

JIS

JAPANESE INDUSTRIAL STANDARD

**Testing method for multiaxial
impact behaviour of carbon
fibre reinforced plastics**

JIS K 7085—1993

Translated and Published

by

Japanese Standards Association

In the event of any doubt arising,
the original Standard in Japanese is to be final authority.

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Testing method for multiaxial impact behaviour
of carbon fibre reinforced plastics

K 7085-1993

1. Scope This Japanese Industrial Standard specifies the testing method for multiaxial impact behaviour of carbon fibre reinforced plastics (hereafter referred to as "CFRP").

Remarks 1. The standards cited in this Standard are as follows:

JIS B 0601 Surface roughness—Definitions and designation

JIS B 7502 Micrometer callipers for external measurement

JIS K 6900 Glossary of terms used in plastic industry

JIS K 7072 Preparation of carbon fibre reinforced plastic panels for test purpose

JIS K 7100 Standard atmospheres for conditioning and testing of plastics

JIS Z 8401 Rules for rounding off of numerical values

2. The units given in { } in this Standard are based on the traditional units and are appended for informative reference.

2. Definitions For the main terms used in this Standard the definitions in JIS K 6900 apply, and the rest of the terms shall be as follows:

- (1) striker The apparatus which consists of the loading nose with hemispherical striking surface, the load sensor and the weight, to load the impact to the test specimen.
- (2) diameter of striker The diameter of the cylindrical and hemispherical surface parts of loading nose (tip) part of striker.
- (3) diameter of clamping ring and supporting frame for test specimen The inside diameter of the clamping ring and the supporting frame for the test specimen.
- (4) impact velocity The striker velocity when the striker contacts with the test specimen.
- (5) height of fall The distance from the surface of the test specimen to the loading nose of the striker which is fixed at the specified height.
- (6) impact energy The loading energy applied to the test specimen.
- (7) impact load The load applied to the test specimen during the test.
- (8) deflection The moving length of the center part of the test specimen after the striker contacts with the test specimen.
- (9) maximum load The maximum load obtained by the load-time diagram or the load-deflection diagram.
- (10) initial fracture The fracture when initial crack is generated on the test specimen.