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**Plastics—Determination
of creep behaviour—
Part 2 : Flexural creep
by three-point loading**

ICS 83.080.01

Descriptors : plastics, creep testing, bend testing

Reference number : JIS K 7116 : 1999 (E)

K 7116 : 1999 (ISO 899-2 : 1993)

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 K 7116 : 1987** is replaced with **JIS K 7116 : 1999**.

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Plastics—Determination of creep behaviour—Part 2 : Flexural creep by three-point loading

Introduction This Japanese Industrial Standard has been prepared based on the first edition of **ISO 899-2** *Plastics—Determination of creep behaviour—Part 2: Flexural creep by three-point loading* published in 1993 without changing the technical contents.

The portions underlined with dots are the matters not specified in the original International Standard.

1 Scope

1.1 This Standard specifies a method for determining the flexural creep of plastics in the form of standard test specimens under specified conditions such as those of pretreatment, temperature and humidity. It applies only to a simple freely supported beam loaded at mid-span (three-point-loading test).

1.2 The method is suitable for use with rigid and semi-rigid non-reinforced, filled and fibre-reinforced plastics materials (see **JIS K 6900** : 1994) in the form of rectangular bars moulded directly or cut from sheets or moulded articles.

NOTE The method may be unsuitable for certain fibre-reinforced materials due to differences in fibre orientation.

1.3 The method is intended to provide data for engineering-design and research and development purposes.

1.4 Flexural creep may vary significantly with differences in specimen preparation and dimensions and in the test environment. The thermal history of the test specimen can also have profound effects on its creep behaviour (see annex A). Consequently, when precise comparative results are required, these factors must be carefully controlled.

1.5 If flexural-creep properties are to be used for engineering-design purposes, the plastics materials should be tested over a broad range of stresses, times and environmental conditions.

1.6 The method may not be suitable for determining the flexural creep of rigid cellular plastics (attention is drawn in this respect to **ISO 1209-1** : 1990, *Cellular plastics, rigid—Flexural tests—Part 1 : Bending test*, and **ISO 1209-2** : 1990, *Cellular plastics, rigid—Flexural test—Part 2 : Determination of flexural properties*)

2 Normative references The following standards contain provisions which, through reference in this Standard, constitute provisions of this Standard. If the indication of the year of coming into effect (or the year of publication) is given to these referred standards, only the edition of indicated year constitutes the provision of this Standard but the revision and amendment made thereafter are not applied.