

ICS 03.120.30

CCS A 41



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

GB/T 43261-2023

**Combined accept-zero sampling systems and process control
procedures for product acceptance**

零接收数抽样系统与过程控制程序相结合的产品验收方案

(English Translation)

Issued on: November 27, 2023

Implemented on: June 1, 2024

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

Table of Contents

Preface	
Introduction	
1 Scope	
2 Normative references	
3 Terms, definitions and symbols	
3.1 Terms and definitions	
3.2 Symbol	
4 General requirements	
4.1 Product requirements	
4.2 Acceptance according to table	
4.2.1 Preferred sampling system	
4.2.2 Composition and identification of inspection lots	
4.2.3 Determination of sampling plan	
4.2.4 Sample extraction	
4.3 Acceptance according to the terms proposed by the supplier	
4.3.1 General	
4.3.2 Requirements and procedures	
4.3.3 Submission and incorporation of alternative acceptance methods	
4.3.4 Withdrawal of alternative acceptance methods after approval	
4.4 Key Features	
4.5 Special provisions for fatal non-conforming products	
5 Detailed requirements	
5.1 Acceptance according to table	
5.1.1 Sampling inspection	
5.1.2 Preferred sampling inspection schedule	
5.2 Acceptance according to the terms proposed by the supplier	
5.2.1 General	
5.2.2 Quality management system	
5.2.3 Prevention-based quality management system	
5.2.4 Process-centered quality management system	
5.2.5 Objective evidence of implementation and effectiveness of the quality management system	

Appendix A (informative) Why is the number of receptions zero?
Appendix B (Informative) Disposal of Batch when Customer Rejects
Appendix C (Informative) Transfer Rules Diagram
Appendix D (normative) Examples of use of sampling system
Appendix E (Informative) Summary Table
Reference

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 is modified to adopt ISO 28594:2017 "Product Acceptance Plan Combining Zero Acceptance Number Sampling System and Process Control Procedures":

The technical differences between this document and ISO 28594:2017 and their reasons are as follows:

---Changed the median symbol involved in terms 3:1:9, 3:1:10, 3:1:31, and 3:1:32, changing $\bar{X}$ to $\bar{X}_{0.50}$, consistent with GB/T 3358.2 consistent:

---Deleted the symbol f_c representing the correction factor and the symbol S_c representing the corrected sum of squares in 3:2 and the two symbols in Table D:2 and Table D:3 no: row: Modify the sample variance formula in Table D:2 and Table D:3 to $\sum(x_i - \bar{x})^2 / (n-1)$, because these two symbols no: is only involved in Table D:2 and Table D:3 of Appendix D: The purpose is to calculate the sample variance: The sample variance can be directly calculated according to the formula $\sum(x_i - \bar{x})^2 / (n-1)$ is used for calculation: Listing these two symbols separately can easily cause misunderstanding:

---Added the last "See 5.1:2:4:5" explanation in 5:1:2:4:4 "See 5.1:2:4:5 when fatal defective products are found in inspection", original text Missing bridging instructions:

---Deleted 84:75/3 in the row of sample variance in Table D:2 and Table D:3, because 84:75 is the calculation result of the corrected sum of squares, so After deleting the line containing the corrected sum of squares, there is no need to list the explanation of the calculation using this value:

---Deleted the rows containing the sum of squares of the measured values in Table D:2 and Table D:3, and calculated the sample variance according to the formula $\sum(x_i - \bar{x})^2 / (n-1)$ After calculation, there is no need to calculate the sum of squares of the measured values separately:

---Changed the formula (D:2) in Appendix D to $AOQL_a = (n-1) \cdot \frac{1}{n} \cdot \frac{1}{n}$ Modify to $AOQL_a = (n-1) \cdot \frac{1}{n} \cdot \frac{1}{n}$ the original expression is prone to ambiguity:

The following editorial changes have been made to this document:

---Added the sources of terms 3:1:20, 3:1:26, 3:1:27, and 3:1:28;

---Deleted the 3:2 symbol F and the redundant symbol F at the end , the original text is incorrect;

--- Figure C:1 has been changed, changing normal screening to normal inspection, tightening screening to tightening inspection, and relaxing screening to relaxing inspection: The original the text is wrong;

---Changed the conditions from normal inspection to relaxed inspection in Figure C:1, changing "10 consecutive batches received" to "10 consecutive batches received and "Satisfies conditions b), c) and d) of 5:1:1:6:4" are consistent with the transfer rule conditions of 5:1:1:6:4 in the main text: The original conditions are not the same:

whole;

---Added the description of the process conditions from strict screening to normal inspection in Figure C:2 of Appendix C "See Figure C:2 (continued)", the original text lacks the clause File description;

---Changed the conditions from normal sampling inspection to relaxed sampling inspection in Figure C:2 of Appendix C, changing "starting from the last non-conforming product, consecutive qualified products" "The number reaches 10na (N)" is changed to "Starting from the last non-conforming product, the number of consecutive qualified products reaches 10na (N) and meets 5:1:1:6:4 "Conditions b), c), and d)" are consistent with the transfer rule conditions in 5:1:1:6:4 in the main text, and the original conditions are incomplete;

---Changed the two repeated modules in Figure C:2 of Appendix C and merged them to make the flow chart more concise and clear;

---Changed the symbol p after the percentage of unqualified products in Table E:1 and Table E:2 to 100p: The original text was incorrect:

Please note that some content in this document may be subject to patents: The publisher of this document assumes no responsibility for identifying patents:

Introduction

Modern quality management practices encourage industrial innovation and provide the possibility to obtain benefits from continuous improvement: With the industrial product quality management with the continuous development of the concept, people realize that it is necessary to change the existing quality policy and give suppliers certain incentives to improve product quality and promote A mutually beneficial partnership between suppliers and customers:

The rational application of process control and statistical control methods is an effective way to prevent the occurrence of non-conformities, conduct quality control and provide information for system improvement:

effective means: An effective process control system can also provide information used to evaluate the quality of inspection batches: This document encourages suppliers to implement within their internal controls Use process control and statistical control procedures in the process, and submit effective process control documents to the customer: After obtaining the customer's consent, the supplier can reduce Reduce or even eliminate sampling inspection procedures:

Using sampling inspection itself to prove product compliance is a less efficient industrial method: Sampling inspection is used for acceptance There are risks for both users and producers: Increasing the number of random inspections is a way to reduce risks, but this will also increase costs: Suppliers can pass appropriate process controls to reduce risks: By applying process control methods to a certain extent, and these methods are appropriate and effective, we can control risk, thereby reducing inspection and testing:

This document supports the transition from a (reasonable) inspection strategy based on AQL (Acceptance Quality Limit) to the implementation of an effective prevention-based strategy:

strategy, which includes a comprehensive quality system, continuous improvement and collaboration: The underlying idea of this strategy is cooperation between customers and suppliers, which both parties need to have the necessary capabilities to bring obvious mutual benefits to both parties through the process of continuously providing high-quality products or services:

The purpose is to create an atmosphere in which each nonconformity is viewed as an opportunity for corrective action and improvement, rather than just AQL is the goal that the contract strives to achieve:

This document is based on:

- a) The supplier should submit products that meet the requirements and provide effective evidence of producing and maintaining continuous production of qualified products;
- b) The supplier is responsible for producing products that meet the requirements through manufacturing and process control;
- c) Suppliers should adopt effective preventive measures, such as statistical process control:

The ideal goal of this document is to enable product to be accepted as a result of process control procedures: This document also provides a set of zero acceptance number sampling System (see Appendix A) used to plan and implement the assessment of product quality and its compliance with specified requirements: This acceptance sampling system