

JIS

JAPANESE INDUSTRIAL STANDARD

Sampling Inspection No. 2

Single sampling inspection plans having desired operating characteristics

Part 1. Sampling by attributes

JIS Z 9002—1956

Translated and Published

by

Japanese Standards Association

**In the event of any doubt arising,
the original Standard in Japanese is to be final authority**

Contents

	Page
1. General Matters	1
1.1 Scope	1
1.2 Definitions and Symbols	1
1.2.1 Symbols	1
1.2.2 Definitions of Terms	1
2. Procedure of Inspection	2
3. Operation of Inspection	3
3.1 Establishment of Quality Criteria	3
3.2 Designation of p_0 and p_1	3
3.3 Formation of Lot	3
3.4 Derivation of n and c	3
3.5 Sampling	5
3.6 Test of Sample	5
3.7 Determination of Lot Acceptability	5
3.8 Disposition of Lot	5
4. Sampling Inspection Table	5
5. OC Curve and Diagram for Designing Inspection Plan	5
Table 1. Single Sampling Inspection Plans by Attributes having Desired Operating Characteristics	6
Table 2. Supplementary Table for Design of Inspection Plan.	7
Attached Fig. 1. OC Curve	7
Attached Fig. 2. Diagram for Designing Single Inspection Plans by Attributes	15

JAPANESE INDUSTRIAL STANDARD

J I S

Single Sampling Inspection Plans having
Desired Operating CharacteristicsZ 9002-1956
(Reaffirmed: 1994)

Part 1. Sampling by Attributes

1. General Matters

1.1 Scope This Japanese Industrial Standard specifies the methods of determining single sampling inspection plans by attributes and of operating them.

Remark: Single sampling inspection plans are those designed so as to have operating characteristics desired by producers and consumers. In these plans, acceptance or rejection of each lot is determined by the number of defective units found in a sample drawn at one time from the lot.

Since this inspection is conducted by sampling, it is necessary that the products can be dealt with in the form of lots and it is difficult to avoid some defective units being contained in accepted lots.

1.2 Definitions and Symbols1.2.1 Symbols

p_0 : upper limit for the fraction defective of a lot which is desired to be accepted at high probability.

p_1 : lower limit for the fraction defective of a lot which is desired to be rejected at high probability.

α : producer's risk (the probability that a p_0 fraction defective lot is rejected)

β : consumer's risk (the probability that a p_1 fraction defective lot is accepted)

n : sample size

c : acceptance number

1.2.2 Definitions of Terms

inspection unit: A single unit of product or a definite quantity of material submitted for inspection.

inspection lot: A collection of units of product submitted for inspection (hereinafter referred to as the "lots").

lot size: Total number of inspection units in a lot.

Reference Standards:

JIS Z 9001-General Rules for Sampling Inspection Procedures