

ISO 10017:2021 (E)

Quality management — Guidance on statistical techniques for ISO 9001:2015

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Statistical techniques in the implementation of ISO 9001
5	Quantitative data and associated statistical techniques in ISO 9001
6	Applicability of selected techniques
7	Description of statistical techniques
7.1	Descriptive statistics
7.1.1	General description
7.1.1.1	Data characteristics
7.1.1.2	Numerical
7.1.1.3	Graphical
7.1.2	Benefits
7.1.3	Limitations and cautions
7.1.4	Examples of applications
7.2	Design of experiments
7.2.1	General description
7.2.2	Benefits
7.2.3	Limitations and cautions
7.2.4	Examples of applications
7.3	Hypothesis testing
7.3.1	General description
7.3.2	Benefits
7.3.3	Limitations and cautions
7.3.4	Examples of applications
7.4	Measurement system analysis
7.4.1	General description
7.4.2	Benefits
7.4.3	Limitations and cautions
7.4.4	Examples of applications
7.5	Process capability analysis
7.5.1	General description
7.5.2	Benefits
7.5.3	Limitations and cautions
7.5.4	Examples of applications
7.6	Regression analysis
7.6.1	General description
7.6.2	Benefits
7.6.3	Limitations and cautions
7.6.4	Examples of applications
7.7	Reliability analysis
7.7.1	General description
7.7.2	Benefits
7.7.3	Limitations and cautions

7.7.4	Examples of applications
7.8	Sampling
7.8.1	General description
7.8.2	Benefits
7.8.3	Limitations and cautions
7.8.4	Examples of applications
7.9	Simulation
7.9.1	General description
7.9.2	Benefits
7.9.3	Limitations and cautions
7.9.4	Examples of applications
7.10	Statistical process control
7.10.1	General description
7.10.2	Benefits
7.10.3	Limitations and cautions
7.10.4	Examples of applications
7.11	Statistical tolerance
7.11.1	General description
7.11.2	Benefits
7.11.3	Limitations and cautions
7.11.4	Examples of applications
7.12	Time series analysis
7.12.1	General description
7.12.2	Benefits
7.12.3	Limitations and cautions
7.12.4	Examples of applications

Page count: 30