

JAPANESE
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STANDARD

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JIS Z 3317 : 1999

**MAG welding solid wires
for molybdenum steel and
chromium molybdenum steel**

ICS 25.160.20

Descriptors : molybdenum steels, chromium steels, wires, metal-arc welding, gas-shielded welding, filler wire, arc welding

Reference number : JIS Z 3317 : 1999 (E)

Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of International Trade and Industry through deliberations at the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law. Consequently **JIS Z 3317 : 1991** is replaced with **JIS Z 3317 : 1999**.

Attention is drawn to the possibility that some parts of this Standard may conflict with a patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have technical properties. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying the patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have the said technical properties.

In this revision, **JIS Z 3200** is used as a normative reference following the establishment of **JIS Z 3200** wherein dimensions, tolerances, the condition of products, marking and packaging are specified.

Date of Establishment: 1985-04-01

Date of Revision: 1999-09-20

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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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MAG welding solid wires for molybdenum steel and chromium molybdenum steel

1 Scope This Japanese Industrial Standard specifies solid wires used for MAG welding of molybdenum steel and chromium molybdenum steel (hereafter referred to as "wires").

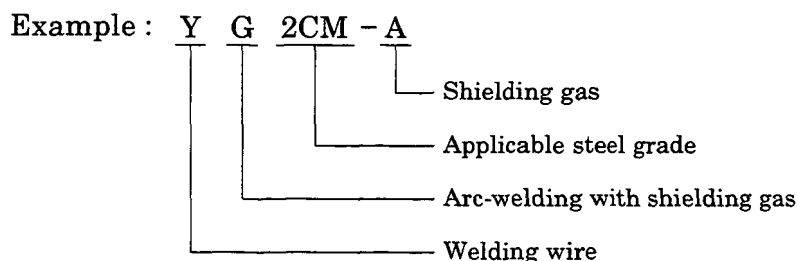
2 Normative references The standards given in Attached Table 1 contain provisions which, through reference in this Standard, constitute provisions of this Standard. The most recent editions of the standards shall be applied.

3 Classification The classification of wires shall be as given in Table 1 based on the shielding gas and the applicable steel grade.

Table 1 Classification of wires

Classification	Shielding gas	Applicable steel grade
YGM-C	Carbon dioxide (CO ₂)	0.5 % Mo steel
YGM-A	Mixed gas of 80 % argon and 20 % carbon dioxide (80Ar-20CO ₂)	
YGM-G	Not specified	
YGCM-C	Carbon dioxide (CO ₂)	0.5 % Cr ⁻ 0.5 % Mo steel
YGCM-A	Mixed gas of 80 % argon and 20 % carbon dioxide (80Ar-20CO ₂)	
YGCM-G	Not specified	
YG1CM-C	Carbon dioxide (CO ₂)	1 % Cr ⁻ 0.5 % Mo steel, 1.25 % Cr ⁻ 0.5 % Mo steel
YG1CM-A	Mixed gas of 80 % argon and 20 % carbon dioxide (80Ar-20CO ₂)	
YG1CM-G	Not specified	
YG2CM-C	Carbon dioxide (CO ₂)	2.25 % Cr ⁻ 1 % Mo steel
YG2CM-A	Mixed gas of 80 % argon and 20 % carbon dioxide (80Ar-20CO ₂)	
YG2CM-G	Not specified	
YG3CM-C	Carbon dioxide (CO ₂)	3 % Cr ⁻ 1 % Mo steel
YG3CM-A	Mixed gas of 80 % argon and 20 % carbon dioxide (80Ar-20CO ₂)	
YG3CM-G	Not specified	
YG5CM-C	Carbon dioxide (CO ₂)	5 % Cr ⁻ 0.5 % Mo steel
YG5CM-A	Mixed gas of 80 % argon and 20 % carbon dioxide (80Ar-20CO ₂)	
YG5CM-G	Not specified	

Remarks : The symbols used for classification of wires shall be as follows.



4 Quality

4.1 Appearance The appearance of wires shall be specified in 3 of JIS Z 3200.

4.2 Chemical composition The chemical composition of wires shall conform to Table 2 when tested in accordance with the method in 7.2.