Chinastandards.org

ICS 03.120.10
CCS A00

NATIONAL STANDARD OF THE

PEOPLE'S REPUBLIC OF CHINA

GB/T 19027-2001

Quality management - Guidance on statistical techniques for GB/T 19001-2016

(English Translation)

Issued on: May 30, 2025 **Implemented on: May 30, 2025**

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

Preview: page 1 of 5 shown, 24 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/gb-t-19027-2001

Chinastandards.org

Table of Contents

1 Scope
2 Normative references
3 Terms and Definitions
4 Statistical techniques in the implementation of GB/T 19001
5 Quantitative data and related statistical techniques in GB/T 19001-2016
6 Applicability of the selected statistical techniques
7 Statistical Technical Notes
7.1 Descriptive Statistics
7.1.1 General description
7.1.2 Benefits
7.1.3 Limitations and Precautions
7.1.4 Application Examples
7.2 Experimental Design
7.2.1 General description
7.2.2 Benefits
7.2.3 Limitations and Precautions
7.2.4 Application Examples
7.3 Hypothesis Testing
7.3.1 General description
7.3.2 Benefits
7.3.3 Limitations and Precautions
7.3.4 Application Examples
7.4 Measurement System Analysis
7.4.1 General description
7.4.2 Benefits
7.4.3 Limitations and Precautions
7.4.4 Application Examples
7.5 Process Capability Analysis
7.5.1 General description
7.5.2 Benefits
7.5.3 Limitations and Precautions
7.5.4 Application Examples

Preview: page 2 of 5 shown, 24 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/gb-t-19027-2001

Chinastandards.org

7.6 Regression Analysis
7.6.1 General description
7.6.2 Benefits
7.6.3 Limitations and Precautions
7.6.4 Application Examples
7.7 Reliability Analysis
7.7.1 General description
7.7.2 Benefits
7.7.3 Limitations and Precautions
7.7.4 Application Examples
7.8 Sampling
7.8.1 General description
7.8.2 Benefits
7.8.3 Limitations and Precautions
7.8.4 Application Examples
7.9 Simulation
7.9.1 General description
7.9.2 Benefits
7.9.3 Limitations and Precautions
7.9.4 Application Examples
7.10 Statistical Process Control
7.10.1 General description
7.10.2 Benefits
7.10.3 Limitations and Precautions
7.10.4 Application Examples
7.11 Statistical Tolerance Method
7.11.1 General description
7.11.2 Benefits
7.11.3 Limitations and Precautions
7.11.4 Application Examples
7.12 Time Series Analysis
7.12.1 General description
7.12.2 Benefits
7.12.3 Limitations and Precautions
7.12.4 Application Examples

Preview: page 3 of 5 shown, 24 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/gb-t-19027-2001

1 Foreword

GB/T 19027-2001 was issued by State Administration for Market Regulation, China National Standardization Administration on 30 May 2025 and took effect the same day.

The GB/T prefix marks a recommended standard. It is not law in itself: it becomes binding when a contract names it, when a regulation or a mandatory standard refers to it, or when a producer declares conformity with it.

The document runs to 24 pages in English translation.

2 Scope Preview

GB/T 19027-2001 falls under ICS 03.120.10, in the field of services and company organization.

This catalogue holds 1,754 other GB/T standards in that field.

In this catalogue, GB/T standards carry edition years from 1963 to 2026.

3 About this standard

Sector: National Standard (Recommended)

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

English translation: about 24 pages

Chinese original: about 31,377 characters

4 Related standards

Other editions:

GB/T 19027-2025 (later edition)

Standards on related subjects:

GB/T 19025-2023 - Quality management - Guidelines for competence management and people development

GB/T 19028-2023 - Quality management - Guidance for people engagement

GB/T 19017-2020 - Quality management. Guidelines for configuration management

GB/T 19019-2026 - Quality management - Guidance for quality tools and their application

GB/T 19018-2026 - Quality management - Customer satisfaction - Guidance for business-to-consumer electronic commerce transactions

Preview: page 4 of 5 shown, 24 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/gb-t-19027-2001

Chinastandards.org

5 Classification and status

International classification (ICS): 03.120.10

Chinese Standard Classification (CCS): A 00

Prefix GB/T: recommended standard.

Preview: page 5 of 5 shown, 24 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/gb-t-19027-2001