

ICS 65.060.99

CCS B 91



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

GB/T 21163.1-2007

**Agricultural grain driers -- Determination of drying performance
-- Part 1: General**

农业谷物干燥机干燥性能的测定第1部分:总则

(English Translation)

Issued on: November 1, 2007

Implemented on: January 1, 2008

Issued by: Standardization Administration of China

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Foreword

GB/T 21163 "agriculture grain dryer drying performance measurement" consists of the following components.

--- Part 1. General;

--- Part 2. Additional procedures and crop - specific requirements.

This part of GB/T 21163 Part 1.

The partial modification of the use of ISO 11520-1:1997 "Determination of drying performance of agricultural grain dryers - Part 1. General" (In English).

This part of ISO 11520-1:1997, compared the content changes as follows.

--- Deleted international standards foreword;

--- Of ISO 11520-1:1997 is referenced in ISO 11520-2:2001, it has been adopted as the country with the GB/T 21163.2-2007 instead.

Appendix A of this section is normative appendix, Appendix B, Appendix C, Appendix D, Appendix E is an information appendix.

This part is proposed by China Machinery Industry Federation.

This part of the National Standardization Technical Committee on Agriculture machinery

centralized.

This section drafted by. Chinese Academy of Agricultural Mechanization Sciences, Beijing middle peasants Khong Oils Technology Development Co., China Agriculture the University.

1 Scope

This section provides a method for the evaluation of continuous and batch-type grain dryer performance. This section provides a method for determining the dryer Experimental tests under steady state conditions, the ability to obtain the required rate of water evaporation. This section also specifies the test Performance (data) to the other input conditions and criteria under environmental conditions conversion method.

This section applies to the determination of continuous and batch-type grain dryer performance.

2 Normative references

The following documents contain provisions which, through reference GB/T 21163 in this section constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 1236-2000 Industrial fans using standardized airways performance test (idt ISO 5801:1997) GB/T 5497-1985 grain and oilseeds - Determination of water test GB/T 5498-1985 grain and oilseeds bulk density test method GB/T 5519-1988 food and fuel grain weight assay (neq ISO 520. 1977) GB/T 5520-1985 grain and oilseeds test seed germination test GB /21163.2 Determination T agriculture grain dryer drying performance - Part 2. Additional procedures and crop - specific requirements (ISO 11520-2:2001, MOD) JB/T 5325-1991 the average rate of the flow sensor (neq ISO 3966. 1977)

3 Terms and Definitions

The following terms and definitions apply to this section.

Dry material in a continuous flow mode through without recycling dryer.

After drying in a dryer group of grain drying chamber is completely emptied.

Determination of average atmospheric dry bulb temperature and relative humidity as close to the average dryer main air inlet, but be careful not affect the dryer.

Within a certain period of time determined to be the average relative humidity and air absolute humidity averages and average dry bulb temperature, respectively.

Temperature, pressure and relative humidity conditions on the environmental impact of these test results the dryer is to be amended.

Note: See GB/T 21163.2.