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

GB/T 457-2008

Replacing GB/T 1538-1979; GB/T 2679.5-1995; GB/T 457-2002

Paper and board -- Determination of folding endurance

纸和纸板耐折度的测定

(English Translation)

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Foreword

This revised standard adopts the ISO 5626:1993 "Determination of paper folding," which cardboard folding tester Schopper relevant international law does not standard.

This standard and ISO 5626:1993 The main differences are as follows.

--- Cancel the ISO 5626. Determination Le Molin (KhlerMmolin) and Luo Maji (Lhomargy) two instruments of 1993 method;

--- Increasing the Schopper instrument cardboard folding method.

This standard is the "measurement of paper folding endurance (Schopper method)" on GB/T 457-2002, measured GB/T 1538-1979 "of folding cardboard Paper and cardboard folding of titration (Schopper type tester) "and GB/T 2679.5-1995" (MIT folding tester Act) "three criteria Integration of amendments.

This standard replaces GB/T 457-2002, GB/T 1538-1979 and GB/T 2679.5-1995.

This standard and GB/T 457-2002, GB/T 1538-1979 and GB/T 2679.5-1995 compared to the main differences are as follows.

--- Increasing the foreword;

--- Increasing the normative references (Chapter 2 of this edition);

--- Test method to increase the general requirements (edition 9.1);

--- Test method increases the MIT instrument (edition 9.3);

--- Modify the sample preparation, in the direction of the test requirements were cut at least 10 samples; sample width is $15.0\text{mm} \pm 0.1\text{mm}$, Length of the instrument using the effective length;

- Increasing the description of the instrument (see Appendix A);
- Increased equipment maintenance and calibration (see Appendix B);
- Increased in this standard with the corresponding ISO 5626:1993 chapter number table (see Appendix C);
- Increased this standard and ISO 5626:1993 Differences and technical reasons (see Appendix D).

This standard Annex A, Annex B is normative appendix, Appendix C, Appendix D is informative appendix.

The standard proposed by China National Light Industry Council.

This standard by the National Standardization Technical Committee of the paper industry.

This standard was drafted. China Pulp and Paper Research Institute.

1 Scope

This standard specifies the determination of paper and cardboard folding Schopper method and MIT method, we proposed to use the instrument should comply with the conditions and Use each instrument precautions to be taken.

Schopper method is suitable for a thickness of less than 0.25mm, a tensile strength greater than 1.33kN/m paper, and the thickness of 0.25mm ~ 1.4mm cardboard. MIT method with adjustable spacing chuck for a thickness no greater than 1.25mm of paper and paperboard.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 450 and take samples to an aspect of paper and paperboard samples, positive and negative determination (GB/T 450-2002, ISO 186.

2002, MOD)

GB/T 10739 paper, paperboard and pulp sample processing and testing standard atmospheric conditions (GB/T 10739-2002, eqv ISO 187.

1990)

3 Terms and Definitions

The following terms and definitions apply to this standard.

Sample fold backwards first, then fold forward at the same pincher, a complete specimen reciprocate back and forth.

Tension tested under standard conditions, the number of samples at break double folding number (base 10).

Number of folding against average.

Principle 4

Under standard conditions, the sample subjected to the action of longitudinal tension, folded forward and backward, until the specimen breaks.

5.1 Folding tester (see Appendix A)

Folding tester maintenance and calibration see Appendix B.

5.2 Fold near the head temperature measuring device

Note: Due to the heat the specimen chuck folded or instrument generated by the motor is transferred to the sample, causing heating of the sample test area will lead to sample local embrittlement resistance, Fold decreased. Through the rest of the instrument and the motor insulation, and folded around the head area for effective ventilation, so that these effects can be reduced Min.

5.3 If desired, the apparatus may be used as space folded around the head for ventilation, such as installing a fan in the vicinity of the folding head, air can flow