



JAPANESE
INDUSTRIAL
STANDARD

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JIS Z 3319 : 1999

**Flux cored wires for electrogas
arc welding**

ICS 25.160.20

Descriptors : gas-shielded welding, fluxes (materials), filler wire, welding rods,
welding electrodes

Reference number : JIS Z 3319 : 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 3319 : 1991** is replaced with **JIS Z 3319 : 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.

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Divisional Council on Welding

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In the event of any doubts arising as to the contents,
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Flux cored wires for electrogas arc welding

1 Scope This Japanese Industrial Standard specifies flux cored wires (hereafter referred to as "wires") used for electrogas arc welding of low carbon steel, 490 N/mm² high strength steel, 590 N/mm² high strength steel, and carbon steel for low temperature service.

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
YFEG-11C	Carbon dioxide (CO ₂)	Low carbon steel
YFEG-21C	Carbon dioxide (CO ₂)	Low carbon steel and 490 N/mm ² high strength steel
YFEG-22C		
YFEG-20G		
YFEG-31C	Carbon dioxide (CO ₂)	590 N/mm ² high strength steel
YFEG-32C		
YFEG-30G		
YFEG-41C	Carbon dioxide (CO ₂)	Carbon steel for low temperature service
YFEG-42C		
YFEG-41A		
YFEG-42A	Mixed gas of 80 % argon and 20 % carbon dioxide (80Ar-20CO ₂)	

Remarks : The symbol for classification of wires is as given in the following example:

Example : Y F EG-11 C

Y — Weld wire
 F — Flux cored wire
 EG — Electrogas arc welding
 11 — Classification of applicable steel grade and chemical composition of weld metal
 C — Type of shielding gas