

JIS

JAPANESE INDUSTRIAL STANDARD

**Testing Methods for Sliding
Wear Resistance of Plastics**

JIS K 7218^{—1986}

Translated and Published

by

Japanese Standards Association

Translation without guarantee
In the event of any doubt arising, the original
standard in Japanese is to be evidence

JAPANESE INDUSTRIAL STANDARD

Testing Methods for Sliding Wear Resistance of Plastics

JIS
K 7218-19861. Scope

This Japanese Industrial Standard specifies the testing methods for sliding wear resistance (hereinafter referred to as "wear test") of plastics.

- Remarks:
1. Where the sliding wear resistance characteristic of plastic materials is compared, the manufacturing method of test piece, the shape of test piece, the testing method, the estimating method and the like shall be carried out under the same conditions.
 2. The units and the numerical values given in { } in this standard are in accordance with the conventional system of units, and are appended for reference.

2. Definitions

For the purposes of this standard, the following definitions apply. Other terms and the definitions are given in JIS K 6900.

- (1) sliding wear Gradual separation of one body from the surface of the other body by the resisting force (friction) that acts in the case where one body slides on the other body without rolling.
- (2) wear test To measure the amount of wear after wearing the test piece by use of the specified wear test machine.
- (3) amount of wear Volume of test piece separated by the wear test.
- (4) specific amount of wear Amount of wear per unit sliding distance and unit load.
- (5) pv value Product of the contact pressure (p) between faces and the velocity (v).

3. Classification of Wear Test Methods

The classification of wear test methods shall be as follows:

- (1) Method A Method of wear the plastic test piece by bringing the plastic test piece of square plate, disc or hollow cylinder into contact with the end face of the opposite material of the hollow cylinder made of metal or other material under the definite load and by revolving either one of them. [see Fig. 1 (A)]
- (2) Method B Method to wear the plastic test piece by bringing the end face at right angles to the axis of the plastic test piece of round rod shape or square rod shape into contact vertically with the disc made of metal or other material which revolves under the definite load. [see Fig. 1 (B)]
- (3) Method C Method to wear the plastic test piece by bringing the plastic test piece of plate shape into contact under a definite pressure with the surface of the circumference of the disc made of metal or other materials which revolves. [see Fig. 1 (C)]

Applicable Standards: Reference Standards: See page 17.