

ICS 65.060.01
CCS B 90



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

GB/T 45297-2025

**Technical specification for digital production of machine-picked
cotton**

机采棉加工生产数字化技术规范

Issued on: February 28, 2025

Implemented on: September 1, 2025

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

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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 is required.

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 is proposed and coordinated by the China Federation of Supply and Marketing Cooperatives.

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Technical specifications for digitalization of machine-picked cotton processing and production

1 Scope

This document establishes the overall principles and system structure for realizing the digitalization of machine-picked cotton processing and production, and stipulates the production equipment and facilities, data collection and The digital requirements for data collection and transmission, production control, and management decision-making are defined, and the corresponding verification methods are described.

This document applies to the planning, design, construction, acceptance and operation of digital production equipment and processes for machine-picked cotton processing.

2 Normative references

GB/T 23023

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Digitalization

Convert information, parameters, indicators, etc. related to machine-picked cotton processing into digital codes.

3.2 cybersecurity

Take necessary measures to prevent attacks, intrusions, interference, destruction, illegal use and accidents on the network, so that the network is in a safe and stable state.

Stable and reliable operation status, as well as the ability to ensure the integrity, confidentiality and availability of network data.

[Source. GB/T 22239-2019, 3.1]

4 Abbreviations

The following abbreviations apply to this document. CAN. Controller Area Network EtherCAT. Ethernet for Control Automation Technology Ethernet/IP. Ethernet Industrial Protocol MQTT. Message Queuing Telemetry Transport MODBUS. Serial Communication Protocol (Modicon Bus) PLC. Programmable Logic Controller PROFINET. Industrial Ethernet real-time bus (Process Field Net) RFID. Radio Frequency Identification TCP. Transmission Control Protocol UDP. User Datagram Protocol UPS. Uninterruptible Power Supply