053**.

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

ISO 15917:2012 *Solid ball-nosed end mills with cylindrical shanks, made of carbide and ceramic materials* (MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standards and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.

2 Normative references

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

JIS B 0172 *Glossary of terms for milling cutters*

JIS B 0401-2 *ISO system of limits and fits—Part 2: Tables of standard tolerance grades and limit deviations for holes and shafts*

NOTE : Corresponding International Standard: ISO 286-2 *ISO system of limits and fits—Part 2: Tables of standard tolerance grades and limit deviations for holes and shafts* (IDT)

JIS B 4053 *Classification and application of hard cutting materials for metal removal with defined cutting edges—Designation of the main groups and groups of application*