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

GB/T 5504-2025

Replacing GB/T 5504-2011

**Inspection of grain and oils - Determination of milling degree of
wheat flour**

粮油检验 小麦粉加工精度检验

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents". Drafting. This document supersedes GB/T 5504-2011 "Grain and Oil Inspection. Inspection of Wheat Flour Processing Precision" and GB/T 27628-2011 "Grain and Oil Inspection. Inspection of Wheat Flour Processing Precision". "Determination of Powder Color and Bran Starch in Wheat Flour". This document is based on GB/T 5504-2011 and integrates the contents of GB/T 27628-2011. Compared with GB/T 5504-2011, the main technical changes are as follows, apart from structural adjustments and editorial modifications.

- a) The applicable boundaries of the scope have been changed (see Chapter 1, Chapter 1 of the 2011 edition);
- b) An instrumental method for testing the precision of wheat flour processing has been added (see Chapter 4);
- c) The material requirements have been changed (see 5.2.1 and 5.2.2, 5.1 in the 2011 edition);
- d) The lighting conditions for visual comparison have been changed (see 5.3.2, 7.2.1 in the 2011 version);
- e) The sample preparation method has been changed (see 5.4.1, 7.1 in the 2011 edition);
- f) The content related to pink color determination has been removed (see Chapters 7 and 8

of the.2011 edition);

g) The method of representing test results has been changed (see 5.5, Chapter 8 of the.2011 edition). Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed by the National Food and Strategic Reserves Administration. This document is under the jurisdiction of the National Technical Committee on Standardization of Grain and Oil (SAC/TC270). This document was drafted by: Henan University of Technology, Wuxi Suibang Technology Co., Ltd., Wudeli Flour Group Co., Ltd., and Beijing Municipal Food Inspection Bureau. Inspection and Testing Institute (Beijing Municipal Food Safety Monitoring and Risk Assessment Center), Henan Provincial Metrology Standards and Product Quality Inspection and Testing Center, Xinjiang Uygur Autonomous Region Xinjiang Uygur Autonomous Region Grain and Oil Products Quality Supervision and Inspection Station, Jiangsu Province Grain and Oil Quality Monitoring Center, Shandong Province Grain and Oil Testing Center, Lingbi County Huiheng Grain and Oil Food Inspection and Testing Station Co., Ltd. The main drafters of this document are. Zhao Renyong, Huo Quangong, Tang Daowu, Yang Yuegang, Li Hui, Yin Chenghua, Li Rui, Zhang Yi, Li Zhenhua, Guo Qin, and Zhao Feng. Zhang Aili and Wang Ming. The release history of this document and the document it replaces is as follows:

---First published in 1985 as GB/T 5504-1985, and revised for the first time in.2011;

1 Scope

GB/T 5504-2025 is the Chinese national standard covering how far the bran has been taken off - the comparison against standard samples or the staining method that makes the bran specks visible, and the judgement that assigns the flour to its grade. It replaces GB/T 5504-2011, under the National Food and Strategic Reserves Administration. In force from 1 May 2026. Issued on 31 October 2025, it has been in force since 1 May 2026, replacing GB/T 5504-2011.

This document describes instrumental and visual methods for determining the precision of wheat flour processing. This document applies to the inspection of the processing precision of commercial wheat flour.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document. GB/T 1355 Wheat Flour

GB/T 5491 Sampling and Divided Sampling Methods for the Inspection of Grains and Oils

GB/T 22505 Sensory Inspection of Grain and Oil - Ambient Lighting LS/T 15111 Standard
Samples for Wheat Flour Processing Precision - Refined Flour LS/T 15112 Standard
Samples for Wheat Flour Processing Precision

3 Terms and Definitions

The terms and definitions defined in GB/T 1355 apply to this document.

4 Instrumental Method

4.1 Principle Using computer image and data processing technology, the bran content of wheat flour samples was measured and compared with that of wheat flour processing precision standard samples. Content comparison determines the processing precision of the sample.

4.2 Materials

4.2.1 Standard sample for wheat flour processing precision (refined flour). conforms to LS/T 15111.

4.2.2 Standard sample for wheat flour processing precision (standard flour). conforms to LS/T 15112.

4.3 Instruments and Equipment

4.3.1 Wheat flour processing precision tester. The sampler has a sample loading capacity of not less than 10g, the image acquisition window is not less than 1800mm², and the bran content is measured. The measurement accuracy is less than or equal to 0.01%, and the stability (30 min) is less than or equal to 5%; a standard sample of wheat flour processing accuracy is used. The test shall be conducted in accordance with (LS/T 15111 or LS/T 15112), and the test results shall meet the requirements of the reference value of the standard sample for wheat flour processing precision.

4.4 Operating Procedures

4.4.1 Sample Preparation According to GB/T 5491, take no less than 250g of wheat flour sample and place it in a wide-mouth bottle for later use.