



JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS H 4202 : 2011

(JMA/JSA)

**Magnesium alloy seamless pipes and
tubes**

ICS 23.040.15;77.150.20

Reference number : JIS H 4202 : 2011 (E)

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H 4202 : 2011

Date of Establishment: 1964-03-01

Date of Revision: 2011-08-22

Date of Public Notice in Official Gazette: 2011-08-22

Investigated by: Japanese Industrial Standards Committee

Standards Board

Technical Committee on Non-Ferrous Metals

JIS H 4202 : 2011, First English edition published in 2012-04

Translated and published by: Japanese Standards Association
4-1-24, Akasaka, Minato-ku, Tokyo, 107-8440 JAPAN

In the event of any doubts arising as to the contents,
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Printed in Japan

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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 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 applicable to the case of revision by the provision of Article 14.

Consequently **JIS H 4202 : 2005** is replaced with this Standard.

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Magnesium alloy seamless pipes and tubes

Introduction

This Japanese Industrial Standard has been prepared based on the fourth edition of **ISO 3116** published in 2007 and the first edition of **ISO 7773** published in 1983 with some modifications of the technical contents.

The portions given dotted underlines are the matters in which the contents of the corresponding International Standards have been modified. A list of modifications with the explanations is given in Annex JA.

1 Scope

This Standard specifies the magnesium alloy seamless pipes and tubes with a circular cross section manufactured by the extrusion (hereafter referred to as "tubes").

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

ISO 3116 : 2007 *Magnesium and magnesium alloys — Wrought magnesium alloys*

ISO 7773 : 1983 *Magnesium alloys — Round bars and tubes — Dimensional tolerances* (Overall evaluation : 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 H 0001 *Aluminium, magnesium and their alloys — Temper designation*

JIS H 0321 *General rules for inspection of non-ferrous metal materials*

JIS H 1332 *Methods for determination of aluminium in magnesium and magnesium alloys*

JIS H 1333 *Methods for determination of zinc in magnesium and magnesium alloys*

JIS H 1334 *Methods for determination of manganese in magnesium and magnesium alloys*

JIS H 1335 *Methods for determination of silicon in magnesium and magnesium alloys*

JIS H 1336 *Methods for determination of copper in magnesium and magnesium alloys*

JIS H 1337 *Method for determination of nickel in magnesium and magnesium alloys*

JIS H 1338 *Methods for determination of iron in magnesium and magnesium alloys*

JIS H 1340 *Methods for determination of zirconium in magnesium alloys*

JIS H 1341 *Method for determination of calcium in magnesium alloys*

JIS Z 2241 *Metallic materials — Tensile testing — Method of test at room temperature*

NOTE : Corresponding International Standard : ISO 6892-1 *Metallic materials — Tensile testing — Part 1 : Method of test at room temperature* (MOD)

3 Term and definition

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

3.1 tube

a hollow wrought product with a circular cross section having a hollow over the length, and a uniform cross section and wall thickness

4 Classification and symbol

The classification and symbol shall be as given in table 1.

Table 1 Classification and symbol

Classification	Symbol	Corresponding symbol of ISO
Class 1 B	MT1B	ISO-MgAl3Zn1(A)
Class 1 C	MT1C	ISO-MgAl3Zn1(B)
Class 2	MT2	ISO-MgAl6Zn1
Class 3	MT3	ISO-MgAl8Zn
Class 5	MT5	ISO-MgZn3Zr
Class 6	MT6	ISO-MgZn6Zr
Class 8	MT8	ISO-MgMn2
Class 9	MT9	ISO-MgZn2Mn1
The temper designation of table 3 shall be attached to the symbol above with a hyphen "-". Example : MT1B-F		

5 Quality

5.1 Appearance

The tubes shall be straight and free from flaws, cracks and other defects detrimental to use.