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

GB/T 21307-2025

Replacing GB/T 21307-2007

Roller gin

皮辊轧花机

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document replaces GB/T 21307-2007 "Roller Cotton Gin". Compared with GB/T 21307-2007, except for structural adjustments and editorial changes, In addition to the modifications, the main technical changes are as follows.

- a) The product model structure has been changed and the classification code has been added (see Chapter 4, 3.2 of the 2007 edition);
- b) Deleted the requirements for processed seed cotton (see 4.1 of the 2007 edition);
- c) The basic parameters (see 3.1 of the 2007 edition) have been deleted;
- d) Increased the effective working length output of the roller gin (see 5.3.6, 5.3.7);
- e) The provisions on the yellow root rate and rough head rate of processed lint cotton have been changed (see 5.3.10, 4.2.4 of the 2007 edition);
- f) The cotton drop rate should not be greater than 1.5% (see 5.3.11, 4.2.5 of the 2007 edition);
- g) The service life of the top roller has been deleted (see 4.2.7 of the 2007 edition);

- h) Added the requirements for punching knife and fixed knife parts (see 5.2.6 and 5.2.7);
- i) Added assembly requirements for punching cutters and fixed cutters (see 5.3.1 and 5.3.2).

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document was proposed by the China Federation of Supply and Marketing Cooperatives.

This document was prepared by the National Cotton Processing Standardization Technical Committee (SAC/TC407), the National Agricultural Machinery Standardization Technical Committee (SAC/TC201) is responsible for this matter.

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The previous versions of this document and the documents it replaces are as follows.

- First published in 2007 as GB/T 21307-2007;
- This is the first revision. Roller gin

1 Scope

This document specifies the technical requirements for the appearance quality, quality of main parts and components, and performance of the whole machine, as well as the inspection rules and signs, It also describes the packaging, storage and transportation, and the corresponding sampling and testing methods, and gives the composition and classification of product models.

This document is applicable to the design, manufacture and quality inspection of roller ginning machines.

2 Normative references

GB/T 191

GB/T 6103

GB/T 6388

GB/T 9239.1-2006

GB 18399

GB/T 19635-2024

GB/T 32139-2015

3 Terms and definitions

The terms and definitions defined in GB/T 32139-2015 and the following apply to this document.

3.1 Hob doubleknife

A component of a roller gin that performs a rotary motion to impact the seed cotton, separating the fibers from the seeds.

3.2 Moving knife

A component of a roller gin that performs reciprocating motion, impacting the seed cotton and separating the fibers from the seeds.

3.3 fixedknife

A relatively fixed component of the roller gin that blocks the seed cotton and separates the fibers from the seeds.

3.4 Roller coveredroler

The outer layer is a component made of leather strips of uniform thickness wrapped in a spiral shape on the surface of a wooden stick.

[Source. GB/T 32139-2015, 3.1.1.1]

3.5

The percentage of the weight of the hair contained in a certain weight of cotton seeds to the weight of the cotton seed sample.