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

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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 for establishment of Japanese Industrial Standard submitted by The Japan Magnesium Association (JMA)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, applications for a patent after opening to the public or utility model rights. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, applications for a patent after opening to the public or utility model rights.

Testing method of determining bendability for magnesium alloy sheets

1 Scope

This Japanese Industrial Standard specifies the bend test method for determining the bendability at room temperature for the symbol of MP1B among the magnesium alloy sheets and plates (hereafter referred to as "sheet") and the magnesium alloy strips and coiled sheets (hereafter referred to as "strip") specified in **JIS H 4201** having the thickness of 0.5 mm to 1.0 mm.

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 H 4201 *Magnesium alloy sheets, plates, strips and coiled sheets*

JIS R 6252 *Abrasive papers*

JIS Z 2248 *Metallic materials — Bend test*

JIS Z 2343-1 *Non-destructive testing — Penetrant testing — Part 1 : General principles — Method for liquid penetrant testing and classification of the penetrant indication*

JIS Z 8401 *Guide to the rounding of numbers*

3 Terms and definitions

For the purpose of this Standard, the following terms and definitions apply.

3.1 formability

the degree of capability for being formed into a required shape without generating cracks

3.2 bendability

the degree of capability for being bent without generating cracks

4 Principle

A test piece (thickness t) placed on a die which is according to the bend test by V-block method specified in **JIS Z 2248** having a V-shape groove of 90° as shown in figure 1 is pushed down by a punch (90° in point angle and R_p in radius of point roundness) and bent until the test piece closely contacts with the 45° inclined surfaces of the die and the punch at room temperature. Several punches whose radius of point roundness is made various in a stepwise manner are prepared. The minimum radius of point