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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

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**Verification of pendulum impact-testing machines used for
Charpy, Izod and tensile impact-testing of plastics**

塑料简支梁、悬臂梁和拉伸冲击试验用摆锤冲击试验机的检验

(English Translation)

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Foreword

This revised standard adopts ISO 13802:1999 "Plastics pendulum impact testing machines simply supported beam, Izod and tensile impact test Test "(in English), including Technical Corrigendum ISO 13802:1999/Cor. 1.2000 (in English).

The standard ISO 13802:1999 made the following minor modifications.

- a) modify the standard name;
 - b) Remove the preface to the international standards;
 - c) international technical standards errata content into the body, and they are involved in the provision of margin space with vertical double identity White Office;
 - d) increasing the term "angle of attack" and definitions;
 - e) Remove international standard Chapter 2, "normative references." Because in addition to the international standard Normative references ISO 8256:1990's
- Table 1, other data were all cited references, this, this standard made the following treatments.
- 1) The ISO 8256:2004 (ISO 8256:1990 revision) directly into Table 1 of this standard;
 - 2) increase the "References." The list of international standards "Normative references" in the content as an information reference file column the "Reference" (using ISO 8256:2004 instead of ISO 8256:1990);
 - f) Table 2 test types "stretch" to "stretch/simply supported beam";
 - g) The equation (11), equation (12) is W_f , 1, W_f , 2 and W_f , 3 were changed W_f , 1, W_f , 2 and W_f , 3.

Please note that some of the content of this standard may involve patents. The standard release mechanism should not bear the responsibility to identify these patents.

The Standard Appendix A, Appendix B, Appendix C, Appendix D and Appendix E is an

informative annex.

The standard proposed by China Machinery Industry Federation.

This standard by the National Standardization Technical Committee tester (SAC/TC122) centralized.

This standard was drafted. Changchun Institute of test machine, Chengde Precision Testing Machine Co., Ltd. Dahua tester.

1 Scope

This standard has been specified in ISO 179-1, Plastics simply supported ISO 180 and ISO 8256 are described in the beam impact test, Izod impact Tensile test and impact test used pendulum impact testing machine test methods.

This standard only relates to pendulum tester. During the impact of sample absorbed impact energy W (see 2.13) is equal to the potential energy of the pendulum E (see 2.12) difference between the residual energy after the impact of the sample and the pendulum. Friction loss and air resistance (see Table 2 and 4.6), the impact of Energy correction.

The method described in this standard is about the testing machine geometry and physical properties of the various parts of the test. Some geometric properties of the assembled test Testing machine difficult to test on, so by the manufacturer responsible for these performance tests, and provided on the tester can be tested according to this standard Reference plane.

When these methods are to be applied in the test installation, repair, after moving or periodic inspection.

This standard applies to geometric and physical properties have specified in Chapter 4 of the various capacity and (or) the type of pendulum impact tester.

According to the standard inspection pendulum impact testing machine is suitable for all types of notched and unnotched impact test specimens.

Appendix A describes the various characteristics of the length of the pendulum, the pendulum relationship between potential energy and the moment of inertia of the pendulum.

Appendix B shows the frame quality than the computer and the quality of the pendulum method, in order to avoid errors resulting impact energy.

Appendix C describes the Charpy impact test, after the impact of the sample as the instantaneous rate of change of the pendulum impact energy function, and

Given predetermined capacity Charpy impact energy measurement range.

Appendix D rack chassis rigidity discuss issues in order to prevent the reaction force

causes the pendulum motion of the rack results in resonance.

Appendix E gives the size of the model test Charpy impact test machine used.

2 Terms and definitions

The following terms and definitions apply to this standard.

Use standard or calibrated reference material, qualified instrument calibration verification tests.

Under specified conditions, to determine the magnitude of the measuring instrument or measuring system indicated by the corresponding standard or standards now known magnitude complex the relationship between a set of operations.

Pendulum position away from the vertical angle of not more than 5 °, to complete a swing (reciprocatingly) the time required, in seconds.

A little pendulum on this point in the swing plane on the specimen and the impact of vertical oscillating shaft no reaction.