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

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**Technical requirements and test method for wheat hardness
index tester**

(English Translation)

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Table of Contents

- Foreword
- Introduction
- 1 Scope
- 2 Normative references
- 3 Terms and definitions
- 4 Requirements
 - 4.1 General requirements
 - 4.2 Working environment requirements
 - 4.3 Functional requirements

Foreword

Appendix A of this standard is an informative annex.

This standard was proposed by the National Grain Administration.

This standard is under the jurisdiction of the National Grain and Oil Standardization Technical Committee.

This standard is mainly drafted by. Wuxi Grain Machinery Factory, Henan University of Technology, Wuxi Tin Grain Machinery Manufacturing Co., Ltd.

Introduction

The softness and hardness of wheat grain texture is called wheat hardness and is an important indicator for evaluating wheat processing quality and food quality.

The method for determining the hardness index of wheat is one of the methods for determining the hardness of wheat.

The measurement of "wheat hardness index" is different from the concept of hardness measurement of ordinary materials.

This standard is the basis for testing and evaluating the basic performance of the wheat hardness index tester for accuracy, stability, reliability and safety.

Wheat hardness index tester technical conditions Test method

1 Scope

This standard specifies the terms and definitions, technical requirements, test methods and inspection rules of the wheat hardness index tester.

This standard is applicable to the wheat hardness index measuring instrument which adopts the principle of anti-mechanical pulverization and uses wheat hardness as the measurement object.

2 Normative references

The terms in the following documents become the terms of this standard by reference to this standard. All dated references, followed by all Modifications (not including errata content) or revisions do not apply to this standard, however, parties to agreements based on this standard are encouraged to study if it is possible to use the latest version of these files? For undated references, the latest edition applies to this standard.

GB/T 2423.10 Environmental testing for electric and electronic products - Part 2. Test methods Test Fc and guide. Vibration (sinusoidal) GB/T 3768 Acoustic sound pressure method for the determination of noise source sound power level GB 5226.1-2002 Mechanical safety machinery and electrical equipment - Part 1. General technical conditions GB 5491 Inspection of food and oil materials, sample method GB/T 5497 Determination of moisture content of grain and oil materials General technical conditions for GB/T 9314 serial impact dot matrix printer JB/T 5374 electronic balance LS/T 3501.10 Grain and oil processing machinery General technical conditions Surface painting

3 Terms and definitions

The following terms and definitions apply to this standard.

The ability of wheat grains to resist deformation and breakage under external forces.

The wheat sample was pulverized under the specified conditions, and the sample remaining on the screen accounted for the mass fraction of the sample, which was represented by HI. Hardness index Large, indicating that the higher the hardness of wheat, and vice versa, the lower the hardness of wheat.

4.1 General requirements

The wheat hardness index tester shall comply with the provisions of this standard and be manufactured in accordance with the drawings and technical documents approved by the prescribed procedures.

4.2 Working environment requirements

4.2.1

Temperature. 5 ° C ~ 45 ° C.

4.2.2

Relative humidity. $\leq 90\%$.

4.2.3

Power supply voltage. AC220 (1 $\pm$ 10%) V, 50 (1 $\pm$ 2%) Hz.

4.2.4

Avoid direct sunlight and vibration.

4.3 Functional requirements

It should have at least the functions of smashing and sifting, safety protection, timing, weighing and data processing, display and printing.