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Plastics—Determination of tensile-impact strength

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Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of International Trade and Industry through deliberations at Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law:

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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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Plastics — Determination of tensile-impact strength

Foreword for Japanese Industrial Standard

This Japanese Industrial Standard has been prepared based on the first edition issued in 1990 of **ISO 8256**, *Plastics* — *Determination of tensile-impact strength*, without modifying the technical contents.

The portions underlined with dots in this Standard are items not included in the original International Standard.

1 Scope

- 1.1 This Japanese Industrial Standard specifies two methods for the determination of the energy required to rupture test specimens of plastics under a specified tensile-impact velocity. The tests can be described as tensile tests at comparatively high rates of straining. These methods can be used for materials too flexible or too thin to be tested with impact tests conforming to ISO 179 (Charpy impact test) and ISO 180 (Izod impact test), and for more rigid materials. Different parameters are specified depending on the type of test specimen (see 6.1 and Fig. 3).
- 1.2 These methods are used for investigating the behaviour of specified specimens under specified impact velocities, and for estimating the brittleness or the toughness of specimens within the limitations inherent in the test condition. The response of plastics to comparatively high rates of straining is useful to describe, for example, the behaviour of materials when subjected to weathering or thermal ageing, as well as to assess their properties under corresponding service conditions.
- 1.3 These methods are applicable to specimens prepared from moulding materials or to specimens taken from finished or semi-finished products (for example mouldings, films, laminates or extruded or cast sheets). The methods are suitable for production control as well as for quality control. Test results gained on test specimens obtained from moulding compounds cannot be applied directly to mouldings of any given shape, because values may depend on the design of the moulding and the moulding conditions.
- 1.4 Results obtained by testing moulded specimens of different dimensions may not necessarily be the same. Equally, specimens cut from moulded products may not give the same results as specimens of the same dimensions moulded directly from the material. Results obtained by method A and method B may or may not be comparable.
- 1.5 These methods are not suitable for use as a source of data for design calculations on components. Information on the typical behaviour of a material can be obtained, however, by testing different types of test specimen prepared under different conditions, and testing at different temperatures.