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(JPIF/JSA)

Plastics — Determination of compressive properties

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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 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 Plastics Industry Federation (JPIF)/ 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 K 7181:1994 is replaced with this Standard.

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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 or utility model right. 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 or the utility model right.

Plastics — Determination of compressive properties

JIS K 7181: 2011

Introduction

This Japanese Industrial Standard has been prepared based on the third edition of ISO 604 published in 2002 with some modifications of the technical contents.

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

1 Scope

This Standard specifies a method for determining the compressive properties of plastics (compressive strength, compressive modulus and compressive stress/strain curves) under defined conditions. A range of test speed is included.

The method applies to the following range of materials:

- rigid and semi-rigid (JIS K 6900) thermoplastic moulding and extrusion materials, including compounds filled and reinforced by e.g. short fibres, small rods, plates or granules in addition to unfilled types; rigid and semi-rigid thermoplastic sheet;
- rigid and semi-rigid thermoset moulding materials, including filled and reinforced compounds; rigid and semi-rigid thermoset sheet;
- thermoplastic liquid-crystal polymers.

In agreement with JIS K 7140-1 and JIS K 7140-2, this Standard applies to fibre-reinforced compounds with fibre lengths ≤ 7.5 mm prior to processing.

The method is not normally suitable for use with materials reinforced by textile fibres (ISO 3597-3 and JIS K 7018), fibre-reinforced plastic composites and laminates (JIS K 7018), rigid cellular materials (JIS K 7132) or sandwich structures containing cellular material or rubber (JIS K 6254).

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

ISO 604: 2002 Plastics — Determination of compressive properties (MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standard 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 (in-