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Sampling procedures for inspection by attributes —

Part 1:

Sampling schemes indexed by acceptance
quality limit (AQL) for lot-by-lot inspection

Règles d'échantillonnage pour les contrôles par attributs —

*Partie 1: Procédures d'échantillonnage pour les contrôles lot par lot,
indexés d'après le niveau de qualité acceptable (NQA)*



Reference number
ISO 2859-1:1999(E)

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International Organization for Standardization
Case postale 56 • CH-1211 Genève 20 • Switzerland
Internet iso@iso.ch

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 2859-1 was prepared by Technical Committee ISO/TC 69, *Applications of statistical methods*, Subcommittee SC 5, *Acceptance sampling*.

This second edition of ISO 2859-1 cancels and replaces the first edition (ISO 2859-1:1989) of which it constitutes a technical revision.

Significant changes in this edition include:

- a new procedure for switching from normal to reduced inspection;
- a reference to skip-lot sampling as an alternative to reduced inspection;
- the term "limiting quality" has been changed to "consumer's risk quality" in the heading of Tables 6-A, 6-B, 6-C, 7-A, 7-B and 7-C;
- a new table has been added giving producer's risk as the probability of rejection of lots with percent nonconforming equal to the AQL;
- optional fractional acceptance number plans have been added; the purpose of these plans is to provide a consistent progression from the plans for acceptance number zero to the acceptance number 1 plans. The fractional acceptance number plans are found in Tables 11-A, 11-B and 11-C, where they take the place of the arrows in the corresponding positions in tables 2-A, 2-B and 2-C;
- reduced plans have been changed to eliminate the gap between the acceptance and rejection numbers;
- some changes have been made to the double sampling plans to provide a smaller average sample size;
- multiple sampling plans have been changed to five stages rather than seven. The change has not increased the average sample size. Some of the new plans have a smaller average sample size than their counterparts in the previous edition;
- scheme operating characteristic curves have been added as Table 12.

ISO 2859 consists of the following parts, under the general title *Sampling procedures for inspection by attributes*:

- *Part 0: Introduction to the ISO 2859 attribute sampling system*
- *Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*
- *Part 2: Sampling plans indexed by limiting quality (LQ) for isolated lot inspection*

— *Part 3: Skip-lot sampling procedures*

It is highly recommended that this part of ISO 2859 be used together with ISO 2859-0, which contains illustrative examples.

Annex A of this part of ISO 2859 is for information only.

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Sampling procedures for inspection by attributes —

Part 1:

Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection

1 Scope

1.1 This part of ISO 2859 specifies an acceptance sampling system for inspection by attributes. It is indexed in terms of the acceptance quality limit (AQL).

Its purpose is to induce a supplier through the economic and psychological pressure of lot non-acceptance to maintain a process average at least as good as the specified acceptance quality limit, while at the same time providing an upper limit for the risk to the consumer of accepting the occasional poor lot.

Sampling schemes designated in this part of ISO 2859 are applicable, but not limited, to inspection of

- end items,
- components and raw materials,
- operations,
- materials in process,
- supplies in storage,
- maintenance operations,
- data or records, and
- administrative procedures.

1.2 These schemes are intended primarily to be used for a continuing series of lots, that is, a series long enough to allow the switching rules (9.3) to be applied. These rules provide:

- a) a protection to the consumer (by means of a switch to tightened inspection or discontinuation of sampling inspection) should a deterioration in quality be detected;
- b) an incentive (at the discretion of the responsible authority) to reduce inspection costs (by means of a switch to reduced inspection) should consistently good quality be achieved.

Sampling plans in this part of ISO 2859 may also be used for the inspection of lots in isolation but, in this case the user is strongly advised to consult the operating characteristic curves to find a plan that will yield the desired protection (see 12.6). In that case, the user is also referred to the sampling plans indexed by limiting quality (LQ) given in ISO 2859-2.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 2859. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 2859 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 2859-3:1991, *Sampling procedures for inspection by attributes — Part 3: Skip-lot sampling procedures*.

ISO 3534-1:1993, *Statistics — Vocabulary and symbols — Part 1: Probability and general statistical terms*.

ISO 3534-2:1993, *Statistics — Vocabulary and symbols — Part 2: Statistical quality control*.

3 Terms, definitions and symbols

3.1 Terms and definitions

For the purposes of this part of ISO 2859, the terms and definitions given in ISO 3534-1 and ISO 3534-2 and the following apply.

NOTE For ease of reference, the definitions of some of these terms are quoted from ISO 3534-1 and ISO 3534-2, while others are redefined or newly defined.

3.1.1

inspection

activity such as measuring, examining, testing or gauging one or more characteristics of a product or service, and comparing the results with specified requirements in order to establish whether conformity is achieved for each characteristic

3.1.2

original inspection

first inspection of a lot according to the provisions of this part of ISO 2859

NOTE This is to be distinguished from the inspection of a lot which has been resubmitted after previous non-acceptance.

3.1.3

inspection by attributes

inspection whereby either the item is classified simply as conforming or nonconforming with respect to a specified requirement or set of specified requirements, or the number of nonconformities in the item is counted

NOTE Inspection by attributes includes inspection for conformity of items as well as inspection for number of nonconformities per hundred items.

3.1.4

item

that which can be individually described and considered

EXAMPLES

- a physical item;
- a defined quantity of material;
- a service, an activity or a process;
- an organization or a person; or
- some combination thereof.

3.1.5**nonconformity**

non-fulfilment of a specified requirement

NOTE 1 In some situations specified requirements coincide with customer usage requirements (see **defect**, 3.1.6). In other situations they may not coincide, being either more or less stringent, or the exact relationship between the two is not fully known or understood.

NOTE 2 Nonconformity will generally be classified according to its degree of seriousness such as:

Class A: those nonconformities of a type considered to be of the highest concern; in acceptance sampling such types of nonconformities will be assigned a very small acceptance quality limit value;

Class B: those nonconformities of a type considered to have the next lower degree of concern; therefore, these can be assigned a larger acceptance quality limit value than those in class A and smaller than in class C, if a third class exists, etc.

NOTE 3 Adding characteristics and classes of nonconformities will generally affect the overall probability of acceptance of the product.

NOTE 4 The number of classes, the assignment into a class, and the choice of acceptance quality limit for each class, should be appropriate to the quality requirements of the specific situation.

3.1.6**defect**

non-fulfilment of an intended usage requirement

NOTE 1 The term "defect" is appropriate for use when a quality characteristic of a product or service is evaluated in terms of usage (as contrasted to conformance to specifications).

NOTE 2 Since the term "defect" now has definite meaning within the law, it should not be used as a general term.

3.1.7**nonconforming item**

item with one or more nonconformities

NOTE Nonconforming items will generally be classified by their degree of seriousness such as:

Class A: an item which contains one or more nonconformities of class A and may also contain nonconformities of class B and/or class C, etc.;

Class B: an item which contains one or more nonconformities of class B and may also contain nonconformities of class C, etc. but contains no nonconformity of class A.

3.1.8**percent nonconforming**

(in a sample) one hundred times the number of nonconforming items in the sample divided by the sample size, viz:

$$\frac{d}{n} \times 100$$

where

d is the number of nonconforming items in the sample;

n is the sample size

3.1.9**percent nonconforming**

(in a population or lot) one hundred times the number of nonconforming items in the population or lot divided by the population or lot size, viz:

$$100p = 100 \frac{D}{N}$$

where

- p is the proportion of nonconforming items;
- D is the number of nonconforming items in the population or lot;
- N is the population or lot size

NOTE 1 In this part of ISO 2859 the terms **percent nonconforming** (3.1.8 and 3.1.9) or **nonconformities per 100 items** (3.1.10 and 3.1.11) are mainly used in place of the theoretical terms "proportion of nonconforming items" and "nonconformities per item" because the former terms are the most widely used.

NOTE 2 This definition differs from that found in ISO 3534-2.

3.1.10 nonconformities per 100 items

(in a sample) one hundred times the number of nonconformities in the sample divided by the sample size, viz:

$$100 \frac{d}{n}$$

where

- d is the number of nonconformities in the sample;
- n is the sample size

3.1.11 nonconformities per 100 items

(in a population or lot) one hundred times the number of nonconformities in the population or lot divided by the population or lot size, viz:

$$100p = 100 \frac{D}{N}$$

where

- p is the number of nonconformities per item;
- D is the number of nonconformities in the population or lot;
- N is the population or lot size

NOTE An item may contain one or more nonconformities.

3.1.12 responsible authority

concept used to maintain the neutrality of this part of ISO 2859 (primarily for specification purposes), irrespective of whether it is being invoked or applied by the first, second or third party

NOTE 1 The responsible authority may be:

- the quality department within a supplier's organization (first party);
- the purchaser or procurement organization (second party);
- an independent verification or certification authority (third party);

- d) any of a), b) or c), differing according to function (see Note 2) as described in a written agreement between two of the parties, for example a document between supplier and purchaser.

NOTE 2 The duties and functions of a responsible authority are outlined in this part of ISO 2859 (see 5.2, 6.2, 7.2, 7.3, 7.5, 7.6, 9.1, 9.3.3, 9.4, 10.1, 10.3, 13.1).

3.1.13

lot

definite amount of some product, material or service, collected together

NOTE An inspection lot may consist of several batches or parts of batches.

3.1.14

lot size

number of items in a lot

3.1.15

sample

set of one or more items taken from a lot and intended to provide information on the lot

3.1.16

sample size

number of items in the sample

3.1.17

sampling plan

combination of sample size(s) to be used and associated lot acceptability criteria

NOTE 1 A single sampling plan is a combination of sample size and acceptance and rejection numbers. A double sampling plan is a combination of two sample sizes and acceptance and rejection numbers for the first sample and for the combined sample.

NOTE 2 A sampling plan does not contain the rules on how to draw the sample.

NOTE 3 For the purposes of this part of ISO 2859, a distinction should be made between the terms **sampling plan** (3.1.17), **sampling scheme** (3.1.18) and **sampling system** (3.1.19).

3.1.18

sampling scheme

combination of sampling plans with rules for changing from one plan to another

NOTE See 9.3.

3.1.19

sampling system

collection of sampling plans, or of sampling schemes, each with its own rules for changing plans, together with sampling procedures including criteria by which appropriate plans or schemes may be chosen

NOTE This part of ISO 2859 is a sampling system indexed by lot-size ranges, inspection levels and AQLs. A sampling system for LQ plans is given in ISO 2859-2.

3.1.20

normal inspection

use of a **sampling plan** (3.1.17) with an acceptance criterion that has been devised to secure the producer a high probability of acceptance when the **process average** (3.1.25) of the lot is better than the **acceptance quality limit** (3.1.26)

NOTE Normal inspection is used when there is no reason to suspect that the **process average** (3.1.25) differs from an acceptable level.

3.1.21**tightened inspection**

use of a **sampling plan** (3.1.17) with an acceptance criterion that is tighter than that for the corresponding plan for **normal inspection** (3.1.20)

NOTE Tightened inspection is invoked when the inspection results of a predetermined number of consecutive lots indicate that the **process average** (3.1.25) might be poorer than the **AQL** (3.1.26).

3.1.22**reduced inspection**

use of a **sampling plan** (3.1.17) with a **sample size** (3.1.16) that is smaller than that for the corresponding plan for **normal inspection** (3.1.20) and with an acceptance criterion that is comparable to that for the corresponding plan for normal inspection

NOTE 1 The discriminatory ability under reduced inspection is less than under normal inspection.

NOTE 2 Reduced inspection may be invoked when the inspection results of a predetermined number of consecutive lots indicate that the **process average** (3.1.25) is better than the **AQL** (3.1.26).

3.1.23**switching score**

indicator that is used under normal inspection to determine whether the current inspection results are sufficient to allow for a switch to reduced inspection

NOTE See 9.3.3.

3.1.24**acceptance score**

indicator that is used for fractional acceptance number plans to determine lot acceptability

NOTE See 13.2.1.2.

3.1.25**process average**

process level averaged over a defined time period or quantity of production

[ISO 3534-2:1993, 3.1.2]

NOTE In this part of ISO 2859 the process average is the quality level (percent nonconforming or number of nonconformities per hundred items) during a period when the process is in a state of statistical control.

3.1.26**acceptance quality limit****AQL**

quality level that is the worst tolerable process average when a continuing series of lots is submitted for acceptance sampling

NOTE 1 This concept only applies when a sampling scheme with rules for switching and for discontinuation, such as in ISO 2859-1 or ISO 3951, is used.

NOTE 2 Although individual lots with quality as bad as the acceptance quality limit may be accepted with fairly high probability, the designation of an acceptance quality limit does not suggest that this is a desirable quality level. Sampling schemes found in International Standards such as this part of ISO 2859, with their rules for switching and for discontinuation of sampling inspection, are designed to encourage suppliers to have process averages consistently better than the AQL. Otherwise, there is a high risk that the inspection severity will be switched to tightened inspection under which the criteria for lot acceptance become more demanding. Once on tightened inspection, unless action is taken to improve the process, it is very likely that the rule requiring discontinuation of sampling inspection pending such improvement will be invoked.

3.1.27**consumer's risk quality****CRQ**

lot or process quality level that in the sampling plan corresponds to a specified consumer's risk

NOTE Consumer's risk is usually 10 %.

3.1.28

limiting quality

LQ

when a lot is considered in isolation, a quality level which for the purposes of sampling inspection is limited to a low probability of acceptance

3.2 Symbols and abbreviations

The symbols and abbreviations used in this part of ISO 2859-1 are as follows:

Ac	acceptance number
AQL	acceptance quality limit (in percent nonconforming items or in nonconformities per hundred items)
AOQ	average outgoing quality (in percent nonconforming items or in nonconformities per hundred items)
AOQL	average outgoing quality limit (in percent nonconforming items or in nonconformities per hundred items)
CRQ	consumer's risk quality (in percent nonconforming items or in nonconformities per hundred items)
d	number of nonconforming items (or nonconformities) found in a sample from a lot
D	number of nonconforming items in a lot
LQ	limiting quality (in percent nonconforming items or in nonconformities per hundred items)
N	lot size
n	sample size
p	process average
p_x	quality level for which the probability of acceptance is x , where x is a fraction
P_a	probability of acceptance (in percent)
Re	rejection number

NOTE The symbol n may be accompanied by a subscript. Numerical subscripts 1 to 5 denote the first to the fifth sample, respectively. In general, n_i is the size of the i^{th} sample in double or multiple sampling.

4 Expression of nonconformity

4.1 General

The extent of nonconformity shall be expressed either in terms of percent nonconforming (see 3.1.8 and 3.1.9) or in terms of nonconformities per 100 items (see 3.1.10 and 3.1.11). Tables 7, 8 and 10 are based on the assumption that nonconformities occur randomly and with statistical independence. If it is known that one nonconformity in an item could be caused by a condition also likely to cause others, the items shall be considered just as conforming or not and multiple nonconformities ignored.

4.2 Classification of nonconformities

Since most acceptance sampling involves evaluation of more than one quality characteristic, and since they may differ in importance in terms of quality and/or economic effects, it is often desirable to classify the types of nonconformities according to agreed classes as defined in 3.1.5. The number of classes, the assignment of nonconformities into

classes, and the choice of AQL for each class should be appropriate to the quality requirements of the specific situation.

5 Acceptance quality limit (AQL)

5.1 Use and application

The AQL, together with the sample size code letter (see 10.2), is used for indexing the sampling plans and schemes provided in this part of ISO 2859.

When a specific value of the AQL is designated for a certain nonconformity or group of nonconformities, it indicates that the sampling scheme will accept the great majority of the lots submitted, provided the quality level (percent nonconforming or nonconformities per 100 items) in these lots is no greater than the designated value of AQL. The sampling plans provided are so arranged that the probability of acceptance at the designated AQL value depends upon the sample size for a given AQL, being generally higher for large samples than for small ones.

The AQL is a parameter of the sampling scheme and should not be confused with the process average that describes the operating level of the manufacturing process. It is expected that the process average will be better than the AQL to avoid excessive rejections under this system.

CAUTION: The designation of an AQL shall not imply that the supplier has the right knowingly to supply any nonconforming item.

5.2 Specifying AQLs

The AQL to be used shall be designated in the contract or by (or in accordance with the prescription laid down by) the responsible authority. Different AQLs may be designated for groups of nonconformities considered collectively or for individual nonconformities as defined in 3.1.5. The classification into groups should be appropriate to the quality requirements of the specific situation. An AQL for a group of nonconformities may be designated in addition to AQLs for individual nonconformities, or subgroups, within that group. When the quality level is expressed as percent of nonconforming items (3.1.8 and 3.1.9), AQL values shall not exceed 10 % nonconforming. When the quality level is expressed as number of nonconformities per 100 items (3.1.10 and 3.1.11), AQL values up to 1 000 nonconformities per 100 items may be used.

5.3 Preferred AQLs

The series of values of AQLs given in the tables are known as the preferred series of AQLs. If, for any product, an AQL is designated other than one of these values, these tables are not applicable.

6 Submission of product for sampling

6.1 Formation of lots

The product shall be assembled into identifiable lots, sub-lots, or in such other manner as may be laid down (see 6.2). Each lot shall, as far as is practicable, consist of items of a single type, grade, class, size and composition, manufactured under uniform conditions at essentially the same time.

6.2 Presentation of lots

The formation of the lots, the lot size and the manner in which each lot shall be presented and identified by the supplier shall be designated or approved by, or according to, the responsible authority. As necessary, the supplier shall provide adequate and suitable storage space for each lot, equipment needed for proper identification and presentation, and personnel for all handling of product required for drawing of samples.

7 Acceptance and non-acceptance

7.1 Acceptability of lots

Acceptability of a lot shall be determined by the use of a sampling plan or plans.

The term "non-acceptance" is used in this context for "rejection" when it refers to the result of following the procedure. Forms of the term "reject" are retained when they refer to actions the consumer may take, as in "rejection number."

7.2 Disposition of non-acceptable lots

The responsible authority shall decide how lots that are not accepted will be disposed of. Such lots may be scrapped, sorted (with or without nonconforming items being replaced), reworked, re-evaluated against more specific usability criteria, or held for additional information, etc.

7.3 Nonconforming items

If a lot has been accepted, the right is reserved to not accept any item found nonconforming during inspection, whether that item formed part of a sample or not. Items found nonconforming may be reworked or replaced by conforming items, and resubmitted for inspection with the approval of, and in the manner specified by, the responsible authority.

7.4 Classes of nonconformities or nonconforming items

Specific assignment of nonconformities or nonconforming items to two or more classes requires using a set of sampling plans. In general, the set of sampling plans have a common sample size, but different acceptance numbers for each class having a different AQL, such as in Tables 2, 3 and 4.

7.5 Special reservation for critical classes of nonconformities

Some types of nonconformities may have critical importance. This subclause specifies the special provisions for such types of designated non-conformities. At the discretion of the responsible authority, every item in the lot may be required to be inspected for such designated classes of nonconformities. The right is reserved to inspect every item submitted for such designated nonconformities and to not accept the lot immediately if a nonconformity of this class is found. The right is also reserved to sample, for specified classes of nonconformities, every lot submitted by the supplier and to not accept any lot if a sample drawn from it is found to contain one or more of these nonconformities.

7.6 Resubmitted lots

All parties shall be immediately notified if a lot is found not acceptable. Such lots shall not be resubmitted until all items are re-examined or retested and the supplier is satisfied that all nonconforming items have been removed or replaced by conforming items, or all nonconformities have been corrected. The responsible authority shall determine whether normal or tightened inspection shall be used on re-inspection and whether re-inspection shall include all types or classes of nonconformities or only the particular types or classes of nonconformities which caused initial non-acceptance.

8 Drawing of samples

8.1 Sample selection

The items selected for the sample shall be drawn from the lot by simple random sampling (see 2.1.5 in ISO 3534-2:1993). However, when the lot consists of sub-lots or strata, identified by some rational criterion, stratified sampling shall be used in such a way that the size of the subsample from each subplot or stratum is proportional to the size of that subplot or stratum (for further details see 2.25 in ISO 2859-0:1995).

8.2 Time for drawing the samples

Samples may be drawn after the lot has been produced, or during production of the lot. In either case, the samples shall be selected according to 8.1.

8.3 Double or multiple sampling

When double or multiple sampling is to be used, each subsequent sample shall be selected from the remainder of the same lot.

9 Normal, tightened and reduced inspection

9.1 Start of inspection

Normal inspection shall be carried out at the start of inspection, unless otherwise directed by the responsible authority.

9.2 Continuation of inspection

Normal, tightened or reduced inspection shall continue unchanged on successive lots, except where the switching procedures (see 9.3) require the severity of the inspection to be changed. The switching procedures shall be applied to each class of nonconformities or nonconforming items independently.

9.3 Switching rules and procedures (see Figure 1)

9.3.1 Normal to tightened

When normal inspection is being carried out, tightened inspection shall be implemented as soon as two out of five (or fewer than five) consecutive lots have been non-acceptable on original inspection (that is, ignoring resubmitted lots or batches for this procedure).

9.3.2 Tightened to normal

When tightened inspection is being carried out, normal inspection shall be re-instated when five consecutive lots have been considered acceptable on original inspection.

9.3.3 Normal to reduced

9.3.3.1 General

When normal inspection is being carried out, reduced inspection shall be implemented provided that all of the following conditions are satisfied:

- a) the current value of the switching score (see 9.3.3.2) is at least 30; and
- b) production is at a steady rate; and
- c) reduced inspection is considered desirable by the responsible authority.

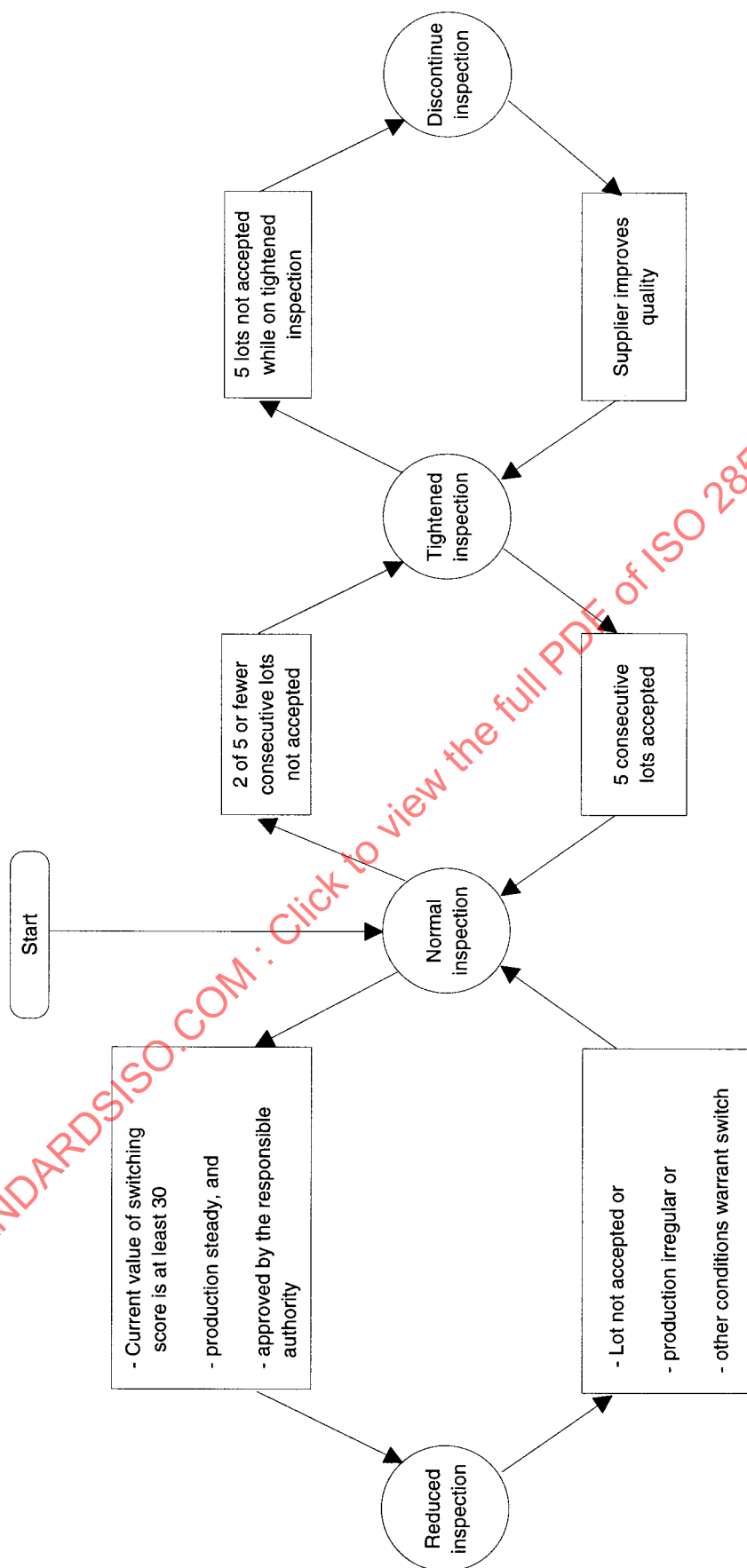


Figure 1 - Outline of the switching rules (see 9.3)

9.3.3.2 Switching score

The calculation of the switching score shall be initiated at the start of normal inspection unless otherwise specified by the responsible authority.

The switching score shall be set at zero at the start and updated following the inspection of each subsequent lot on original normal inspection.

a) Single sampling plans:

- 1) when the acceptance number is 2 or more, add 3 to the switching score if the lot would have been accepted if the AQL had been one step tighter; otherwise reset the switching score to zero;
- 2) when the acceptance number is 0 or 1, add 2 to the switching score if the lot is accepted; otherwise reset the switching score to zero.

b) Double and multiple sampling plans:

- 1) when a double sampling plan is used, add 3 to the switching score if the lot is accepted after the first sample; otherwise reset the switching score to zero;
- 2) when a multiple sampling plan is used, add 3 to the switching score if the lot is accepted by the third sample; otherwise reset the switching score to zero.

NOTE The application of the switching score is illustrated in annex A.

9.3.4 Reduced to normal

When reduced inspection is being carried out, normal inspection shall be re-instated if any of the following occur on original inspection:

- a) a lot is not accepted; or
- b) production becomes irregular or delayed; or
- c) other conditions warrant that normal inspection shall be re-instated.

9.4 Discontinuation of inspection

If the cumulative number of lots not accepted in a sequence of consecutive lots on original tightened inspection reaches 5, the acceptance procedures of this part of ISO 2859 shall not be resumed until action has been taken by the supplier to improve the quality of the submitted product or service, and the responsible authority has agreed that this action is likely to be effective. Tightened inspection shall then be used as if 9.3.1 had been invoked.

9.5 Skip-lot sampling

The lot-by-lot inspection in this part of ISO 2859 may be replaced by skip-lot sampling when the requirements of ISO 2859-3 are fulfilled.

NOTE There are limitations to the use of the skip-lot procedures of ISO 2859-3 in place of the reduced-inspection procedures of this part of ISO 2859. Some of the AQLs and inspection levels are not applicable.

10 Sampling plans

10.1 Inspection level

The inspection level designates the relative amount of inspection. Three inspection levels, I, II and III, are given in Table 1 for general use. Unless otherwise specified, level II shall be used. Level I may be used when less discrimination is needed or level III when greater discrimination is required. Four additional special levels, S-1, S-2, S-3 and S-4 are also given in Table 1 and may be used where relatively small sample sizes are necessary and larger sampling risks can be tolerated.

The inspection level required for any particular application shall be specified by the responsible authority. This allows the authority to require greater discrimination for some purposes and less for others.

At each inspection level, the switching rules shall operate to require normal, tightened and reduced inspection, as specified in clause 9. The choice of inspection level is quite separate from these three severities of inspection. Thus, the inspection level that has been specified shall be kept unchanged when switching between normal, tightened and reduced inspection.

In the designation of inspection levels S-1 to S-4, care shall be exercised to avoid AQLs inconsistent with these inspection levels. For instance, the code letters under S-1 go no further than D, equivalent to a single sample size of 8, but it is of no use to specify S-1 if the AQL is 0,1 %, for which the minimum sample size is 125.

The amount of information about the quality of a lot gained from examining samples drawn from the lot depends upon the absolute size of the samples, **not** upon the relative size of the sample to the lot size, provided the sample is small relative to the lot that is examined. In spite of this, there are three reasons for varying the sample size with the lot size:

- a) when the loss due to a wrong decision is high, it is more important to make the correct decision;
- b) with a large lot, a sample size can be afforded that would be uneconomic for a small lot;
- c) truly random sampling is relatively more difficult if the sample is too small a proportion of the lot.

10.2 Sample size code letters

Sample sizes are designated by sample size code letters. Table 1 shall be used to find the applicable code letter for the particular lot size and the prescribed inspection level.

NOTE For economy of space in the tables or to avoid unnecessary repetition in the text, the abbreviated term "code letter" is sometimes used.

10.3 Obtaining a sampling plan

The AQL and the sample size code letter shall be used to obtain the sampling plan from Tables 2, 3, 4 or 11. For a specified AQL and a given lot size, the same combination of AQL and sample size code letter shall be used to obtain the sampling plan from the table for normal, tightened and reduced inspection.

When no sampling plan is available for a given combination of AQL and sample size code letter, the tables direct the user to a different letter. The sample size to be used is given by the new sample size code letter, not by the original letter. If this procedure leads to different sample sizes for different classes of nonconformities or nonconforming items, the sample size code letter corresponding to the largest sample size derived may be used for all classes of nonconformities or nonconforming items, when designated or approved by the responsible authority. As an alternative to a single sampling plan with an acceptance number of 0, the plan with an acceptance number of 1 with its correspondingly larger sample size for a designated AQL (where available) may be used, when designated or approved by the responsible authority. As another alternative, the optional fractional acceptance number plans described in clause 13 may be used when approved by the responsible authority.

10.4 Types of sampling plans

Three types of sampling plans, single, double and multiple, are given in Tables 2, 3 and 4, respectively. When several types of plans are available for a given AQL and sample size code letter, any one may be used. A decision as to the type of plan, either single, double or multiple, when available for a given AQL and sample size code letter, shall usually be based upon the comparison between the administrative difficulty and the average sample sizes of the available plans. For the sampling plans given in this part of ISO 2859, the average sample size of multiple plans is less than for double, and both of these are less than the single sample size (see Table 9). Usually, the administrative difficulty for single sampling and the cost per item in the sample are less than for double or multiple sampling.

11 Determination of acceptability

11.1 Inspection for nonconforming items

To determine acceptability of a lot under percent nonconforming inspection, the applicable sampling plan shall be used in accordance with 11.1.1 to 11.1.3.

11.1.1 Single sampling plans (integer acceptance number)

The number of sample items inspected shall be equal to the sample size given by the plan. If the number of nonconforming items found in the sample is equal to or less than the acceptance number, the lot shall be considered acceptable. If the number of nonconforming items is equal to or greater than the rejection number, the lot shall be considered not acceptable.

11.1.2 Double sampling plans

The number of sample items first inspected shall be equal to the first sample size given by the plan. If the number of nonconforming items found in the first sample is equal to or less than the first acceptance number, the lot shall be considered acceptable. If the number of nonconforming items found in the first sample is equal to or greater than the first rejection number, the lot shall be considered not acceptable.

If the number of nonconforming items found in the first sample is between the first acceptance and rejection numbers, a second sample of the size given by the plan shall be inspected. The number of nonconforming items found in the first and second samples shall be accumulated. If the cumulative number of nonconforming items is equal to or less than the second acceptance number, the lot shall be considered acceptable. If the cumulative number of nonconforming items is equal to or greater than the second rejection number, the lot shall be considered not acceptable.

11.1.3 Multiple sampling plans

In multiple sampling, the procedure shall be similar to that specified in 11.1.2. In this part of ISO 2859, there are five stages so that a decision will be reached by the fifth stage at the latest.

11.2 Inspection for nonconformities

In order to determine the acceptability of a lot in a nonconformities per hundred items inspection, the procedure specified for nonconforming inspection (see 11.1) shall be used, except that the term "nonconformities" shall be substituted for "nonconforming items".

12 Further information

12.1 Operating characteristic (OC) curves

The operating characteristic curves for normal and tightened inspection, shown in Table 10, indicate the percentage of lots which may be expected to be accepted under the various sampling plans for a given process quality. The curves shown are for single sampling, integer acceptance number plans; curves for double and multiple sampling are matched as closely as practicable. The OC curves shown for AQLs greater than 10 are applicable for inspection for number of

nonconformities; those for AQLs of 10 or less are applicable for inspection for nonconforming items. For AQLs of 10 or less these OC curves are also applicable to inspection for number of nonconformities.

For each of the curves shown, values of the quality of submitted product corresponding to selected values of probabilities of acceptance are shown in tabular form. In addition, values corresponding to tightened inspection, and values corresponding to sampling for number of nonconformities for AQLs of 10 or fewer nonconformities per 100 items are also given.

Normalized scheme OC curves found in Table 12 indicate the long-range percentage of lots of various qualities that will be accepted, taking into account the switching rules but disregarding the effect of the rule for discontinuation of inspection (9.4). The abscissa is the ratio of the process quality to the AQL. Each curve represents an acceptance number for normal inspection.

12.2 Process average

The process average can be estimated by the average percent nonconforming or average number of nonconformities per 100 items (whichever is applicable) found in the samples of product submitted by the supplier for original inspection, provided that inspection was not curtailed. When double or multiple sampling is used, only first sample results shall be included in the process average estimation.

12.3 Average outgoing quality (AOQ)

The average outgoing quality is the long-term average quality of outgoing product for a given value of incoming product quality, including all accepted lots, plus all lots which are not accepted, after such lots have been effectively 100 % inspected and all nonconforming items replaced by conforming items.

12.4 Average outgoing quality limit (AOQL)

The AOQL is the maximum of the average outgoing qualities for all possible qualities submitted for a given acceptance sampling plan. Approximate AOQL values are given in Table 8-A for each of the single sampling plans for normal inspection and in Table 8-B for each of the single sampling plans for tightened inspection.

12.5 Average sample size curves

Average sample size curves for double and multiple sampling, as compared with the corresponding single sampling plan for each acceptance number, are given in Table 9. These curves show the average sample sizes which may be expected to occur under the various sampling plans for given levels of process quality. The curves assume that the inspection is not curtailed (see ISO 3534-2:1993, 2.5.7).

12.6 Consumer's and producer's risks

12.6.1 Use of individual plans

This part of ISO 2859 is intended to be used as a system employing tightened, normal and reduced inspection on a successive series of lots to achieve consumer protection while assuring the producer that acceptance will occur most of the time if quality is better than the AQL.

Occasionally, specific individual plans are selected from this part of ISO 2859 and used without the switching rules. For example, a purchaser may be using the plans for verification purposes only. This is not the intended application of the system given in this part of ISO 2859 and its use in this way shall not be referred to as "inspection in compliance with ISO 2859-1". When used in this way, this part of ISO 2859 simply represents a repository for a collection of individual plans indexed by AQL. The operating characteristic curves and other measures of a plan so chosen shall be assessed individually for a plan from the tables provided.

12.6.2 Consumer's risk quality tables

If the series of lots is not long enough to allow the switching rules to be applied, it may be desirable to limit the selection of sampling plans to those, associated with a designated AQL value, that give consumer's risk quality not more than a specified limiting quality protection. Sampling plans for this purpose can be selected by choosing a consumer's risk quality (CRQ) and a consumer's risk (probability of lot acceptance) to be associated with it.

Tables 6 and 7 give values of consumer's risk quality (CRQ) for a consumer's risk of 10 %. Table 6 applies when inspecting for nonconforming items and Table 7 applies when inspecting for number of nonconformities. For individual lots with quality levels less than or equal to the tabulated values of consumer's risk qualities, the probabilities of lot acceptance are equal to or less than 10 %. When there is reason for protecting against a specified limiting quality in a lot, Tables 6 and 7 may be useful for fixing minimum sample sizes to be associated with the AQL and inspection level specified for inspection of the series of lots. ISO 2859-2 gives details of the procedure for selecting sampling plans for lots in isolation.

EXAMPLE Assume a consumer's risk quality of 5 % nonconforming items with an associated probability of acceptance of 10 % or less is desired for individual lots. If an AQL of 1 % nonconforming items is designated for inspection of the series of lots, Table 6-A indicates that the minimum sample size shall be given by sample size code letter L.

12.6.3 Producer's risk tables

Tables 5-A, 5-B and 5-C give the probability of rejection for lots of AQL quality on normal, tightened and reduced inspections, respectively. This probability is denoted as producer's risk in 2.6.7 of ISO 3534-2:1993.

13 Fractional acceptance number plans for single sampling (optional)

13.1 Application of fractional acceptance number plans

This subclause specifies optional procedures for fractional acceptance number sampling plans. The optional procedures may be used with the approval of the responsible authority. Unless otherwise specified, standard procedures shown above shall be followed.

Fractional acceptance number plans are found in Tables 11-A, 11-B and 11-C. For normal and tightened inspection, the fractions $1/3$ and $1/2$ are found in place of the two entries with arrows in Table 2-A and 2-B between the plans for acceptance number 0 and acceptance number 1. For reduced inspection, the fractions $1/5$, $1/3$ and $1/2$ are found in place of the three entries with arrows in Table 2-C between the plans for acceptance number 0 and acceptance number 1.

The use of fractional acceptance number plans does not require a change in sample size code letters, with the corresponding change in sample size, when the combination of sample size code letter and AQL results in a plan between the 0 and 1 acceptance number as described in 10.3.

13.2 Acceptability determination

13.2.1 Inspection for nonconforming items

13.2.1.1 Constant sampling plans

When the fractional acceptance number sampling plans remain constant for all lots, the following rules apply.

- a) When there is no nonconforming item in the sample the lot shall be considered acceptable.
- b) When there are two or more nonconforming items in the sample, the lot shall be considered not acceptable.
- c) When there is only one nonconforming item in the sample from the current lot, the lot shall be considered acceptable only if no nonconforming items have been found in the samples from a sufficient number of immediately preceding lots.

For an acceptance number of $1/2$ one such lot is required. For an acceptance number of $1/3$ two such lots are required. For an acceptance number of $1/5$ four such lots are required. Otherwise the current lot shall be considered not acceptable. If the first lot inspected has one nonconforming item, that lot is not accepted.

13.2.1.2 Non-constant sampling plans

When the sampling plan does not remain constant for each successive lot, because of varying lot sizes and/or switching, use an acceptance score that is calculated and used as follows.

- a) Reset the acceptance score to zero at the start of any phase of normal, tightened or reduced inspection.
- b) If the sampling plan obtained indicates an acceptance number 0, the acceptance score shall be kept unchanged.

If the given acceptance number is $1/5$, add 2 to the acceptance score.

If the given acceptance number is $1/3$, add 3 to the acceptance score.

If the given acceptance number is $1/2$, add 5 to the acceptance score.

If the given acceptance number is 1 or more, add 7 to the acceptance score.

- c) When, for fractional acceptance number plans, the updated acceptance score prior to inspection is 8 or less, the lot can be considered acceptable only if there are no nonconforming items in the sample. When, for fractional acceptance number plans, the updated acceptance score prior to inspection is 9 or more, the lot can be considered acceptable only if there is at most one nonconforming item in the sample. When the acceptance number is an integer, use this acceptance number to determine acceptability (in accordance with 11.1.1 or 11.2).
- d) If one or more nonconforming items are found in the sample, reset the acceptance score to 0 (i.e. after making a decision regarding the acceptability of the lot).

The acceptance score shall be updated (added to) after obtaining the sampling plan but before deciding on the acceptability of the lot. The acceptance score shall be reset after the acceptability decision is made. In contrast, the switching score (see 9.3.3.2) shall be added to or reset after deciding on acceptability of the lot.

NOTE When an acceptance score is used for the case of constant sampling plans, the results are the same as 13.2.1.1.

13.2.2 Inspection for number of nonconformities

In order to determine the acceptability of a lot when inspecting for number of nonconformities, the procedures specified for inspection for nonconforming items (see 13.2.1) shall be used, except that the term "nonconformities" shall be substituted for "nonconforming items".

13.3 Switching rules

13.3.1 Normal to tightened and tightened to normal

These rules are the same as indicated in 9.3.1 and 9.3.2, respectively.

13.3.2 Normal to reduced

The rule for updating the switching score (9.3.3.2) under single sampling when using a fractional acceptance number is as follows.

- a) When the given acceptance number is $1/3$ or $1/2$, add 2 to the switching score if the lot is accepted; otherwise reset the switching score to zero.
- b) When the acceptance number is zero, add 2 to the switching score if no nonconforming items are found in the sample; otherwise reset the switching score to zero.

13.3.3 Reduced to normal inspection and discontinuation of inspection

The rules are the same as indicated in 9.3.4 and 9.4, respectively.

NOTE Fractional acceptance number sampling plans are not applicable under the ISO 2859-3 skip-lot sampling system.

13.4 Non-constant sampling plan

An example given in annex A illustrates the application of this acceptance sampling system using the optional fractional acceptance number plans with variable lot size.

It is assumed throughout this example that a series of lots are submitted for inspection for nonconforming items, and that it has been agreed to use an AQL of 1 % nonconforming items with general inspection level II. The results for the first 25 lots are given in annex A.

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Table 1 - Sample size code letters (see 10.1 and 10.2)

Lot size	Special inspection levels				General inspection levels		
	S-1	S-2	S-3	S-4	I	II	III
2 to 8	A	A	A	A	A	A	B
9 to 15	A	A	A	A	A	B	C
16 to 25	A	A	B	B	B	C	D
26 to 50	A	B	B	C	C	D	E
51 to 90	B	B	C	C	C	E	F
91 to 150	B	B	C	D	D	F	G
151 to 280	B	C	D	E	E	G	H
281 to 500	B	C	D	E	F	H	J
501 to 1 200	C	C	E	F	G	J	K
1 201 to 3 200	C	D	E	G	H	K	L
3 201 to 10 000	C	D	F	G	J	L	M
10 001 to 35 000	C	D	F	H	K	M	N
35 001 to 150 000	D	E	G	J	L	N	P
150 001 to 500 000	D	E	G	J	M	P	Q
500 001 and over	D	E	H	K	N	Q	R

Table 2-A — Single sampling plans for normal inspection (Master table)

Sample size code letter	Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (normal inspection)																	
	0,010	0,015	0,025	0,040	0,065	0,10	0,15	0,25	0,40	0,65	1,0	1,5	2,5	4,0	6,5	10	15	25
	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re
A	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
B	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
C	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
D	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
E	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
F	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
G	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
H	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
J	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
K	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125
L	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200
M	315	315	315	315	315	315	315	315	315	315	315	315	315	315	315	315	315	315
N	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
P	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800
Q	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250
R	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000

↗ = Use the first sampling plan below the arrow. If sample size equals, or exceeds, lot size, carry out 100 % inspection.

↖ = Use the first sampling plan above the arrow.

Ac = Acceptance number

Re = Rejection number

Table 2-B — Single sampling plans for tightened inspection (Master table)

Sample size code letter	Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (tightened inspection)																	Sample size
	0,010	0,015	0,025	0,040	0,065	0,10	0,15	0,25	0,40	0,65	1,0	1,5	2,5	4,0	6,5	10	15	
	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	
A	2																	2
B	3																	3
C	5																	5
D	8																	8
E	13																	13
F	20																	20
G	32																	32
H	50																	50
J	80																	80
K	125																	125
L	200																	200
M	315																	315
N	500																	500
P	800																	800
Q	1 250																	1 250
R	2 000																	2 000
S	3 150																	3 150

↘ = Use the first sampling plan below the arrow. If sample size equals, or exceeds, lot size, carry out 100 % inspection.

↗ = Use the first sampling plan above the arrow.

Ac = Acceptance number

Re = Rejection number

Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (reduced inspection)

Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (reduced inspection)

 = Use the first sampling plan above the arrow.

Re = Rejection number

Table 3-A — Double sampling plans for normal inspection (Master table)

Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (normal inspection)																							
Sample size code letter	Sample size	Cumulative sample size	0,010	0,015	0,025	0,40	0,65	1,0	1,5	2,5	4,0	6,5	10	15	25	40	65	100	150	250	400	650	1 000
			Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re
A			↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
B	First	2	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	2	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
C	First	3	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	3	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
D	First	5	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	5	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
E	First	8	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	8	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
F	First	13	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	13	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
G	First	20	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	20	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
H	First	32	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	32	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
J	First	50	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	50	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
K	First	80	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	80	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
L	First	125	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	125	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
M	First	200	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	200	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
N	First	315	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	315	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
P	First	500	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	500	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Q	First	800	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	800	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
R	First	1 250	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	1 250	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓

↓ = Use the first sampling plan below the arrow. If sample size equals, or exceeds, lot size, carry out 100 % inspection.

↓ = Use the first sampling plan above the arrow.

Ac = Acceptance number

Re = Rejection number

* = Use the corresponding single sampling plan (or alternatively use the double sampling plan below, where available).

Table 3-B — Double sampling plans for tightened inspection (Master table)

Sample size code letter	Sample size	Cumulative sample size	Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (tightened inspection)																				
			0,010	0,015	0,025	0,40	0,65	1,0	1,5	2,5	4,0	6,5	10	15	25	40	65	100	150	250	400	650	1 000
			Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re
A																							
B	First	2																					
	Second	2																					
C	First	3																					
	Second	3																					
D	First	5																					
	Second	5																					
E	First	8																					
	Second	8																					
F	First	13																					
	Second	13																					
G	First	20																					
	Second	20																					
H	First	32																					
	Second	32																					
J	First	50																					
	Second	50																					
K	First	80																					
	Second	80																					
L	First	125																					
	Second	125																					
M	First	200																					
	Second	200																					
N	First	315																					
	Second	315																					
P	First	500																					
	Second	500																					
Q	First	800																					
	Second	800																					
R	First	1 250																					
	Second	1 250																					
S	First	2 000																					
	Second	2 000																					

↘ = Use the first sampling plan below the arrow. If sample size equals, or exceeds, lot size, carry out 100 % inspection.

↗ = Use the first sampling plan above the arrow.

Ac = Acceptance number

Re = Rejection number

* = Use the corresponding single sampling plan (or alternatively use the double sampling plan below, where available).

Table 3-C — Double sampling plans for reduced inspection (Master table)

Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (reduced inspection)																								
Sample size code letter	Sample size	Cumulative sample size	0,010	0,015	0,025	0,40	0,65	1,0	1,5	2,5	4,0	6,5	10	15	25	40	65	100	150	250	400	650	1 000	
			Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re
A			→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
B			→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
C			→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
D	First	2	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
	Second	4	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
E	First	3	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
	Second	6	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
F	First	5	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
	Second	10	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
G	First	8	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
	Second	16	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
H	First	13	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
	Second	26	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
J	First	20	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
	Second	40	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
K	First	32	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
	Second	64	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
L	First	50	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
	Second	100	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
M	First	80	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
	Second	160	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
N	First	125	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
	Second	250	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
P	First	200	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
	Second	400	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
Q	First	315	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
	Second	630	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
R	First	500	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
	Second	1 000	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	

↓ = Use the first sampling plan below the arrow. If sample size equals, or exceeds, lot size, carry out 100 % inspection.

↑ = Use the first sampling plan above the arrow.

Ac = Acceptance number

Re = Rejection number

* = Use the corresponding single sampling plan (or alternatively use the double sampling plan below, where available).

Table 4-A — Multiple sampling plans for normal inspection (Master table)

Sample size code letter	Sample size	Cumulative sample size	Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (normal inspection)																				
			0,010	0,015	0,025	0,040	0,065	1,0	1,5	2,5	4,0	6,5	10	15	25	40	65	100	150	250	400	650	1 000
			Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re
A																							
B																							
C																							
D	First	2																					
	Second	2																					
	Third	2																					
	Fourth	2																					
	Fifth	2																					
E	First	3																					
	Second	3																					
	Third	3																					
	Fourth	3																					
	Fifth	3																					
F	First	5																					
	Second	5																					
	Third	5																					
	Fourth	5																					
	Fifth	5																					
G	First	8																					
	Second	8																					
	Third	8																					
	Fourth	8																					
	Fifth	8																					

↓ = Use the first sampling plan below the arrow. If sample size equals, or exceeds, lot size, carry out 100 % inspection.

↓ = Use the first sampling plan above the arrow.

Ac = Acceptance number

Re = Rejection number

* = Use the corresponding single sampling plan (or alternatively use the double sampling plan below, where available).

++ = Use the corresponding double sampling plan (or alternatively use the multiple sampling plan below, where available).

= Acceptance is not permitted for this sample size.

Table 4-A — Multiple sampling plans for normal inspection (Master table) (continued)

Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (normal inspection)																							
Sample size code letter	Sample size	Cumulative sample size	0,010	0,015	0,025	0,040	0,65	1,0	1,5	2,5	4,0	6,5	10	15	25	40	65	100	150	250	400	650	1 000
			Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re
H	First	13	↓	↓	↓	↑	↑	# 2	# 2	# 3	# 4	0 4	0 5	1 7	2 9	↑	↑	↑	↑	↑	↑	↑	↑
	Second	13	↓	↓	*	↑	↑	0 2	0 3	0 3	1 5	1 6	3 8	4 10	7 14	↑	↑	↑	↑	↑	↑	↑	↑
	Third	13	↓	↓	↓	↑	↑	0 2	0 3	1 4	2 6	3 8	6 10	8 13	13 19	↑	↑	↑	↑	↑	↑	↑	↑
	Fourth	13	↓	↓	↓	↑	↑	0 2	1 3	2 5	4 7	5 9	12 17	20 25	26 27	↑	↑	↑	↑	↑	↑	↑	↑
	Fifth	13	↓	↓	↓	↑	↑	1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27	↑	↑	↑	↑	↑	↑	↑	↑
J	First	20	↓	↓	↓	↑	↑	# 2	# 2	# 3	# 4	0 4	0 5	1 7	2 9	↑	↑	↑	↑	↑	↑	↑	↑
	Second	20	↓	↓	↓	↑	↑	0 2	0 3	0 3	1 5	1 6	3 8	4 10	7 14	↑	↑	↑	↑	↑	↑	↑	↑
	Third	20	↓	↓	*	↑	↑	0 2	0 3	1 4	2 6	3 8	6 10	8 13	13 19	↑	↑	↑	↑	↑	↑	↑	↑
	Fourth	20	↓	↓	↓	↑	↑	0 2	1 3	2 5	4 7	5 9	12 17	20 25	26 27	↑	↑	↑	↑	↑	↑	↑	↑
	Fifth	20	↓	↓	↓	↑	↑	1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27	↑	↑	↑	↑	↑	↑	↑	↑
K	First	32	↓	↓	↓	↑	↑	# 2	# 3	# 4	0 4	0 5	1 7	2 9	↑	↑	↑	↑	↑	↑	↑	↑	↑
	Second	32	↓	↓	↓	↑	↑	0 2	0 3	0 3	1 5	1 6	3 8	4 10	7 14	↑	↑	↑	↑	↑	↑	↑	↑
	Third	32	↓	↓	*	↑	↑	0 2	0 3	1 4	2 6	3 8	6 10	8 13	13 19	↑	↑	↑	↑	↑	↑	↑	↑
	Fourth	32	↓	↓	↓	↑	↑	0 2	1 3	2 5	4 7	5 9	12 17	20 25	26 27	↑	↑	↑	↑	↑	↑	↑	↑
	Fifth	32	↓	↓	↓	↑	↑	1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27	↑	↑	↑	↑	↑	↑	↑	↑
L	First	50	↓	↓	↓	↑	↑	# 2	# 3	# 4	0 4	0 5	1 7	2 9	↑	↑	↑	↑	↑	↑	↑	↑	↑
	Second	50	↓	↓	↓	↑	↑	0 2	0 3	0 3	1 5	1 6	3 8	4 10	7 14	↑	↑	↑	↑	↑	↑	↑	↑
	Third	50	↓	↓	*	↑	↑	0 2	0 3	1 4	2 6	3 8	6 10	8 13	13 19	↑	↑	↑	↑	↑	↑	↑	↑
	Fourth	50	↓	↓	↓	↑	↑	0 2	1 3	2 5	4 7	5 9	12 17	20 25	26 27	↑	↑	↑	↑	↑	↑	↑	↑
	Fifth	50	↓	↓	↓	↑	↑	1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27	↑	↑	↑	↑	↑	↑	↑	↑
M	First	80	↓	↓	↓	↑	↑	# 2	# 2	# 3	# 4	0 4	0 5	1 7	2 9	↑	↑	↑	↑	↑	↑	↑	↑
	Second	80	↓	↓	↓	↑	↑	0 2	0 3	0 3	1 5	1 6	3 8	4 10	7 14	↑	↑	↑	↑	↑	↑	↑	↑
	Third	80	↓	↓	*	↑	↑	0 2	0 3	1 4	2 6	3 8	6 10	8 13	13 19	↑	↑	↑	↑	↑	↑	↑	↑
	Fourth	80	↓	↓	↓	↑	↑	0 2	1 3	2 5	4 7	5 9	12 17	20 25	26 27	↑	↑	↑	↑	↑	↑	↑	↑
	Fifth	80	↓	↓	↓	↑	↑	1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27	↑	↑	↑	↑	↑	↑	↑	↑

↓ = Use the first sampling plan below the arrow. If sample size equals, or exceeds, lot size, carry out 100 % inspection.

↑ = Use the first sampling plan above the arrow.

Ac = Acceptance number

Re = Rejection number

* = Use the corresponding single sampling plan (or alternatively use the double sampling plan below, where available).

++ = Use the corresponding double sampling plan (or alternatively use the multiple sampling plan below, where available).

= Acceptance is not permitted for this sample size.

Table 4-A — Multiple sampling plans for normal inspection (Master table) (concluded)

Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (normal inspection)																												
Sample size code letter	Sample size	Cumulative sample size	0,010	0,015	0,025	0,040	0,065	1,0	1,5	2,5	4,0	6,5	10	15	25	40	65	100	150	250	400	650	1 000					
			Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re				
N	First	125	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	Second	125	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	Third	125	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	Fourth	125	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	Fifth	125	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
P	First	200	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	Second	200	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	Third	200	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	Fourth	200	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	Fifth	200	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
Q	First	315	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	Second	315	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	Third	315	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	Fourth	315	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	Fifth	315	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
R	First	500	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	Second	500	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	Third	500	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	Fourth	500	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	Fifth	500	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					

↓ = Use the first sampling plan below the arrow. If sample size equals, or exceeds, lot size, carry out 100 % inspection.

↑ = Use the first sampling plan above the arrow.

Ac = Acceptance number

Re = Rejection number

* = Use the corresponding single sampling plan (or alternatively use the double sampling plan below, where available).

++ = Use the corresponding double sampling plan (or alternatively use the multiple sampling plan below, where available).

= Acceptance is not permitted for this sample size.

Table 4-B — Multiple sampling plans for tightened inspection (Master table)

Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (tightened inspection)																							
Sample size code letter	Sample size	Cumulative sample size	0,010	0,015	0,025	0,040	0,065	1,0	1,5	2,5	4,0	6,5	10	15	25	40	65	100	150	250	400	650	1 000
			Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re
A																							
B																							
C																							
D	First	2																					
	Second	2																					
	Third	2																					
	Fourth	2																					
	Fifth	2																					
E	First	3																					
	Second	3																					
	Third	3																					
	Fourth	3																					
	Fifth	3																					
F	First	5																					
	Second	5																					
	Third	5																					
	Fourth	5																					
	Fifth	5																					
G	First	8																					
	Second	8																					
	Third	8																					
	Fourth	8																					
	Fifth	8																					

↓ = Use the first sampling plan below the arrow. If sample size equals, or exceeds, lot size, carry out 100 % inspection.

↑ = Use the first sampling plan above the arrow.

Ac = Acceptance number

Re = Rejection number

* = Use the corresponding single sampling plan (or alternatively use the double sampling plan below, where available).

++ = Use the corresponding double sampling plan (or alternatively use the multiple sampling plan below, where available).

= Acceptance is not permitted for this sample size.

Table 4-B — Multiple sampling plans for tightened inspection (Master table) (continued)

Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (tightened inspection)																								
Sample size code letter	Sample size	Cumulative sample size	0,010	0,015	0,025	0,040	0,065	1,0	1,5	2,5	4,0	6,5	10	15	25	40	65	100	150	250	400	650	1 000	
			Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re
H	First	13							# 2	# 2	# 3	# 4	0 4	0 6	1 8									
	Second	13							0 2	0 3	0 3	1 5	2 7	3 9	6 12									
	Third	13				*			0 2	0 3	1 4	2 6	4 9	7 12	11 17									
	Fourth	13							0 2	1 3	2 5	4 7	6 11	11 15	16 22									
	Fifth	13							1 2	3 4	4 5	6 7	10 11	15 16	23 24									
J	First	20						# 2	# 2	# 3	# 4	0 4	0 6	1 8										
	Second	20						0 2	0 3	0 3	1 5	2 7	3 9	6 12										
	Third	20			*			0 2	0 3	1 4	2 6	4 9	7 12	11 17										
	Fourth	20						0 2	1 3	2 5	4 7	6 11	11 15	16 22										
	Fifth	20						1 2	3 4	4 5	6 7	10 11	15 16	23 24										
K	First	32					# 2	# 2	# 3	# 4	0 4	0 6	1 8											
	Second	32					0 2	0 3	0 3	1 5	2 7	3 9	6 12											
	Third	32		*			0 2	0 3	1 4	2 6	4 9	7 12	11 17											
	Fourth	32					0 2	1 3	2 5	4 7	6 11	11 15	16 22											
	Fifth	32					1 2	3 4	4 5	6 7	10 11	15 16	23 24											
L	First	50				# 2	# 2	# 3	# 4	0 4	0 6	1 8												
	Second	50				0 2	0 3	0 3	1 5	2 7	3 9	6 12												
	Third	50		*		0 2	0 3	1 4	2 6	4 9	7 12	11 17												
	Fourth	50				0 2	1 3	2 5	4 7	6 11	11 15	16 22												
	Fifth	50				1 2	3 4	4 5	6 7	10 11	15 16	23 24												
M	First	80			# 2	# 2	# 3	# 4	0 4	0 6	1 8													
	Second	80			0 2	0 3	0 3	1 5	2 7	3 9	6 12													
	Third	80			0 2	0 3	1 4	2 6	4 9	7 12	11 17													
	Fourth	80			0 2	1 3	2 5	4 7	6 11	11 15	16 22													
	Fifth	80			1 2	3 4	4 5	6 7	10 11	15 16	23 24													

↓ = Use the first sampling plan below the arrow. If sample size equals, or exceeds, lot size, carry out 100 % inspection.

↑ = Use the first sampling plan above the arrow.

Ac = Acceptance number

Re = Rejection number

* = Use the corresponding single sampling plan (or alternatively use the double sampling plan below, where available).

++ = Use the corresponding double sampling plan (or alternatively use the multiple sampling plan below, where available).

= Acceptance is not permitted for this sample size.

Table 4-B — Multiple sampling plans for tightened inspection (Master table) (concluded)

Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (tightened inspection)																												
Sample size code letter	Sample size	Cumulative sample size	0,010	0,015	0,025	0,040	0,065	0,10	0,15	0,25	0,40	0,65	1,0	1,5	2,5	4,0	6,5	10	15	25	40	65	100	150	250	400	650	1 000
			Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re
N	First	125	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	125	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Third	125	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Fourth	125	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Fifth	125	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
P	First	200	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	200	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Third	200	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Fourth	200	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Fifth	200	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Q	First	315	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	315	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Third	315	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Fourth	315	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Fifth	315	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
R	First	500	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	500	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Third	500	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Fourth	500	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Fifth	500	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
S	First	800	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	800	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Third	800	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Fourth	800	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Fifth	800	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓

↓ = Use the first sampling plan below the arrow. If sample size equals, or exceeds, lot size, carry out 100 % inspection.

↓ = Use the first sampling plan above the arrow.

Ac = Acceptance number

Re = Rejection number

* = Use the corresponding single sampling plan (or alternatively use the double sampling plan below, where available).

++ = Use the corresponding double sampling plan (or alternatively use the multiple sampling plan below, where available).

= Acceptance is not permitted for this sample size.

Table 4-C — Multiple sampling plans for reduced inspection (Master table)

Sample size code letter	Sample size	Cumulative sample size	Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (reduced inspection)															
			0,010	0,015	0,025	0,040	0,065	1,0	1,5	2,5	4,0	6,5	10	15	25	40	65	100
			Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re
A			↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
B			↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
C			↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
D			↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
E			↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
F	First	2	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	4	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Third	6	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Fourth	8	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Fifth	10	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
G	First	3	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	6	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Third	9	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Fourth	12	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Fifth	15	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
H	First	5	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	10	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Third	15	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Fourth	20	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Fifth	25	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓

↓ = Use the first sampling plan below the arrow. If sample size equals, or exceeds, lot size, carry out 100 % inspection.

↓ = Use the first sampling plan above the arrow.

Ac = Acceptance number

Re = Rejection number

* = Use the corresponding single sampling plan (or alternatively use the double sampling plan below, where available).

++ = Use the corresponding double sampling plan (or alternatively use the multiple sampling plan below, where available).

= Acceptance is not permitted for this sample size.

Table 4-C — Multiple sampling plans for reduced inspection (Master table) (continued)

Sample size code letter	Sample size	Cumulative sample size	Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (reduced inspection)																										
			0,010	0,015	0,025	0,040	0,065	1,0	1,5	2,5	4,0	6,5	10	15	25	40	65	100	150	250	400	650	1 000						
			Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re					
J	First	8							# 2	# 2	# 3	# 3	0 4	0 4	0 5														
	Second	8							0 2	0 3	0 3	1 4	1 6	2 7	3 8														
	Third	8					*		0 2	0 3	1 4	2 5	2 7	4 9	6 10														
	Fourth	8							0 2	1 3	2 5	3 5	4 8	6 11	9 12														
	Fifth	8							1 2	3 4	4 5	5 6	7 8	10 11	12 13														
K	First	13							# 2	# 2	# 3	0 4	0 4	0 5															
	Second	13							0 2	0 3	0 3	1 4	1 6	2 7	3 8														
	Third	13					*		0 2	0 3	1 4	2 5	2 7	4 9	6 10														
	Fourth	13							0 2	1 3	2 5	3 5	4 8	6 11	9 12														
	Fifth	13							1 2	3 4	4 5	5 6	7 8	10 11	12 13														
L	First	20							# 2	# 2	# 3	0 4	0 4	0 5															
	Second	20							0 2	0 3	0 3	1 4	1 6	2 7	3 8														
	Third	20					*		0 2	0 3	1 4	2 5	2 7	4 9	6 10														
	Fourth	20							0 2	1 3	2 5	3 5	4 8	6 11	9 12														
	Fifth	20							1 2	3 4	4 5	5 6	7 8	10 11	12 13														
M	First	32							# 2	# 3	# 3	0 4	0 4	0 5															
	Second	32							0 2	0 3	0 3	1 4	1 6	2 7	3 8														
	Third	32					*		0 2	0 3	1 4	2 5	2 7	4 9	6 10														
	Fourth	32							0 2	1 3	2 5	3 5	4 8	6 11	9 12														
	Fifth	32							1 2	3 4	4 5	5 6	7 8	10 11	12 13														

↓ = Use the first sampling plan below the arrow. If sample size equals, or exceeds, lot size, carry out 100 % inspection.

↑ = Use the first sampling plan above the arrow.

Ac = Acceptance number

Re = Rejection number

* = Use the corresponding single sampling plan (or alternatively use the double sampling plan below, where available).

++ = Use the corresponding double sampling plan (or alternatively use the multiple sampling plan below, where available).

= Acceptance is not permitted for this sample size.

Table 4-C — Multiple sampling plans for reduced inspection (Master table) (concluded)

Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (reduced inspection)																												
Sample size code letter	Sample size	Cumulative sample size	0,010	0,015	0,025	0,040	0,065	0,10	0,15	0,25	0,40	0,65	1,0	1,5	2,5	4,0	6,5	10	15	25	40	65	100	150	250	400	650	1 000
			Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re
N	First	50	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	50	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Third	50	↓	↓	*	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Fourth	50	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Fifth	50	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
P	First	80	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	80	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Third	80	↓	*	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Fourth	80	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Fifth	80	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Q	First	125	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	125	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Third	125	↓	↓	*	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Fourth	125	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Fifth	125	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
R	First	200	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Second	200	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Third	200	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Fourth	200	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	Fifth	200	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓

↓ = Use the first sampling plan below the arrow. If sample size equals, or exceeds, lot size, carry out 100 % inspection.

↓ = Use the first sampling plan above the arrow.

Ac = Acceptance number

Re = Rejection number

* = Use the corresponding single sampling plan (or alternatively use the double sampling plan below, where available).

++ = Use the corresponding double sampling plan (or alternatively use the multiple sampling plan below, where available).

= Acceptance is not permitted for this sample size.

Table 5-A — Producer's risk for normal inspection

(in percent of lots not accepted for single sampling plans)

Sample size code letter	Sample size	Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (normal inspection)																					
		0,010	0,015	0,025	0,040	0,065	1,0	1,5	2,5	4,0	6,5	10	15	25	40	65	100	150	250	400	650	1 000	
A	2																						
B	3																						
C	5																						
D	8																						
E	13																						
F	20																						
G	32																						
H	50																						
J	80																						
K	125																						
L	200																						
M	315																						
N	500																						
P	800																						
Q	1 250																						
R	2 000																						

NOTES

- 1 The producer's risk is the probability of nonacceptance for lots of AQL quality.
- 2 Upper entries are for inspection for nonconformities per 100 items and are based on the Poisson distribution.
Lower entries are for inspection for percent nonconforming and are based on the binomial distribution.
- 3 Superscript * denotes that the value is for the optional fractional acceptance number sampling plan (see Table 11-A).

Table 5-B — Producer's risk for tightened inspection

(in percent of lots not accepted for single sampling plans)

Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (tightened inspection)																											
Sample size code letter	Sample size	0,010	0,015	0,025	0,040	0,065	1,0	1,5	2,5	4,0	6,5	10	15	25	40	65	100	150	250	400	650	1 000					
A	2											18,1 19,0	13,7* 21,0*														
B	3											13,7* 14,2*	17,9* 21,0*	17,3 12,1	13,4 11,1	6,81 5,19	4,27 3,74	6,81 5,25	6,38 4,09	6,98 2,21	5,25						
C	5									18,1 18,5	15,5* 15,9*	21,0* 21,6*	17,3 13,2	14,3 11,1	6,81 5,19	4,27 3,74	5,25 6,16										
D	8								18,1 18,3	15,1* 15,3*	22,2* 22,6*	19,1 18,7	12,1 14,3	14,3 10,5	8,19 6,38	3,74 5,12											
E	13							17,7 17,8	15,5* 15,6*	22,2* 22,4*	20,7 20,5	14,3 13,4	13,4 11,1	8,19 6,38	6,22												
F	20						18,1 18,2	13,7* 13,8*	21,0* 21,1*	19,1 19,0	14,3 13,7	14,3 13,3	8,39 6,81	6,38 5,19													
G	32					18,8 18,8	15,1* 15,2*	19,7* 19,8*	19,1 19,0	13,8 13,5	15,8 15,2	10,5 9,44	5,58 4,27	6,38 5,19													
H	50						18,1 18,2	15,5* 15,5*	21,0* 21,0*	17,3 17,3	13,2 12,9	11,1 10,4	6,81 5,79	4,27 3,74													
J	80						15,1* 15,2*	19,1 19,1	12,1 11,9	14,3 14,1	10,5 10,1	8,19 7,51	6,38 5,38														
K	125						17,1 17,1	14,6* 14,6*	21,0* 21,0*	19,6 19,5	13,2 12,0	9,70 9,44	7,00 6,34	5,19 4,28													
L	200						18,1 18,1	13,7* 13,7*	21,0* 21,0*	19,1 19,1	14,3 14,2	8,39 8,24	6,81 6,32														
M	315						18,5 18,5	14,8* 14,8*	19,3* 19,3*	18,7 18,7	13,4 13,3	5,16 5,03	5,80 5,56	5,52 5,15													
N	500					18,1 18,1	15,5* 15,5*	21,0* 21,0*	17,3 17,3	13,2 13,1	11,1 11,1	6,81 6,71	4,27 4,14	5,19 4,96													
P	800					18,1 18,1	15,1* 15,1*	22,2* 22,2*	19,1 19,1	12,1 12,0	10,5 10,5	8,19 8,13	6,38 6,28	3,74 3,63													
Q	1 250					17,1 17,1	14,6* 14,6*	21,0* 21,0*	19,6 19,6	13,2 13,1	9,70 9,68	7,00 6,94	5,19 5,10														
R	2 000	18,1 18,1	13,7* 13,7*	21,0* 21,0*	19,1 19,1	14,3 14,3	8,39 8,38	6,81 6,78	6,38 6,34	6,98 6,92																	
S	3 150																										

NOTES

1 The producer's risk is the probability of nonacceptance for lots of AQL quality.

2 Upper entries are for inspection for nonconformities per 100 items and are based on the Poisson distribution.

Lower entries are for inspection for percent nonconforming and are based on the binomial distribution.

3 Superscript * denotes that the value is for the optional fractional acceptance number sampling plan (see Table 11-B).

Table 5-C — Producer's risk for reduced inspection

(in percent of lots not accepted for single sampling plans)

Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (reduced inspection)																						
Sample size code letter	Sample size	0,010	0,015	0,025	0,040	0,065	1,0	1,5	2,5	4,0	6,5	10	15	25	40	65	100	150	250	400	650	1 000
A	2										12,2	7,15*	9,45*	9,02	4,74	4,31	1,66	1,19	1,37	1,73	1,41	1,35
B	2									7,69	5,40*	7,15*	9,45*	9,02	4,74	4,31	1,66	1,19	1,37	1,73	1,41	1,35
C	2								4,88	2,33*	3,39*	4,72*	3,69	1,44	0,908	1,07	0,453	0,380	1,37	1,73	1,41	1,35
D	3							4,40	2,07*	2,94*	4,51*	3,69	1,09	0,729	0,775	0,396	0,38	0,667	1,03	0,607		
E	5						4,88	2,07*	3,16*	4,72*	4,27	1,44	0,729	0,912	0,453	0,629	1,37	1,03	0,940			
F	8						5,07	2,33*	2,94*	4,72*	4,15	1,59	0,908	0,775	0,453	0,571	1,77					
G	13						5,08	2,32*	2,91*	4,65*	3,81	1,20	0,502	0,380	1,37							
H	20						5,07	2,33*	3,39*	4,72*	4,15	1,59	0,908	0,775	0,453	0,571	1,77					
J	32						5,08	2,32*	3,38*	4,69*	3,57	1,30	0,741	0,788	0,239							
K	50						4,88	2,07*	3,16*	4,71*	4,21	1,38	0,674	0,813	0,361	0,454	0,935					
L	80						4,88	2,07*	3,16*	4,72*	4,27	1,44	0,729	0,912	0,453	0,571	1,77					
M	125						4,88	2,07*	3,16*	4,71*	4,21	1,38	0,674	0,813	0,361	0,454	0,935					
N	200						4,88	2,07*	3,16*	4,72*	4,27	1,44	0,729	0,912	0,453	0,571	1,77					
P	315						4,88	2,07*	3,16*	4,72*	4,27	1,44	0,729	0,912	0,453	0,571	1,77					
Q	500						4,88	2,07*	3,16*	4,72*	4,27	1,44	0,729	0,912	0,453	0,571	1,77					
R	800						4,88	2,07*	3,16*	4,72*	4,27	1,44	0,729	0,912	0,453	0,571	1,77					

Table 6-A — Consumer's risk quality for normal inspection

(in percent nonconforming for single sampling plans, for inspection for percent nonconforming)

Sample size code letter		Sample size	Acceptance quality limit, AQL, percent nonconforming items															
			0,010	0,015	0,025	0,040	0,065	0,10	0,15	0,25	0,40	0,65	1,0	1,5	2,5	4,0	6,5	10
A	2																68,4	69,0*
B	3															53,6	54,1*	57,6*
C	5													36,9	37,3*	39,8*	58,4	
D	8												25,0	25,2*	27,0*	40,6	53,8	
E	13											16,2	16,4*	17,5*	26,8	36,0	44,4	
F	20										10,9	11,0*	11,8*	18,1	24,5	30,4	41,5	
G	32									6,94	7,01*	7,50*	11,6	15,8	19,7	27,1	34,0	
H	50								4,50	4,54*	4,87*	7,56	10,3	12,9	17,8	22,4	29,1	
J	80							2,84	2,86*	3,07*	4,78	6,52	8,16	11,3	14,3	18,6	24,2	
K	125						1,83	1,84*	1,97*	3,08	4,20	5,27	7,29	9,24	12,1	15,7	21,9	
L	200					1,14	1,16*	1,24*	1,93	2,64	3,31	4,59	5,82	7,60	9,91	13,8		
M	315			0,728		0,735*	0,788*	1,23	1,68	2,11	2,92	3,71	4,85	6,33	8,84			
N	500		0,459	0,464*		0,497*	0,776	1,06	1,33	1,85	2,34	3,06	4,00	5,60				
P	800		0,287	0,290*		0,485	0,664	0,833	1,16	1,47	1,92	2,51	3,51					
Q	1 250	0,184	0,186*	0,199*		0,425	0,534	0,741	0,940	1,23	1,61	2,25						
R	2 000	0,116*	0,124*	0,194	0,266	0,334	0,463	0,588	0,769	1,00	1,41							

NOTES

1 At the consumer's risk quality, 10% of lots will be expected to be accepted.

2 All the values are based on the binomial distribution.

3 Superscript * denotes that the value is for the optional fractional acceptance number sampling plan (see Table 11-A).

Table 6-B — Consumer's risk quality for tightened inspection

(in percent nonconforming for single sampling plans, for inspection for percent nonconforming)

Sample size code letter		Sample size	Acceptance quality limit, AQL, percent nonconforming items															
			0,010	0,015	0,025	0,040	0,065	0,10	0,15	0,25	0,40	0,65	1,0	1,5	2,5	4,0	6,5	10
A	2																	68,4
B	3																53,6	54,1*
C	5														36,9	37,3*	39,8*	
D	8													25,0	25,2*	27,0*	40,6	
E	13												16,2	16,4*	17,5*	26,8	36,0	
F	20											10,9	11,0*	11,8*	18,1	24,5	30,4	
G	32										6,94	7,01*	7,50*	11,6	15,8	19,7	27,1	
H	50									4,50	4,54*	4,87*	7,56	10,3	12,9	17,8	24,7	
J	80								2,84	2,86*	3,07*	4,78	6,52	8,16	11,3	15,7	21,4	
K	125							1,83	1,84*	1,97*	3,08	4,20	5,27	7,29	10,2	13,9	19,3	
L	200							1,14	1,16*	1,24*	1,93	3,31	4,59	6,42	8,76	12,2		
M	315					0,728	0,735*	0,788*	1,23	1,68	2,11	2,92	4,09	5,59	7,77			
N	500				0,459	0,464*	0,497*	0,776	1,06	1,33	1,85	2,59	3,54	4,92				
P	800		0,287	0,290*	0,311*	0,311*	0,485	0,664	0,833	1,16	1,62	2,21	3,08					
Q	1 250		0,184	0,186*	0,199*	0,311	0,425	0,534	0,741	1,04	1,42	1,98						
R	2 000	0,115	0,116*	0,124*	0,194	0,266	0,334	0,463	0,649	0,888	1,24							
S	3 150			0,123														

NOTES

- 1 At the consumer's risk quality, 10% of lots will be expected to be accepted.
- 2 All the values are based on the binomial distribution.
- 3 Superscript * denotes that the value is for the optional fractional acceptance number sampling plan (see Table 11-B).

Table 6-C — Consumer's risk quality for reduced inspection

(in percent nonconforming for single sampling plans, for inspection for percent nonconforming)

Sample size code letter		Sample size	Acceptance quality limit, AQL, percent nonconforming items														
			0,010	0,015	0,025	0,040	0,065	1,0	1,5	2,5	4,0	6,5	10				
A	2															68,4	69,0*
B	2														68,4	68,4*	69,0*
C	2												68,4	68,4*	69,0*	73,2*	
D	3											53,6	53,6*	54,1*	57,6*	80,4	
E	5										36,9	36,9*	37,3*	39,8*	58,4	75,3	
F	8									25,0	25,0*	25,2*	27,0*	40,6	53,8	65,5	
G	13								16,2	16,2*	16,4*	17,5*	26,8	36,0	44,4	52,3	
H	20							10,9	10,9*	11,0*	11,8*	18,1	24,5	30,4	36,1	46,7	
J	32						6,94	6,94*	7,01*	7,50*	11,6	15,8	19,7	23,4	30,6	37,4	
K	50						4,50	4,50*	4,54*	4,87*	7,56	10,3	12,9	15,4	20,1	24,7	29,1
L	80					2,84	2,84*	2,86*	3,07*	4,78	6,52	8,16	9,74	12,8	15,7	18,6	
M	125				1,83	1,83*	1,84*	1,97*	3,08	4,20	5,27	6,29	8,27	10,2	12,1		
N	200		1,14	1,14*		1,16*	1,24*	1,93	2,64	3,31	3,96	5,21	6,42	7,60			
P	315		0,728	0,728*	0,735*	0,788*	1,23	1,68	2,11	2,52	3,32	4,09	4,85				
Q	500	0,459	0,460*	0,464*	0,497*	0,776	1,06	1,33	1,59	2,10	2,59	3,06					
R	800	0,287*	0,290*	0,311*	0,485	0,664	0,833	0,997	1,31	1,62	1,92						

NOTES

- 1 At the consumer's risk quality, 10% of lots will be expected to be accepted.
- 2 All the values are based on the binomial distribution.
- 3 Superscript * denotes that the value is for the optional fractional acceptance number sampling plan (see Table 11-C).

Table 7-A — Consumer's risk quality for normal inspection

(in nonconformities per 100 items for single sampling plans, for inspection for nonconformities per 100 items)

Acceptance quality limit, AQL, nonconformities per 100 items																										
Sample size code letter	Sample size	0,010	0,015	0,025	0,040	0,065	1,0	1,5	2,5	4,0	6,5	10	15	25	40	65	100	150	250	400	650	1 000				
A	2											115	116*	125*	194	266	334	464	589	770	1 006	1 409	1 916			
B	3								76,8	77,5*	83,0*	130	177	223	309	392	514	671	939	1 277	1 793					
C	5							46,1	46,5*	49,8*	77,8	106	134	185	235	308	403	564	766	1 076						
D	8							28,8	29,1*	31,1*	48,6	66,5	83,5	116	147	193	252	352	479	672						
E	13						17,7	17,9*	19,2*	29,9	40,9	51,4	71,3	90,5	119	155	217	295	414							
F	20						11,5	11,6*	12,5*	19,4	26,6	33,4	46,4	58,9	77,0	101	141									
G	32						7,20	7,26*	7,78*	12,2	16,6	20,9	29,0	36,8	48,1	62,9	88,1									
H	50					4,61	4,65*	4,98*	7,78	10,6	13,4	18,5	23,5	30,8	40,3	56,4										
J	80					2,88	2,91*	3,11*	4,86	6,65	8,35	11,6	14,7	19,3	25,2	35,2										
K	125					1,84	1,86*	1,99*	3,11	4,26	5,34	7,42	9,42	12,3	16,1	22,5										
L	200					1,15	1,16*	1,25*	1,94	2,66	3,34	4,64	5,89	7,70	10,1	14,1										
M	315					0,731	0,738*	0,791*	1,23	1,69	2,12	2,94	3,74	4,89	6,39	8,95										
N	500					0,461	0,465*	0,498*	0,778	1,06	1,34	1,85	2,35	3,08	4,03	5,64										
P	800					0,288	0,291*	0,311*	0,486	0,665	0,835	1,16	1,47	1,93	2,52	3,52										
Q	1 250					0,184	0,186*	0,199*	0,311	0,426	0,534	0,742	0,942	1,23	1,61	2,25										
R	2 000					0,116*	0,125*	0,266	0,334	0,334	0,464	0,589	0,770	1,01	1,41											

NOTES

1 At the consumer's risk quality, 10% of lots will be expected to be accepted.

2 All the values are based on the Poisson distribution.

3 Superscript * denotes that the value is for the optional fractional acceptance number sampling plan (see Table 11-A).

Table 7-B — Consumer's risk quality for tightened inspection
(in nonconformities per 100 items for single sampling plans, for inspection for nonconformities per 100 items)

Sample size code letter		Sample size	Acceptance quality limit, AQL, nonconformities per 100 items																									
			0,010	0,015	0,025	0,040	0,065	1,0	1,5	2,5	4,0	6,5	10	15	25	40	65	100	150	250	400	650	1 000					
A	2																	115	116*	125*	194	266	334	464	650	889	1 238	1 748
B	3																	76,8	83,0*	130	177	223	309	433	593	825	1 165	1 683
C	5															46,1	46,5*	49,8*	77,8	106	134	185	260	356	495	699	1 010	
D	8														28,8	29,1*	31,1*	48,6	66,5	83,5	116	162	222	309	437	631		
E	13													17,7	17,9*	19,2*	29,9	40,9	51,4	71,3	100	137	190	269	388			
F	20												11,5	11,6*	12,5*	19,4	26,6	33,4	46,4	65,0	88,9	124						
G	32												7,20	7,26*	7,78*	12,2	16,6	20,9	29,0	40,6	55,6	77,4						
H	50											4,61	4,65*	4,98*	7,78	10,6	13,4	18,5	26,0	35,6	49,5							
J	80												2,88	2,91*	3,11*	4,86	6,65	8,35	11,6	16,2	22,2	30,9						
K	125												1,84	1,86*	1,99*	3,11	4,26	5,34	7,42	10,4	14,2	19,8						
L	200												1,15	1,16*	1,25*	1,94	2,66	3,34	4,64	6,50	8,89	12,4						
M	315												0,731	0,738*	0,791*	1,23	1,69	2,12	2,94	4,13	5,64	7,86						
N	500												0,461	0,465*	0,498*	0,778	1,06	1,34	1,85	2,60	3,56	4,95						
P	800												0,288	0,291*	0,311*	0,486	0,665	0,835	1,16	1,62	2,22	3,09						
Q	1 250												0,184	0,186*	0,199*	0,311	0,426	0,534	0,742	1,04	1,42	1,98						
R	2 000												0,115	0,116*	0,125*	0,194	0,266	0,334	0,464	0,650	0,889	1,24						
S	3 150																											

NOTES

- 1 At the consumer's risk quality, 10% of lots will be expected to be accepted.
- 2 All the values are based on the Poisson distribution.
- 3 Superscript * denotes that the value is for the optional fractional acceptance number sampling plan (see Table 11-B).

Table 7-C — Consumer's risk quality for reduced inspection

(in nonconformities per 100 items for single sampling plans, for inspection for nonconformities per 100 items)

Sample size code letter		Sample size	Acceptance quality limit, AQL, nonconformities per 100 items																											
			0,010	0,015	0,025	0,040	0,065	1,0	1,5	2,5	4,0	6,5	10	15	25	40	65	100	150	250	400	650	1 000							
A	2																115	116*	125*	194*	266	334	464	589	770	1 006	1 409	1 916		
B	2																115	115*	116*	125*	194	266	334	464	589	770	1 006	1 409	1 916	
C	2																115	115*	116*	125*	194	266	334	400	527	650	770	1 006	1 409	
D	3																76,8	76,8*	77,5*	83,0*	130	177	223	266	351	433	514	671	939	
E	5																46,1	46,1*	46,5*	49,8*	77,8	106	134	160	211	260	308	403	564	
F	8																28,8	28,8*	29,1*	31,1*	48,6	66,5	83,5	99,9	132	162	193			
G	13																17,7	17,7*	17,9*	19,2*	29,9	40,9	51,4	61,5	81,0	100	119			
H	20																11,5	11,5*	11,6*	12,5*	19,4	26,6	33,4	40,0	52,7	65,0	77,0			
J	32																7,20	7,20*	7,26*	7,78*	12,2	16,6	20,9	25,0	32,9	40,6	48,1			
K	50																	4,61*	4,65*	4,98*	7,78	10,6	13,4	16,0	21,1	26,0	30,8			
L	80																	2,88	2,88*	2,91*	3,11*	4,86	6,65	8,35	9,99	13,2	16,2	19,3		
M	125																	1,84	1,84*	1,86*	1,99*	3,11	4,26	5,34	6,39	8,43	10,4	12,3		
N	200																	1,15	1,15*	1,16*	1,25*	1,94	2,66	3,34	4,00	5,27	6,50	7,70		
P	315																	0,731	0,731*	0,738*	0,791*	1,23	1,69	2,12	2,54	3,34	4,13	4,89		
Q	500																	0,461	0,461*	0,465*	0,498*	0,778	1,06	1,34	1,60	2,11	2,60	3,08		
R	800																	0,288*	0,291*	0,311*	0,486	0,665	0,835	0,999	1,32	1,62	1,93			

NOTES

1 At the consumer's risk quality, 10% of lots will be expected to be accepted.

2 All the values are based on the Poisson distribution.

3 Superscript * denotes that the value is for the optional fractional acceptance number sampling plan (see Table 11-C).

Table 8-A — Average outgoing quality limits for normal inspection (Single sampling plans)

Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (normal inspection)																											
Sample size code letter	Sample size	0,010	0,015	0,025	0,040	0,065	1,0	1,5	2,5	4,0	6,5	10	15	25	40	65	100	150	250	400	650	1 000					
A	2										18,4 14,8			42,0	68,6	97,1	158	224	326	470	733	1 085					
B	3																										
C	5									12,3 10,5			28,0	45,7	64,7	106	149	218	313	489	723	1 102					
D	8							4,60 4,33	7,36 6,70			16,8 16,0	27,4	38,8	63,4	89,4	131	188	293	434	661						
E	13											17,1 17,0	24,3	39,6	55,9	81,6	117	183	271	413							
F	20						2,83 2,73			6,46 6,32	10,5 10,5	14,9 15,1	24,4	34,4	50,2	72,3	113	167	254								
G	32							2,62 2,60	4,28 4,27	6,07 6,08	9,90 10,0	14,0 14,3	20,4	29,4	45,8												
H	50						1,68 1,67	2,74 2,74	3,88 3,89	6,34 6,38	8,94 9,06	13,1 13,3	18,8	29,3													
J	80						1,05 1,05	1,71 2,43	3,96 3,98	5,59 5,63	8,16 8,27	11,7 12,0	18,3														
K	125						1,10 1,10	1,55 2,54	3,58 3,60	5,22 5,26	7,52 7,61	11,7 11,9															
L	200						1,58 1,59	2,24 2,24	3,26 3,28	4,70 4,73	7,33 7,41																
M	315						1,42 1,42	2,07 2,08	2,98 3,00	4,65 4,69																	
N	500						1,31 1,31	1,88 1,89	2,93 2,94																		
P	800						1,17 1,18	1,83 1,84																			
Q	1 250	0,0294 0,0294					1,17 1,17																				
R	2 000																										

NOTE

Upper entries are for inspection for nonconformities per 100 items and are based on the Poisson distribution.
Lower entries are for inspection for percent nonconforming and are based on the binomial distribution.

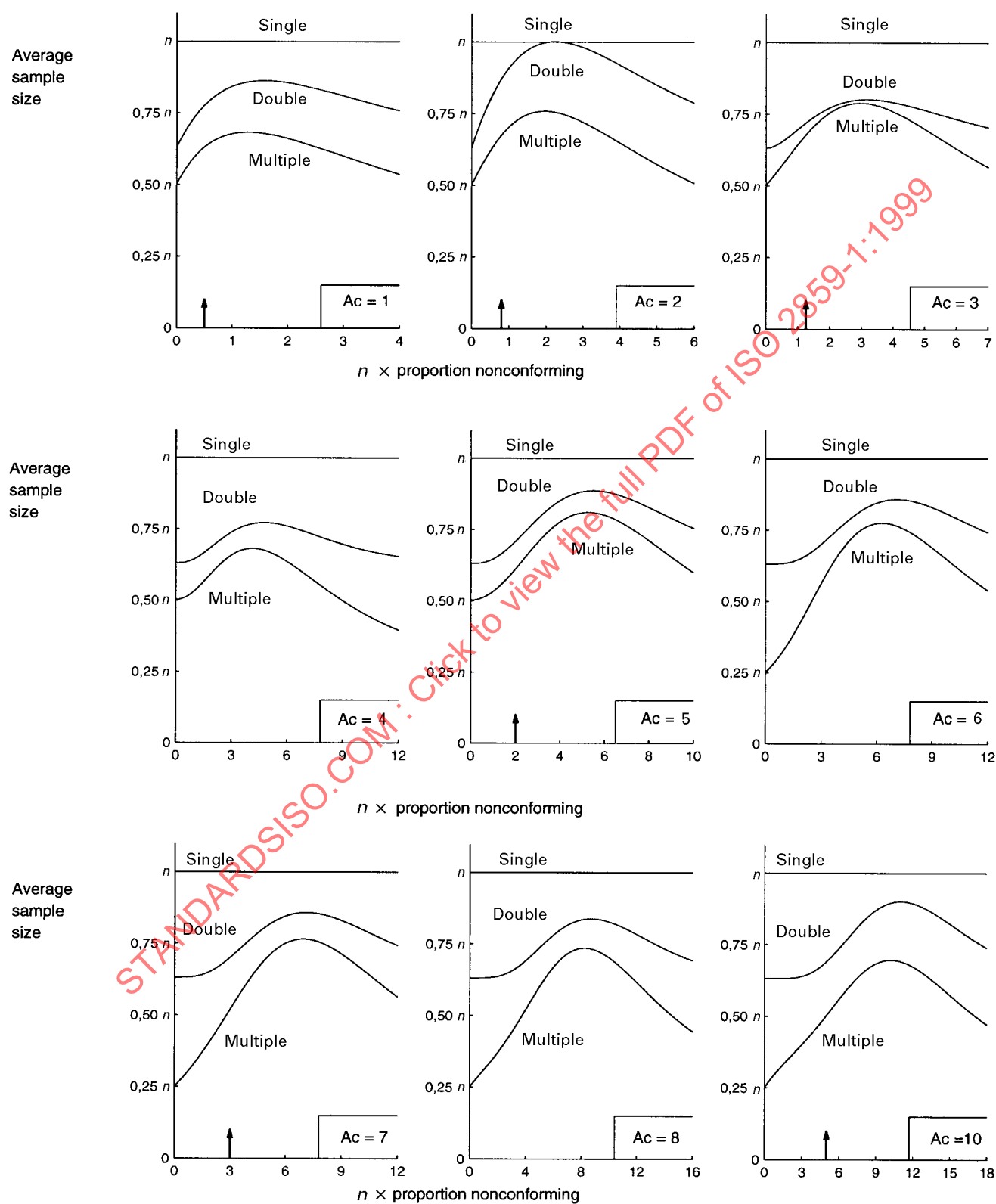
Table 8-B — Average outgoing quality limits for tightened inspection (Single sampling plans)

Sample size code letter		Sample size	Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (tightened inspection)																									
			0,010	0,015	0,025	0,040	0,065	0,10	0,15	0,25	0,40	0,65	1,0	1,5	2,5	4,0	6,5	10	15	25	40	65	100	150	250	400	650	1 000
A	2																18,4 14,8				42,0	68,6	97,1	158	257	397	619	966
B	3															12,3 10,5			28,0	45,7	64,7	106	172	265	412	644	1 020	
C	5														7,36 6,70			16,8	27,4	38,8	63,4	103	159	247	387	612		
D	8													4,60 4,33			10,5 10,1	17,1	24,3	39,6	64,3	99,3	155	242	382			
E	13												2,83 2,73			6,46 6,32	10,5 10,5	14,9	24,4	39,6	61,1	95,2	149	235				
F	20										1,84 1,79					4,20 4,14	9,71 9,75	15,8	25,7	39,7	61,9							
G	32										1,15 1,13					2,62 2,60	6,07 6,08	16,1	24,8	38,7								
H	50											1,68 1,67			2,74 2,74	3,88 3,89	10,3 10,5	15,9	24,7									
J	80										1,05 1,05				2,43 2,43	3,96 3,98	9,93 10,1	15,5										
K	125											1,10 1,10			2,53 2,54	4,12 4,14	9,90 10,1											
L	200						0,184 0,183					0,672 0,670			0,420 0,419	0,686 0,685	0,971 0,971	1,58 1,59	2,57 2,58	3,97 4,00	6,19 6,25							
M	315					0,117 0,117						0,267 0,266			0,435 0,435	0,617 0,617	1,01 1,01	1,63 1,64	2,52 2,53	3,93 3,95								
N	500					0,0736 0,0735						0,168 0,168			0,274 0,274	0,388 0,388	0,634 0,634	1,03 1,03	1,59 1,59	2,47 2,48								
P	800				0,0460 0,0460							0,105 0,105			0,171 0,171	0,243 0,243	0,396 0,396	0,643 0,644	0,993 0,995	1,55 1,55								
Q	1 250				0,0294 0,0294							0,0672 0,0672			0,110 0,110	0,155 0,155	0,253 0,254	0,412 0,412	0,636 0,636	0,990 0,991								
R	2 000					0,0420 0,0420						0,0184 0,0184			0,0686 0,0686	0,0971 0,0971	0,158 0,158	0,257 0,257	0,397 0,398	0,619 0,619								
S	3 150				0,0267 0,0267																							

NOTE

Upper entries are for inspection for nonconformities per 100 items and are based on the Poisson distribution.
Lower entries are for inspection for percent nonconforming and are based on the binomial distribution.

Table 9 — Average sample size curves for single, double and multiple sampling (normal, tightened and reduced inspection)

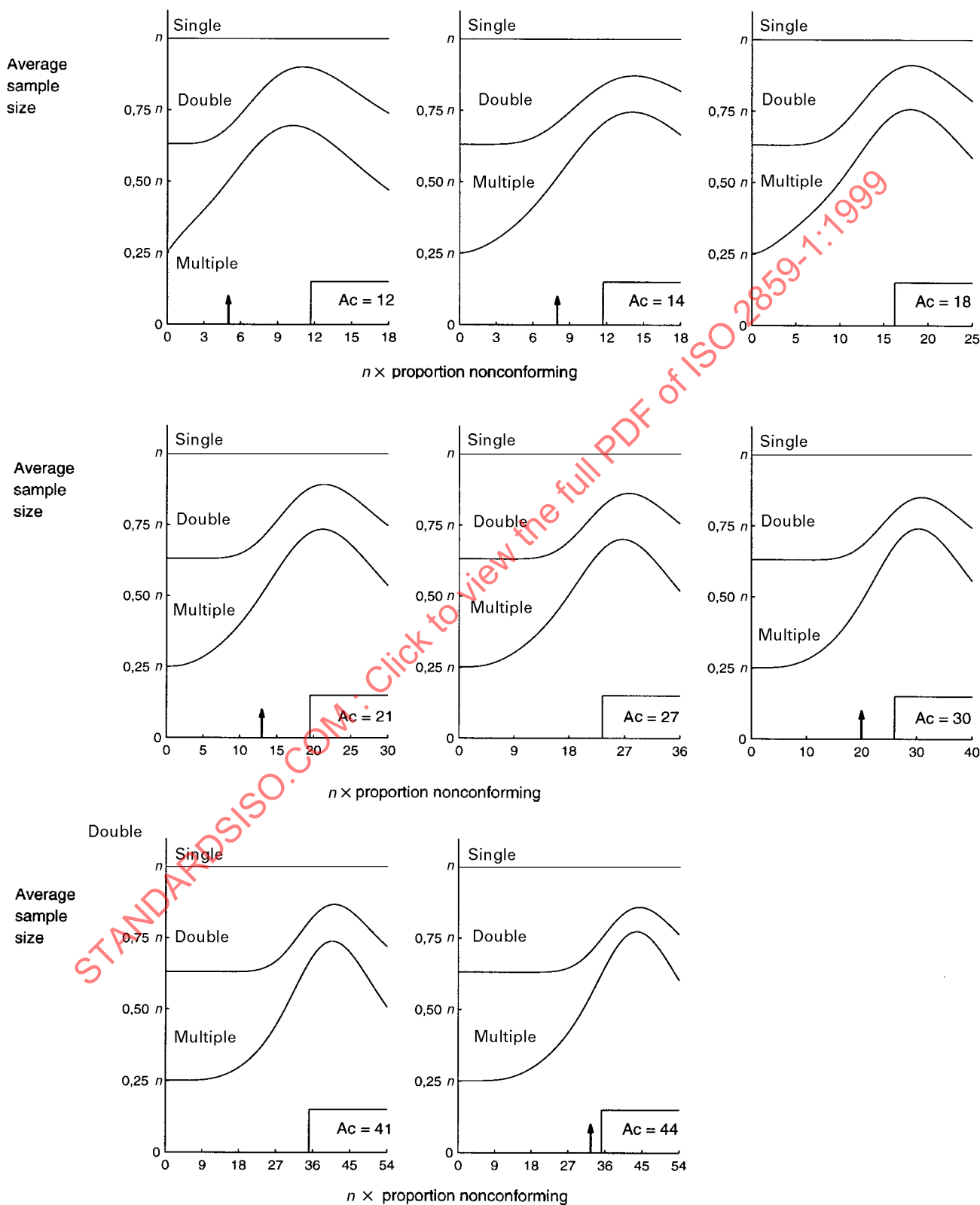


n = Equivalent single sampling size

Ac = Single sample acceptance number

↑ = Reference point showing performance at AQL for normal inspection

Table 9 — Average sample size curves for single, double and multiple sampling (normal, tightened and reduced inspection) (concluded)



n = Equivalent single sampling size

Ac = Single sample acceptance number

↑ = Reference point showing performance at AQL for normal inspection

Table 10-A — Tables for sample size code letter A (Individual plans)

Chart A Operating characteristic curves for single sampling plans
(Curves for double and multiple sampling are matched as closely as practicable)

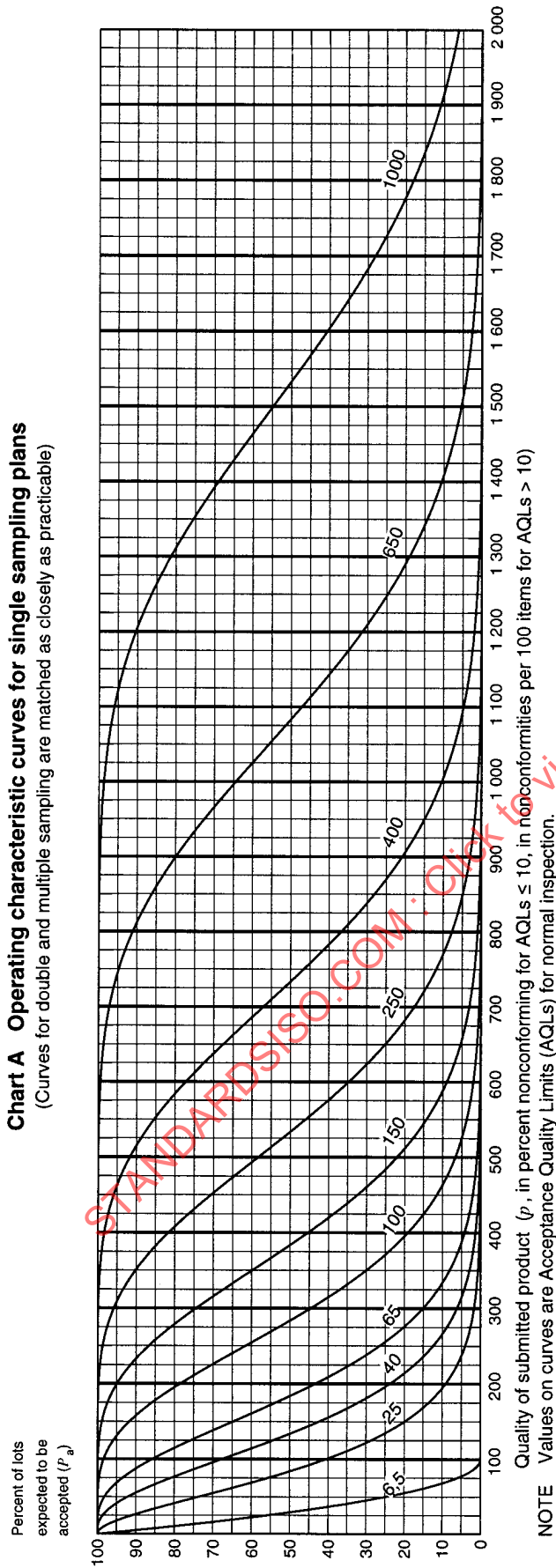


Table 10-A-1 — Tabulated values for operating characteristic curves for single sampling plans

P_a	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)														
	6,5	25	40	65	100	150	250	400	650	1 000	p (in nonconformities per 100 items)				
	p (in percent nonconforming)														
99,0	0,501	7,43	21,8	41,2	89,3	145	175	239	305	374	517	629	859	977	
95,0	2,53	17,8	40,9	68,3	131	199	235	308	384	462	622	745	995	1 122	
90,0	5,13	26,6	55,1	87,2	158	233	272	351	432	515	684	812	1 073	1 206	
75,0	13,4	48,1	86,4	127	211	298	342	431	521	612	795	934	1 214	1 354	
50,0	29,3	83,9	134	184	284	383	433	533	633	733	933	1 083	1 383	1 533	
25,0	50,0	135	196	255	371	484	540	651	761	870	1 087	1 248	1 568	1 728	
10,0	68,4	194	266	334	464	589	650	770	889	1 006	1 238	1 409	1 748	1 916	
5,0	77,6	237	315	388	526	657	722	848	972	1 094	1 335	1 512	1 862	2 035	
1,0	90,0	332	420	502	655	800	870	1 007	1 141	1 272	1 529	1 718	2 088	2 270	
		40	65	100	150	250	400	650	1 000	1 500	2 000	2 500	3 000	3 500	
		Acceptance Quality Limit, tightened inspection (in percent nonconforming and nonconformities per 100 items)													

NOTE Binomial distribution used for entries corresponding to inspection for nonconforming items, Poisson for inspection for number of nonconformities.

Table 10-A-2 — Sampling plans for sample size code letter A

Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)																																				
Type of sampling plan	Cumulative sample size	< 6,5	6,5	10	15	25	40	65	100	150	250	400	650				1 000																			
		Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re																			
Single	2	↓	0 1			1 2 2	2 3 3	3 4 5	4 5 6	5 6 7	6 7 8	7 8 9	8 9 10	9 10 11	10 11 12	11 12 13	12 13 14	13 14 15	14 15 16	15 16 17	16 17 18	17 18 19	18 19 20	19 20 21	20 21 22	21 22 23	22 23 24	23 24 25	24 25 26	25 26 27	26 27 28	27 28 29	28 29 30	29 30 31		
Double		↓	*	use code letter	use code letter	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	
Multiple		↓	*	D	C	B																														
		< 10		10	15	25	40	65	100	150	250	400	650	1 000				1 000																		
Acceptance Quality Limit, tightened inspection (in percent nonconforming and nonconformities per 100 items)																																				

↓ = use next subsequent sample size code letter for which acceptance and rejection numbers are available

Ac = Acceptance number

Re = Rejection number

* = use single sampling plan above (or alternatively use code letter D)

(*) = use single sampling (or alternatively use code letter B)

A

Table 10-B — Tables for sample size code letter B (Individual plans)

Chart B Operating characteristic curves for single sampling plans
(Curves for double and multiple sampling are matched as closely as practicable)

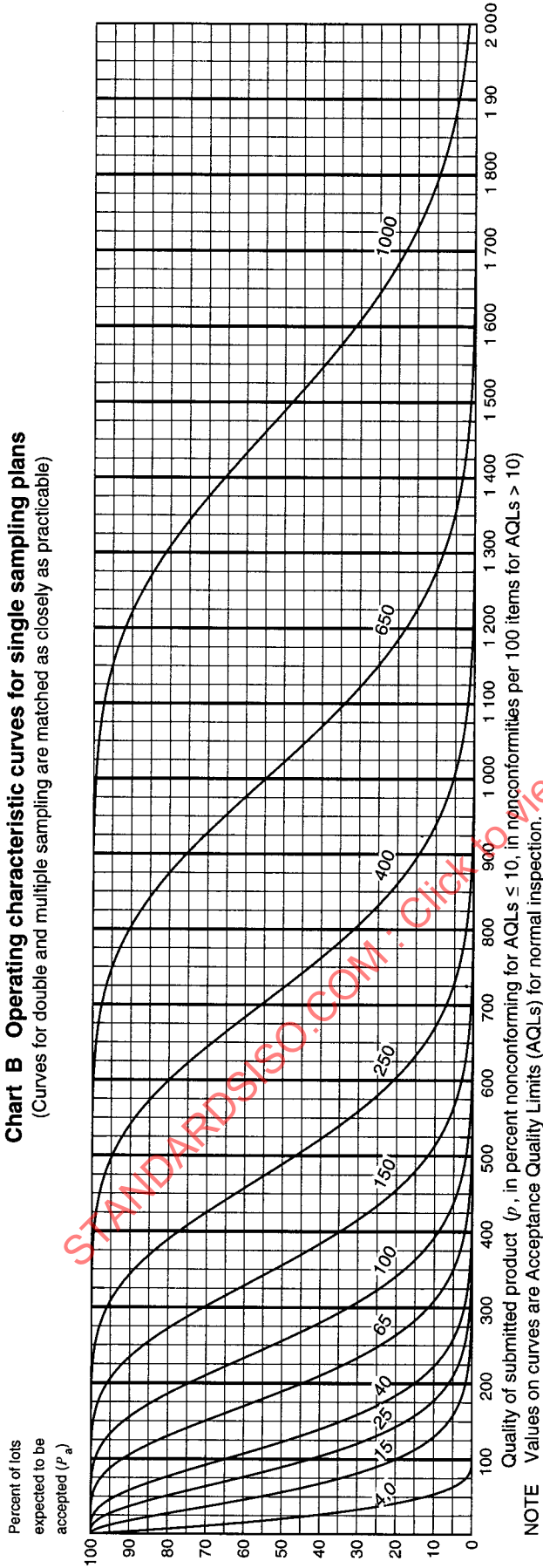


Table 10-B-1 — Tabulated values for operating characteristic curves for single sampling plans

P_a	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)															
	4,0	15	25	40	65	100	150	250	400	650	1 000	p (in nonconformities per 100 items)				
	p (in percent nonconforming)															
99,0	0,334	4,95	14,5	27,4	59,5	96,9	117	203	249	345	419	572	651	947	1 029	
95,0	1,70	11,8	27,3	45,5	87,1	133	157	256	308	415	496	663	748	1 065	1 152	
90,0	3,45	17,7	36,7	58,2	105	144	181	234	288	343	456	541	804	1 131	1 222	
75,0	9,14	32,0	57,6	84,5	141	199	228	287	347	408	530	623	809	903	1 249	1 344
50,0	20,6	55,9	89,1	122	189	256	289	356	422	489	622	722	922	1 022	1 389	1 489
25,0	37,0	89,8	131	170	247	323	360	434	507	580	724	832	1 045	1 152	1 539	1 644
10,0	53,6	130	177	223	309	392	433	514	593	671	825	939	1 165	1 277	1 683	1 793
5,0	63,2	158	210	258	350	438	481	565	648	730	890	1 008	1 241	1 356	1 773	1 886
1,0	78,5	221	280	335	437	533	580	671	761	848	1 019	1 145	1 392	1 513	1 951	2 069
	6,5	25	40	65	100	150	250	400	650	1 000	1 500	2 500	4 000	6 500	10 000	
	Acceptance Quality Limit, tightened inspection (in percent nonconforming and nonconformities per 100 items)															

NOTE Binomial distribution used for entries corresponding to inspection for nonconforming items, Poisson for inspection for number of nonconformities.

Table 10-B-2 — Sampling plans for sample size code letter B

Type of sampling plan		Cumulative sample size	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
			< 4,0	4,0	6,5	10	15	25	40	65	100	150	250	400	650	1 000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
Single	3	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re

↓ = use next subsequent sample size code letter for which acceptance and rejection numbers are available

Ac = Acceptance number

Re = Rejection number

* = use single sampling plan above (or alternatively use code letter E)

++ = use double sampling plan above (or alternatively use code letter D)

B

Table 10-C — Tables for sample size code letter C (Individual plans)

Chart C Operating characteristic curves for single sampling plans
(Curves for double and multiple sampling are matched as closely as practicable)

Percent of lots
expected to be
accepted (P_a)

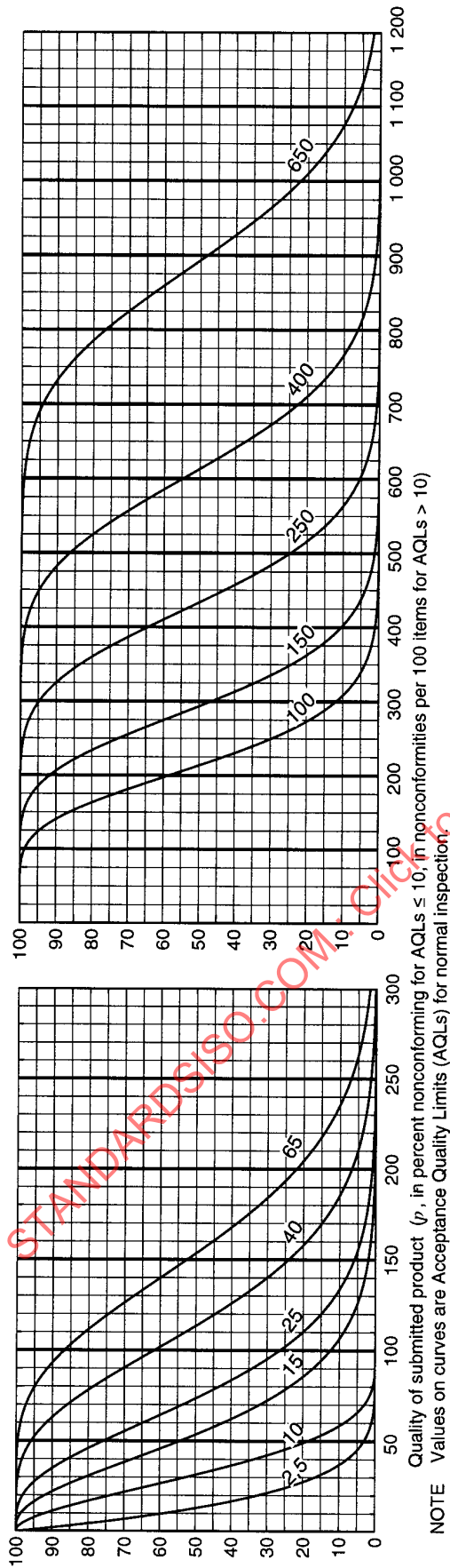


Table 10-C-1 — Tabulated values for operating characteristic curves for single sampling plans

P_a	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)														Acceptance Quality Limit, tightened inspection (in percent nonconforming and nonconformities per 100 items)													
	2,5	10	2,5	10	15	25	40	65	100	150	250	400	650	1000	2,5	10	15	25	40	65	100	150	250	400	650	1000	1200	1500
	p (in percent nonconforming)														p (in nonconformities per 100 items)													
99,0	0,201	3,27	0,201	2,97	8,72	16,5	35,7	58,1	70,1	95,4	122	150	207	251	343	391	568	618										
95,0	1,02	7,64	1,03	7,11	16,4	27,3	52,3	79,6	93,9	123	154	185	249	298	398	449	639	691										
90,0	2,09	11,2	2,11	10,6	22,0	34,9	63,0	93,1	109	140	173	206	273	325	429	482	679	733										
75,0	5,59	19,4	5,75	19,2	34,5	50,7	84,4	119	137	172	208	245	318	374	485	542	749	806										
50,0	12,9	31,4	13,9	33,6	53,5	73,4	113	153	173	213	253	293	373	433	553	613	833	893										
25,0	24,2	45,4	27,7	53,9	78,4	102	148	194	216	260	304	348	435	499	627	691	923	986										
10,0	36,9	58,4	46,1	77,8	106	134	185	235	260	308	356	403	495	564	699	766	1010	1076										
5,0	45,1	65,7	59,9	94,9	126	155	210	263	289	339	389	438	534	605	745	814	1064	1131										
1,0	60,2	77,8	92,1	133	168	201	262	320	348	403	456	509	612	687	835	908	1171	1241										
	4,0		4,0	15	25	40	65		100		150		250		400		650											

NOTE Binomial distribution used for entries corresponding to inspection for nonconforming items, Poisson for inspection for number of nonconformities.

Table 10-C-2 — Sampling plans for sample size code letter C

Type of sampling plan	Cumulative sample size	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)																																
		< 2,5	2,5	4,0	6,5	10	15	25	40	65	100	150	250	400	650	1 000																		
Single	5	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re																		
		↓	0	1		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	18	19	21	22	27	28	30	31	41	42	44	45		
Double	3	↓	*		use	0	2	3	1	3	2	5	3	4	7	5	6	10	7	11	9	14	11	16	15	20	17	22	23	29	25	31		
	6			code	code	1	2	3	4	4	5	6	7	9	10	11	12	13	15	16	18	19	23	24	26	27	34	35	37	38	52	53	56	57
				letter	letter	letter																												
Multiple		↓	*	B	E	D																												
		< 4,0	4,0	6,5	10	15	25	40	65	100	150	250	400	650	1 000																			
		Acceptance Quality Limit, tightened inspection (in percent nonconforming and nonconformities per 100 items)																																

↓

= use next subsequent sample size code letter for which acceptance and rejection numbers are available

Ac = Acceptance number

Re = Rejection number

* = use single sampling plan above (or alternatively use code letter F)

++ = use double sampling plan above (or alternatively use code letter D)

Table 10-D — Tables for sample size code letter D (Individual plans)

Chart D Operating characteristic curves for single sampling plans
(Curves for double and multiple sampling are matched as closely as practicable)

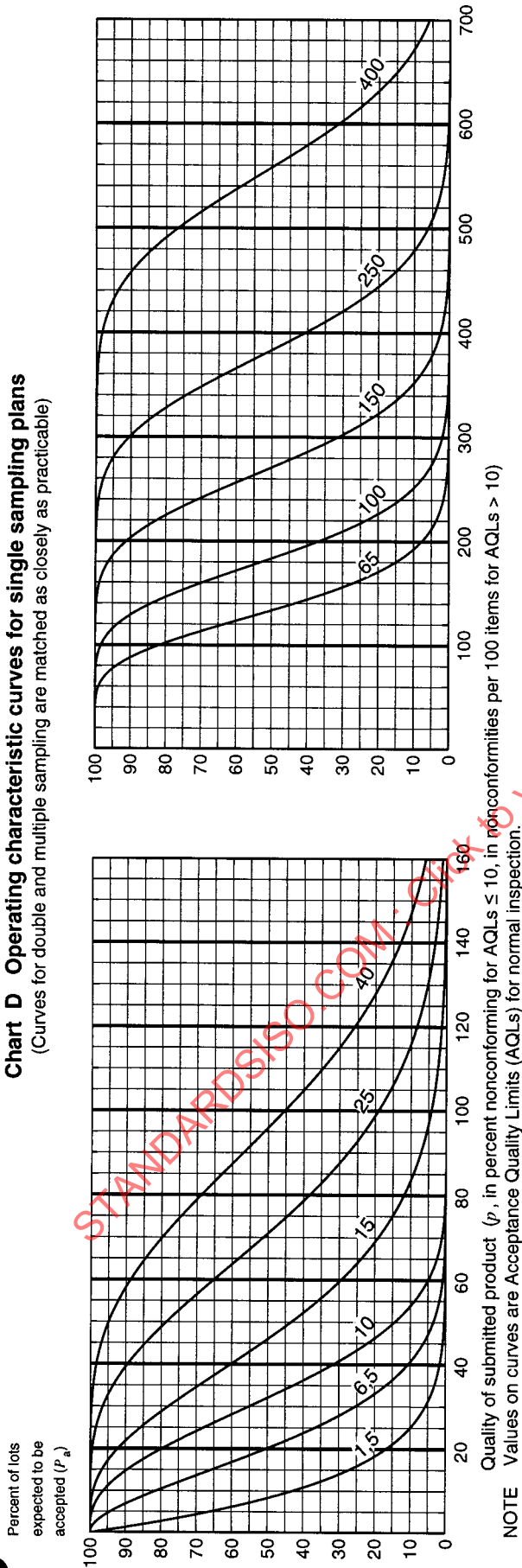


Table 10-D-1 — Tabulated values for operating characteristic curves for single sampling plans

P_a	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)											
	1,5	6,5	10	15	25	40	65	100	150	250	400	
	p (in percent nonconforming)											
99,0	0,126	1,97	6,08	10,3	22,3	36,3	43,8	59,6	76,2	93,5	129	157
95,0	0,639	4,64	11,1	17,1	32,7	49,8	58,7	77,1	96,1	116	156	186
90,0	1,31	6,86	14,7	21,8	39,4	58,2	67,9	87,8	108	129	171	203
75,0	3,53	12,1	22,1	31,7	52,7	74,5	85,5	108	130	153	199	234
50,0	8,30	20,1	32,1	45,9	70,9	95,9	108	133	158	183	233	271
25,0	15,9	30,3	43,3	63,9	92,8	121	135	163	190	217	272	312
10,0	25,0	40,6	53,8	83,5	116	147	162	193	222	252	309	352
5,0	31,2	47,1	60,0	96,9	131	164	180	212	243	274	334	378
1,0	43,8	59,0	70,7	126	164	200	218	252	285	318	382	429
	2,5	10	25	40	65	100	150	250	400			
Acceptance Quality Limit, tightened inspection (in percent nonconforming and nonconformities per 100 items)												
99,0	0,126	1,97	6,08	10,3	22,3	36,3	43,8	59,6	76,2	93,5	129	157
95,0	0,639	4,64	11,1	17,1	32,7	49,8	58,7	77,1	96,1	116	156	186
90,0	1,31	6,86	14,7	21,8	39,4	58,2	67,9	87,8	108	129	171	203
75,0	3,53	12,1	22,1	31,7	52,7	74,5	85,5	108	130	153	199	234
50,0	8,30	20,1	32,1	45,9	70,9	95,9	108	133	158	183	233	271
25,0	15,9	30,3	43,3	63,9	92,8	121	135	163	190	217	272	312
10,0	25,0	40,6	53,8	83,5	116	147	162	193	222	252	309	352
5,0	31,2	47,1	60,0	96,9	131	164	180	212	243	274	334	378
1,0	43,8	59,0	70,7	126	164	200	218	252	285	318	382	429
	2,5	10	25	40	65	100	150	250	400			

NOTE Binomial distribution used for entries corresponding to inspection for nonconforming items, Poisson for inspection for number of nonconformities.

Table 10-D-2 — Sampling plans for sample size code letter D

Type of sampling plan	Cumulative sample size	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)																																		
		< 1,5	1,5	2,5	4,0	6,5	10	15	25	40	65	100	150	250	400	> 400																				
		Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re																			
Single	8	↓	0	1		1	2	2	3	3	4	5	6	7	8	9	10	11	12	13	14	15	18	19	21	22	27	28	30	31	41	42	44	45	↑	
Double	5	↓	*		use	0	2	0	3	1	3	2	5	3	6	4	7	5	9	6	10	7	11	9	14	11	16	15	20	17	22	23	29	25	31	↑
	10				code letter	1	2	3	4	4	5	6	7	9	10	11	12	13	15	16	18	19	23	24	26	27	34	35	37	38	52	53	56	57		
Multiple	2	↓	*		C	#	2	#	2	#	3	#	4	0	4	0	4	0	5	0	6	1	7	1	8	2	9	3	10	4	12	6	15	6	16	↑
	4					0	2	0	3	0	3	1	5	1	6	2	7	3	8	3	9	4	10	6	12	7	14	10	17	11	19	16	25	17	27	
	6					0	2	0	3	1	4	2	6	3	8	4	9	6	10	7	12	8	13	11	17	13	19	17	24	19	27	26	35	29	38	
	8					0	2	1	3	2	5	4	7	5	9	6	11	9	12	11	15	12	17	16	22	20	25	25	31	28	34	38	45	40	48	
	10					1	2	3	4	4	5	6	7	9	10	10	11	12	13	15	16	18	19	23	24	26	27	34	35	37	38	52	53	56	57	
		< 2,5	2,5	4,0	6,5	10	15	25	40	65	100	150	250	400	> 400	Acceptance Quality Limit, tightened inspection (in percent nonconforming and nonconformities per 100 items)																				

- ↑ = use next preceding sample size code letter for which acceptance and rejection numbers are available
 ↓ = use next subsequent sample size code letter for which acceptance and rejection numbers are available
 Ac = Acceptance number
 Re = Rejection number
 * = use single sampling plan above (or alternatively use code letter G)
 # = acceptance not permitted at this sample size

D

Table 10-E — Tables for sample size code letter E (Individual plans)

Chart E Operating characteristic curves for single sampling plans
(Curves for double and multiple sampling are matched as closely as practicable)

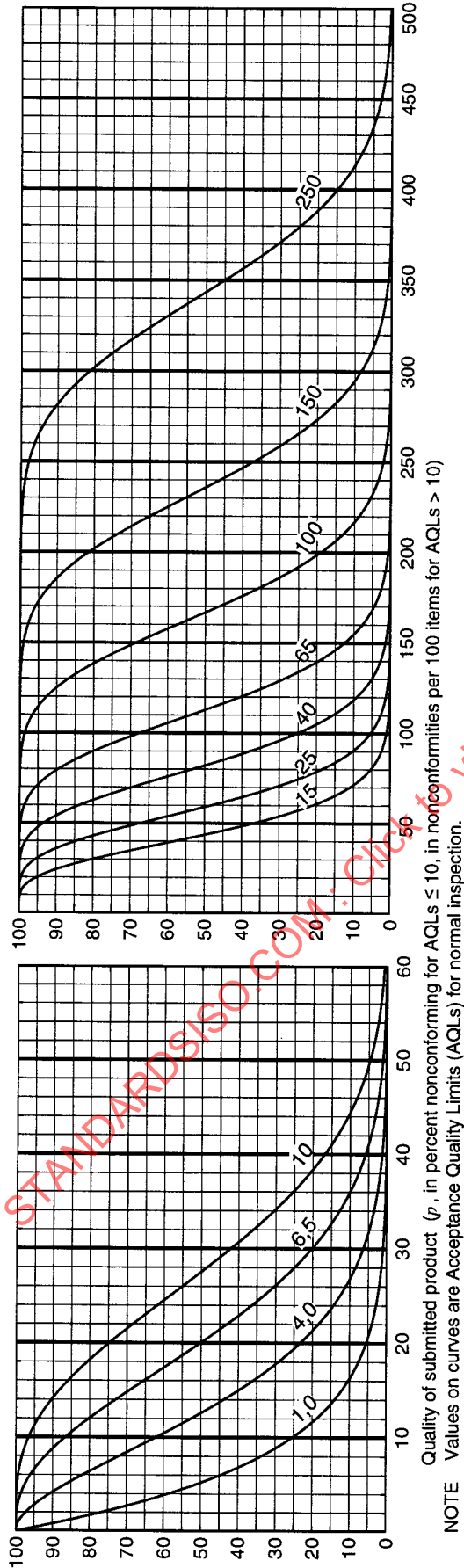


Table 10-E-1 — Tabulated values for operating characteristic curves for single sampling plans

P_a	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)														
	1,0	4,0	6,5	10	1,0	4,0	6,5	10	15	25	40	65	100	150	250
	p (in percent nonconforming)														
99,0	0,0773	1,18	3,58	6,95	0,0773	1,14	3,35	6,33	13,7	22,4	27,0	36,7	46,9	57,5	79,6
95,0	0,394	2,81	6,60	11,3	0,395	2,73	6,29	10,5	20,1	30,6	36,1	47,5	59,2	71,1	95,7
90,0	0,807	4,17	8,80	14,2	0,810	4,09	8,48	13,4	24,2	35,8	41,8	54,0	66,5	79,2	105
75,0	2,19	7,41	13,4	19,9	2,21	7,39	13,3	19,5	32,5	45,8	52,6	66,3	80,2	94,1	122
50,0	5,19	12,6	20,0	27,5	5,33	12,9	20,6	28,2	43,6	59,0	66,7	82,1	97,4	113	144
25,0	10,1	19,4	28,0	36,1	10,7	20,7	30,2	39,3	57,1	74,5	83,1	100	117	134	167
10,0	16,2	26,8	36,0	44,4	17,7	29,9	40,9	51,4	71,3	90,5	100	119	137	155	190
5,0	20,6	31,6	41,0	49,5	23,0	36,5	48,4	59,6	80,9	101	111	130	150	168	205
1,0	29,8	41,3	50,6	58,8	35,4	51,1	64,7	77,3	101	123	134	155	176	196	235
	1,5	6,5	10		1,5	6,5	10	15	25	40	65	100	150	200	250
Acceptance Quality Limit, tightened inspection (in percent nonconforming and nonconformities per 100 items)															
99,0	0,0773	1,18	3,58	6,95	0,0773	1,14	3,35	6,33	13,7	22,4	27,0	36,7	46,9	57,5	79,6
95,0	0,394	2,81	6,60	11,3	0,395	2,73	6,29	10,5	20,1	30,6	36,1	47,5	59,2	71,1	95,7
90,0	0,807	4,17	8,80	14,2	0,810	4,09	8,48	13,4	24,2	35,8	41,8	54,0	66,5	79,2	105
75,0	2,19	7,41	13,4	19,9	2,21	7,39	13,3	19,5	32,5	45,8	52,6	66,3	80,2	94,1	122
50,0	5,19	12,6	20,0	27,5	5,33	12,9	20,6	28,2	43,6	59,0	66,7	82,1	97,4	113	144
25,0	10,1	19,4	28,0	36,1	10,7	20,7	30,2	39,3	57,1	74,5	83,1	100	117	134	167
10,0	16,2	26,8	36,0	44,4	17,7	29,9	40,9	51,4	71,3	90,5	100	119	137	155	190
5,0	20,6	31,6	41,0	49,5	23,0	36,5	48,4	59,6	80,9	101	111	130	150	168	205
1,0	29,8	41,3	50,6	58,8	35,4	51,1	64,7	77,3	101	123	134	155	176	196	235
	1,5	6,5	10		1,5	6,5	10	15	25	40	65	100	150	200	250

NOTE Binomial distribution used for entries corresponding to inspection for nonconforming items, Poisson for inspection for number of nonconformities.

Table 10-E-2 — Sampling plans for sample size code letter E

Type of sampling plan	Cumulative sample size	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)																			
		< 1,0	1,0	1,5	2,5	4,0	6,5	10	15	25	40	65	100	150	250	> 250					
		Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re					
Single	13	↓	0 1		1 2	2 3	3 4	5 6	7 8	8 9	10 11	12 13	14 15	18 19	21 22	27 28	30 31	41 42	44 45	↑	
Double	8	↓	*	use	use	0 2	0 3	1 3	2 5	3 6	4 7	5 9	6 10	7 11	9 14	11 16	15 20	17 22	23 29	25 31	↑
	16			code	code	1 2	3 4	4 5	6 7	9 10	10 11	12 13	15 16	18 19	23 24	26 27	34 35	37 38	52 53	56 57	
Multiple	3	↓	*	D	G	# 2	# 2	# 3	# 4	0 4	0 5	0 6	1 7	1 8	2 9	3 10	4 12	6 15	6 16	↑	
	6					0 2	0 3	0 3	1 5	1 6	2 7	3 8	3 9	4 10	6 12	7 14	10 17	11 19	16 25	17 27	
	9					0 2	0 3	1 4	2 6	3 8	4 9	6 10	7 12	8 13	11 17	13 19	17 24	19 27	26 35	29 38	
	12					0 2	1 3	2 5	4 7	5 9	6 11	9 12	11 15	12 17	16 22	20 25	25 31	28 34	38 45	40 48	
	15					1 2	3 4	4 5	6 7	9 10	10 11	12 13	15 16	18 19	23 24	26 27	34 35	37 38	52 53	56 57	
		< 1,5	1,5	2,5	4,0	6,5	10	15	25	40	65	100	150	250	> 250	Acceptance Quality Limit, tightened inspection (in percent nonconforming and nonconformities per 100 items)					

↑ = use next preceding sample size code letter for which acceptance and rejection numbers are available

↓ = use next subsequent sample size code letter for which acceptance and rejection numbers are available

Ac = Acceptance number

Re = Rejection number

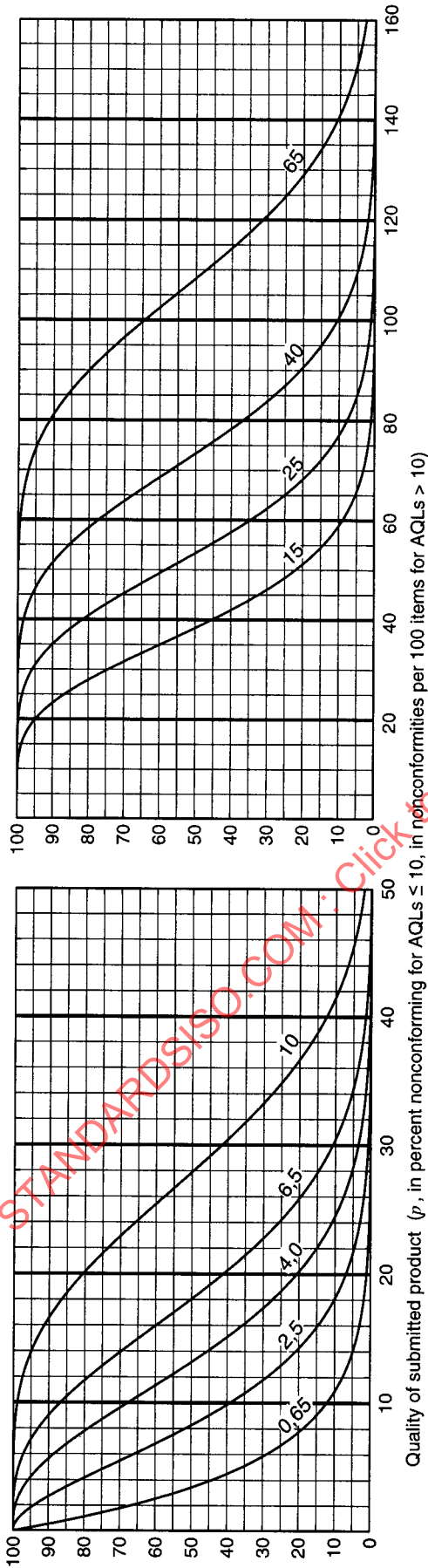
* = use single sampling plan above (or alternatively use code letter H)

= acceptance not permitted at this sample size

Table 10-F — Tables for sample size code letter F (Individual plans)

Chart F Operating characteristic curves for single sampling plans
(Curves for double and multiple sampling are matched as closely as practicable)

Percent of lots
expected to be
accepted (P_a)



Quality of submitted product (p , in percent nonconforming for AQLs ≤ 10 , in nonconformities per 100 items for AQLs > 10)
NOTE Values on curves are Acceptance Quality Limits (AQLs) for normal inspection.

Table 10-F-1 — Tabulated values for operating characteristic curves for single sampling plans

P_a	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)																							
	p (in percent nonconforming)												p (in nonconformities per 100 items)											
	0,65	2,5	4,0	6,5	10	0,65	2,5	4,0	6,5	10	15	25	40	65										
99,0	0,0502	0,759	2,27	4,36	9,75	0,0503	0,743	2,18	4,12	8,93	14,5	17,5	23,9	30,5	37,4	51,7	62,9							
95,0	0,256	1,81	4,22	7,14	14,0	0,256	1,78	4,09	6,83	13,1	19,9	23,5	30,8	38,4	46,2	62,2	74,5							
90,0	0,525	2,69	5,64	9,02	16,6	0,527	2,66	5,51	8,72	15,8	23,3	27,2	35,1	43,2	51,5	68,4	81,2							
75,0	1,43	4,81	8,70	12,8	21,6	1,44	4,81	8,64	12,7	21,1	29,8	34,2	43,1	52,1	61,2	79,5	93,4							
50,0	3,41	8,25	13,1	18,1	27,9	3,47	8,39	13,4	18,4	28,4	38,3	43,3	53,3	63,3	73,3	93,3	108							
25,0	6,70	12,9	18,7	24,2	34,8	6,93	13,5	19,6	25,5	37,1	48,4	54,0	65,1	76,1	87,0	109	125							
10,0	10,9	18,1	24,5	30,4	41,5	11,5	19,4	26,6	33,4	46,4	58,9	65,0	77,0	88,9	101	124	141							
5,0	13,9	21,6	28,3	34,4	45,6	15,0	23,7	31,5	38,8	52,6	65,7	72,2	84,8	97,2	109	133	151							
1,0	20,6	28,9	35,8	42,1	53,2	23,0	33,2	42,0	50,2	65,5	80,0	87,0	101	114	127	153	172							
	1,0	4,0	6,5	10		1,0	4,0	6,5	10	15		25		40		65								
	Acceptance Quality Limit, tightened inspection (in percent nonconforming and nonconformities per 100 items)																							

NOTE Binomial distribution used for entries corresponding to inspection for nonconforming items, Poisson for inspection for number of nonconformities.

Table 10-F-2 — Sampling plans for sample size code letter F

Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)																	
Type of sampling plan	Cumulative sample size	< 0,65	0,65	1,0	1,5	2,5	4,0	6,5	10	15	25	40	65	> 65			
		Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re		
Single	20	↓	0 1			1 2	2 3	3 4	5 6	7 8	8 9	10 11	12 13	14 15	18 19	21 22	↑
Double	13	↓	*	use	use	0 2	0 3	1 3	2 5	3 6	4 7	5 9	6 10	7 11	9 14	11 16	↑
	26			code	code	1 2	3 4	4 5	6 7	9 10	10 11	12 13	15 16	18 19	23 24	26 27	
Multiple				letter	letter												
	5	↓	*	E	H	# 2	# 2	# 3	# 4	0 4	0 4	0 5	0 6	1 7	1 8	2 9	↑
	10					0 2	0 3	0 3	1 5	1 6	2 7	3 8	3 9	4 10	6 12	7 14	
	15					0 2	0 3	1 4	2 6	3 8	4 9	6 10	7 12	8 13	11 17	13 19	
	20					0 2	1 3	2 5	4 7	5 9	6 11	9 12	11 15	12 17	16 22	20 25	
	25					1 2	3 4	4 5	6 7	9 10	10 11	12 13	15 16	18 19	23 24	26 27	
		< 1,0	1,0	1,5	2,5	4,0	6,5	10	15	25	40	65	> 65				
Acceptance Quality Limit, tightened inspection (in percent nonconforming and nonconformities per 100 items)																	

↑ = use next preceding sample size code letter for which acceptance and rejection numbers are available

↓ = use next subsequent sample size code letter for which acceptance and rejection numbers are available

Ac = Acceptance number

Re = Rejection number

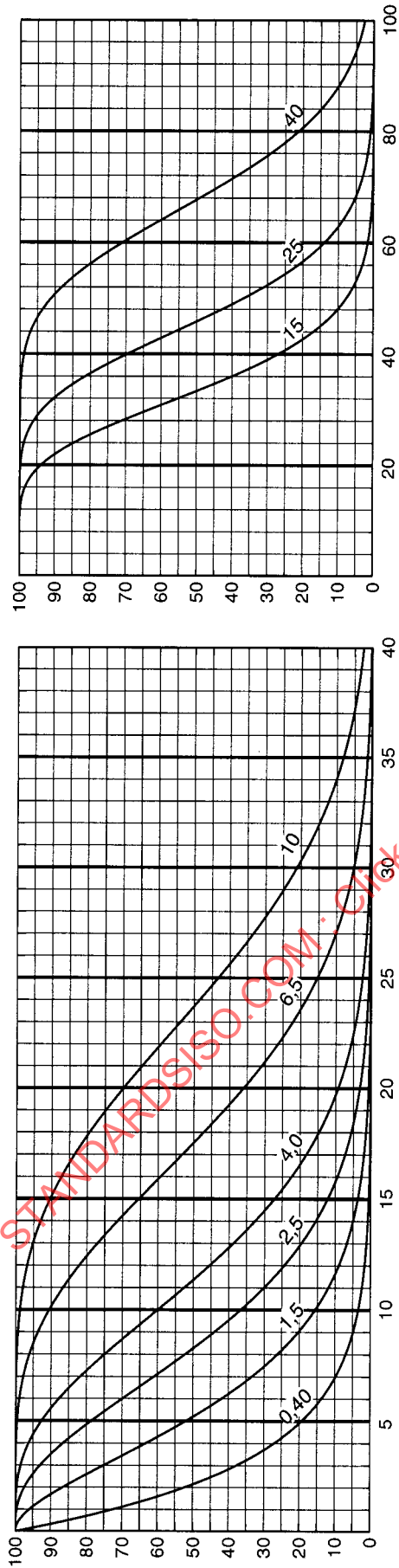
* = use single sampling plan above (or alternatively use code letter J)

= acceptance not permitted at this sample size

Table 10-G — Tables for sample size code letter G (Individual plans)

Chart G Operating characteristic curves for single sampling plans
(Curves for double and multiple sampling are matched as closely as practicable)

Percent of lots
expected to be
accepted (P_a)



Quality of submitted product (p , in percent nonconforming for AQLs ≤ 10 ; in nonconformities per 100 items for AQLs > 10)
NOTE Values on curves are Acceptance Quality Limits (AQLs) for normal inspection.

Table 10-G-1 Tabulated values for operating characteristic curves for single sampling plans

P_a	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)														
	0,40	1,5	2,5	4,0	6,5	10	0,40	1,5	2,5	4,0	6,5	10	15	25	40
	p (in percent nonconforming)														
99,0	0,0314	0,471	1,40	2,67	5,88	9,73	0,0314	0,464	1,36	2,57	5,58	9,08	11,0	14,9	19,1
95,0	0,160	1,12	2,60	4,38	8,50	13,1	0,160	1,11	2,56	4,27	8,17	12,4	14,7	19,3	24,0
90,0	0,329	1,67	3,49	5,56	10,2	15,1	0,329	1,66	3,44	5,45	9,85	14,6	17,0	21,9	27,0
75,0	0,895	3,01	5,42	7,98	13,4	19,0	0,899	3,00	5,40	7,92	13,2	18,6	21,4	26,9	32,6
50,0	2,14	5,19	8,27	11,4	17,5	23,7	2,17	5,24	8,36	11,5	17,7	24,0	27,1	33,3	39,6
25,0	4,24	8,19	11,9	15,4	22,3	29,0	4,33	8,41	12,3	16,0	23,2	30,3	33,8	40,7	47,6
10,0	6,94	11,6	15,8	19,7	27,1	34,0	7,20	12,2	16,6	20,9	29,0	36,8	40,6	48,1	55,6
5,0	8,94	14,0	18,4	22,5	30,1	37,2	9,36	14,8	19,7	24,2	32,9	41,1	45,1	53,0	60,8
1,0	13,4	19,0	23,8	28,1	36,0	43,2	14,4	20,7	26,3	31,4	41,0	50,0	54,4	63,0	71,3
	0,65	2,5	4,0	6,5	10		0,65	2,5	4,0	6,5	10		15	25	40
Acceptance Quality Limit, tightened inspection (in percent nonconforming and nonconformities per 100 items)															

NOTE Binomial distribution used for entries corresponding to inspection for nonconforming items, Poisson for inspection for number of nonconformities.

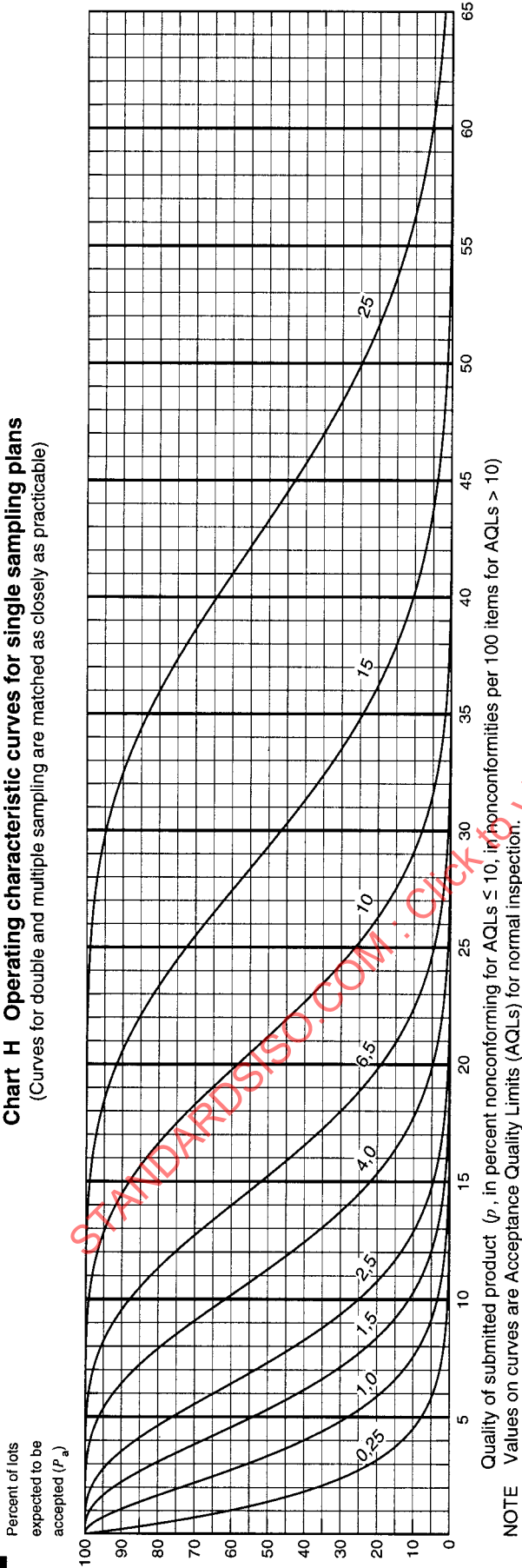
Table 10-G-2 — Sampling plans for sample size code letter G

Type of sampling plan		Cumulative sample size	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
			< 0,40	0,40	0,65	1,0	1,5	2,5	4,0	6,5	10	15	25	40	> 40																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
			Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
Single		32	↓	0 1			1 2	2 3	3 4	5 6	7 8	9 10	11 12	13 14	15 16	17 18	19 20	21 22	23 24	25 26	27 28	29 30	31 32	33 34	35 36	37 38	39 40	41 42	43 44	45 46	47 48	49 50	51 52	53 54	55 56	57 58	59 60	61 62	63 64	65 66	67 68	69 70	71 72	73 74	75 76	77 78	79 80	81 82	83 84	85 86	87 88	89 90	91 92	93 94	95 96	97 98	99 100	101 102	103 104	105 106	107 108	109 110	111 112	113 114	115 116	117 118	119 120	121 122	123 124	125 126	127 128	129 130	131 132	133 134	135 136	137 138	139 140	141 142	143 144	145 146	147 148	149 150	151 152	153 154	155 156	157 158	159 160	161 162	163 164	165 166	167 168	169 170	171 172	173 174	175 176	177 178	179 180	181 182	183 184	185 186	187 188	189 190	191 192	193 194	195 196	197 198	199 200	201 202	203 204	205 206	207 208	209 210	211 212	213 214	215 216	217 218	219 220	221 222	223 224	225 226	227 228	229 230	231 232	233 234	235 236	237 238	239 240	241 242	243 244	245 246	247 248	249 250	251 252	253 254	255 256	257 258	259 260	261 262	263 264	265 266	267 268	269 270	271 272	273 274	275 276	277 278	279 280	281 282	283 284	285 286	287 288	289 290	291 292	293 294	295 296	297 298	299 300	301 302	303 304	305 306	307 308	309 310	311 312	313 314	315 316	317 318	319 320	321 322	323 324	325 326	327 328	329 330	331 332	333 334	335 336	337 338	339 340	341 342	343 344	345 346	347 348	349 350	351 352	353 354	355 356	357 358	359 360	361 362	363 364	365 366	367 368	369 370	371 372	373 374	375 376	377 378	379 380	381 382	383 384	385 386	387 388	389 390	391 392	393 394	395 396	397 398	399 400	401 402	403 404	405 406	407 408	409 410	411 412	413 414	415 416	417 418	419 420	421 422	423 424	425 426	427 428	429 430	431 432	433 434	435 436	437 438	439 440	441 442	443 444	445 446	447 448	449 450	451 452	453 454	455 456	457 458	459 460	461 462	463 464	465 466	467 468	469 470	471 472	473 474	475 476	477 478	479 480	481 482	483 484	485 486	487 488	489 490	491 492	493 494	495 496	497 498	499 500	501 502	503 504	505 506	507 508	509 510	511 512	513 514	515 516	517 518	519 520	521 522	523 524	525 526	527 528	529 530	531 532	533 534	535 536	537 538	539 540	541 542	543 544	545 546	547 548	549 550	551 552	553 554	555 556	557 558	559 560	561 562	563 564	565 566	567 568	569 570	571 572	573 574	575 576	577 578	579 580	581 582	583 584	585 586	587 588	589 590	591 592	593 594	595 596	597 598	599 600	601 602	603 604	605 606	607 608	609 610	611 612	613 614	615 616	617 618	619 620	621 622	623 624	625 626	627 628	629 630	631 632	633 634	635 636	637 638	639 640	641 642	643 644	645 646	647 648	649 650	651 652	653 654	655 656	657 658	659 660	661 662	663 664	665 666	667 668	669 670	671 672	673 674	675 676	677 678	679 680	681 682	683 684	685 686	687 688	689 690	691 692	693 694	695 696	697 698	699 700	701 702	703 704	705 706	707 708	709 710	711 712	713 714	715 716	717 718	719 720	721 722	723 724	725 726	727 728	729 730	731 732	733 734	735 736	737 738	739 740	741 742	743 744	745 746	747 748	749 750	751 752	753 754	755 756	757 758	759 760	761 762	763 764	765 766	767 768	769 770	771 772	773 774	775 776	777 778	779 780	781 782	783 784	785 786	787 788	789 790	791 792	793 794	795 796	797 798	799 800	801 802	803 804	805 806	807 808	809 810	811 812	813 814	815 816	817 818	819 820	821 822	823 824	825 826	827 828	829 830	831 832	833 834	835 836	837 838	839 840	841 842	843 844	845 846	847 848	849 850	851 852	853 854	855 856	857 858	859 860	861 862	863 864	865 866	867 868	869 870	871 872	873 874	875 876	877 878	879 880	881 882	883 884	885 886	887 888	889 890	891 892	893 894	895 896	897 898	899 900	901 902	903 904	905 906	907 908	909 910	911 912	913 914	915 916	917 918	919 920	921 922	923 924	925 926	927 928	929 930	931 932	933 934	935 936	937 938	939 940	941 942	943 944	945 946	947 948	949 950	951 952	953 954	955 956	957 958	959 960	961 962	963 964	965 966	967 968	969 970	971 972	973 974	975 976	977 978	979 980	981 982	983 984	985 986	987 988	989 990	991 992	993 994	995 996	997 998	999 1000	1001 1002	1003 1004	1005 1006	1007 1008	1009 1010	1011 1012	1013 1014	1015 1016	1017 1018	1019 1020	1021 1022	1023 1024	1025 1026	1027 1028	1029 1030	1031 1032	1033 1034	1035 1036	1037 1038	1039 1040	1041 1042	1043 1044	1045 1046	1047 1048	1049 1050	1051 1052	1053 1054	1055 1056	1057 1058	1059 1060	1061 1062	1063 1064	1065 1066	1067 1068	1069 1070	1071 1072	1073 1074	1075 1076	1077 1078	1079 1080	1081 1082	1083 1084	1085 1086	1087 1088	1089 1090	1091 1092	1093 1094	1095 1096	1097 1098	1099 1100	1101 1102	1103 1104	1105 1106	1107 1108	1109 1110	1111 1112	1113 1114	1115 1116	1117 1118	1119 1120	1121 1122	1123 1124	1125 1126	1127 1128	1129 1130	1131 1132	1133 1134	1135 1136	1137 1138	1139 1140	1141 1142	1143 1144	1145 1146	1147 1148	1149 1150	1151 1152	1153 1154	1155 1156	1157 1158	1159 1160	1161 1162	1163 1164	1165 1166	1167 1168	1169 1170	1171 1172	1173 1174	1175 1176	1177 1178	1179 1180	1181 1182	1183 1184	1185 1186	1187 1188	1189 1190	1191 1192	1193 1194	1195 1196	1197 1198	1199 1200	1201 1202	1203 1204	1205 1206	1207 1208	1209 1210	1211 1212	1213 1214	1215 1216	1217 1218	1219 1220	1221 1222	1223 1224	1225 1226	1227 1228	1229 1230	1231 1232	1233 1234	1235 1236	1237 1238	1239 1240	1241 1242	1243 1244	1245 1246	1247 1248	1249 1250	1251 1252	1253 1254	1255 1256	1257 1258	1259 1260	1261 1262	1263 1264	1265 1266	1267 1268	1269 1270	1271 1272	1273 1274	1275 1276	1277 1278	1279 1280	1281 1282	1283 1284	1285 1286	1287 1288	1289 1290	1291 1292	1293 1294	1295 1296	1297 1298	1299 1300	1301 1302	1303 1304	1305 1306	1307 1308	1309 1310	1311 1312	1313 1314	1315 1316	1317 1318	1319 1320	1321 1322	1323 1324	1325 1326	1327 1328	1329 1330	1331 1332	1333 1334	1335 1336	1337 1338	1339 1340	1341 1342	1343 1344	1345 1346	1347 1348	1349 1350	1351 1352	1353 1354	1355 1356	1357 1358	1359 1360	1361 1362	1363 1364	1365 1366	1367 1368	1369 1370	1371 1372	1373 1374	1375 1376	1377 1378	1379 1380	1381 1382	1383 1384	1385 1386	1387 1388	1389 1390	1391 1392	1393 1394	1395 1396	1397 1398	1399 1400	1401 1402	1403 1404	1405 1406	1407 1408	1409 1410	1411 1412	1413 1414	1415 1416	1417 1418	1419 1420	1421 1422	1423 1424	1425 1426	1427 1428	1429 1430	1431 1432	1433 1434	1435 1436	1437 1438	1439 1440	1441 1442	1443 1444	1445 1446	1447 1448	1449 1450	1451 1452	1453 1454	1455 1456	1457 1458	1459 1460	1461 1462	1463 1464	1465 1466	1467 1468	1469 1470	1471 1472	1473 1474	1475 1476	1477 1478	1479 1480	1481 1482	1483 1484	1485 1486	1487 1488	1489 1490	1491 1492	1493 1494	1495 1496	1497 1498	1499 1500	1501 1502	1503 1504	1505 1506	1507 1508	1509 1510	1511 1512	1513 1514	1515 1516	1517 1518	1519 1520	1521 1522	1523 1524	1525 1526	1527 1528	1529 1530	1531 1532	1533 1534	1535 1536	1537 1538	1539 1540	1541 1542	1543 1544	1545 1546	1547 1548	1549 1550	1551 1552	1553 1554	1555 1556	1557 1558	1559 1560	1561 1562	1563 1564	1565 1566	1567 1568	1569 1570	1571 1572	1573 1574	1575 1576	1577 1578	1579 1580	1581 1582	1583 1584	1585 1586	1587 1588	1589 1590	1591 1592	1593 1594	1595 1596	1597 1598	1599 1600	1601 1602	1603 1604	1605 1606	1607 1608	1609 1610	1611 1612	1613 1614	1615 1616	1617 1618	1619 1620	1621 1622	1623 1624	1625 1626	1627 1628	1629 1630	1631 1632	1633 1634	1635 1636	1637 1638	1639 1640	1641 1642	1643 1644	1645 1646	1647 1648	1649 1650	1651 1652	1653 1654	1655 1656	1657 1658	1659 1660	1661 1662	1663 1664	1665 1666	1667 1668	1669 1670	1671 1672	1673 1674	1675 1676	1677 1678	1679 1680	1681 1682	1683 1684	1685 1686	1687 1688	1689 1690	1691 1692	1693 1694	1695 1696	1697 1698	1699 1700	1701 1702	1703 1704	1705 1706	1707 1708	1709 1710	1711 1712	1713 1714	1715 1716	1717 1718	1719 1720	1721 1722	1723 1724	1725 1726	1727 1728	1729 1730	1731 1732	1733 1734	1735 1736	1737 1738	1739 1740	1741 1742	1743 1744	1745 1746	1747 1748	1749 1750	1751 1752	1753 1754	1755 1756	1757 1758	1759 1760	1761 1762	1763 1764	1765 1766	1767 1768	1769 1770	1771 1772	1773 1774	1775 1776	1777 1778	1779 1780	1781 1782	1783 1784	1785 1786	1787 1788	1789 1790	1791 1792	1793 1794	1795 1796	1797 1798	1799 1800	1801 1802	1803 1804	1805 1806	1807 1808	1809 1810	1811 1812	1813 1814	1815 1816	1817 1818	1819 1820	1821 1822	1823 1824	1825 1826	1827 1828	1829 1830	1831 1832	1833 1834	1835 1836	1837 1838	1839 1840	1841 1842	1843 1844	1845 1846	1847 1848	1849 1850	1851 1852	1853 1854	1855 1856	1857 1858	1859 1860	1861 1862	1863 1864	1865 1866	1867 1868	1869 1870	1871 1872	1873 1874	1875 1876	1877 1878	187

- ↑ = use next preceding sample size code letter for which acceptance and rejection numbers are available
 ↓ = use next subsequent sample size code letter for which acceptance and rejection numbers are available
 Ac = Acceptance number
 Re = Rejection number
 * = use single sampling plan above (or alternatively use code letter K)
 # = acceptance not permitted at this sample size

Table 10-H — Tables for sample size code letter H (Individual plans)

Chart H Operating characteristic curves for single sampling plans
(Curves for double and multiple sampling are matched as closely as practicable)



NOTE Values on curves are Acceptance Quality Limits (AQLs) for normal inspection.

Table 10-H-1 — Tabulated values for operating characteristic curves for single sampling plans

P_a	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)														
	0,25	1,0	1,5	2,5	4,0	6,5	10	0,25	1,0	1,5	2,5	4,0	6,5	10	25
	p (in percent nonconforming)														
99,0	0,0201	0,300	0,886	1,68	3,69	6,07	7,36	0,0201	0,297	0,872	1,65	3,57	5,81	7,01	25,1
95,0	0,103	0,715	1,66	2,78	5,36	8,22	9,72	0,103	0,711	1,64	2,73	5,23	7,96	9,39	29,8
90,0	0,210	1,07	2,22	3,53	6,43	9,54	11,2	0,211	1,06	2,20	3,49	6,30	9,31	10,9	32,5
75,0	0,574	1,92	3,46	5,10	8,51	12,0	13,8	0,575	1,92	3,45	5,07	8,44	11,9	13,7	37,4
50,0	1,38	3,33	5,31	7,29	11,3	15,2	17,2	1,39	3,36	5,35	7,34	11,3	15,3	17,3	43,3
25,0	2,73	5,29	7,69	10,0	14,5	18,8	21,0	2,77	5,39	7,84	10,2	14,8	19,4	21,6	49,9
10,0	4,50	7,56	10,3	12,9	17,8	22,4	24,7	4,61	7,78	10,6	13,4	18,5	23,5	26,0	56,4
5,0	5,82	9,14	12,1	14,8	19,9	24,7	27,0	5,99	9,49	12,6	15,5	21,0	26,3	28,9	60,5
1,0	8,80	12,6	15,8	18,7	24,2	29,2	31,6	9,21	13,3	16,8	20,1	26,2	32,0	34,8	68,7
	0,40	1,5	2,5	4,0	6,5	10	10	0,40	1,5	2,5	4,0	6,5	10	10	25

NOTE Binomial distribution used for entries corresponding to inspection for nonconforming items, Poisson for inspection for number of nonconformities.

Table 10-H-2 — Sampling plans for sample size code letter H

Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)																	
Type of sampling plan	Cumulative sample size	< 0,25	0,25	0,40	0,65	1,0	1,5	2,5	4,0	6,5	10	15	25	25	> 25		
		Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	
Single	50	↓	0 1			1 2	2 3	3 4	5 6	7 8	8 9	10 11	12 13	14 15	18 19	21 22	↑
Double	32	↓	*	use	use	0 2	0 3	1 3	2 5	3 6	4 7	5 9	6 10	7 11	9 14	11 16	↑
	64			code letter	code letter	1 2	3 4	4 5	6 7	9 10	10 11	12 13	15 16	18 19	23 24	26 27	
Multiple	13	↓	*	G	K	# 2	# 2	# 3	4	0 4	0 4	0 5	0 6	1 7	1 8	2 9	↑
	26					0 2	0 3	0 3	1 5	1 6	2 7	3 8	3 9	4 10	6 12	7 14	
	39					0 2	0 3	1 4	2 6	3 8	4 9	6 10	7 12	8 13	11 17	13 19	
	52					0 2	1 3	2 5	4 7	5 9	6 11	9 12	11 15	12 17	16 22	20 25	
	65					1 2	3 4	4 5	6 7	9 10	10 11	12 13	15 16	18 19	23 24	26 27	
		< 0,40	0,40		0,65	1,5	2,5	4,0	6,5		10	15	25				> 25
Acceptance Quality Limit, tightened inspection (in percent nonconforming and nonconformities per 100 items)																	

- ↑ = use next preceding sample size code letter for which acceptance and rejection numbers are available
 ↓ = use next subsequent sample size code letter for which acceptance and rejection numbers are available
 Ac = Acceptance number
 Re = Rejection number
 * = use single sampling plan above (or alternatively use code letter L)
 # = acceptance not permitted at this sample size

Table 10-J — Tables for sample size code letter J (Individual plans)

Chart J Operating characteristic curves for single sampling plans
(Curves for double and multiple sampling are matched as closely as practicable)

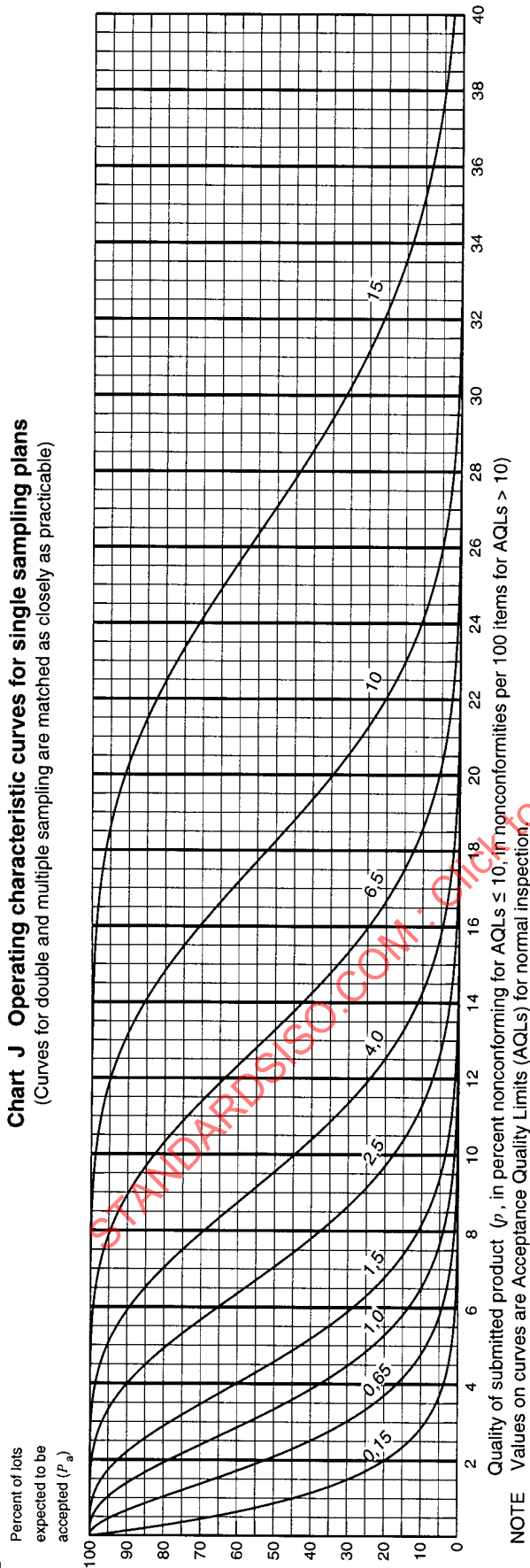


Table 10-J-1 — Tabulated values for operating characteristic curves for single sampling plans

Pa	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)																		
	0,15	0,65	1,0	1,5	2,5	4,0	6,5	10	15	2,5	4,0	6,5	10	15	2,5	4,0	6,5	10	15
	p (in percent nonconforming)																		
99,0	0,0126	0,187	0,550	1,04	2,28	3,73	4,51	6,17	7,93	9,76	0,0126	0,186	0,545	1,03	2,23	3,63	4,38	5,96	7,62
95,0	0,0641	0,446	1,03	1,73	3,32	5,07	6,00	7,91	9,89	11,9	0,0641	0,444	1,02	1,71	3,27	4,98	5,87	7,71	9,61
90,0	0,132	0,667	1,39	2,20	3,99	5,91	6,90	8,95	11,0	13,2	0,132	0,665	1,38	2,18	3,94	5,82	6,79	8,78	10,8
75,0	0,359	1,20	2,16	3,18	5,30	7,50	8,61	10,9	13,2	15,5	0,360	1,20	2,16	3,17	5,27	7,45	8,55	10,8	13,0
50,0	0,863	2,09	3,33	4,57	7,06	9,55	10,8	13,3	15,8	18,3	0,866	2,10	3,34	4,59	7,09	9,59	10,8	13,3	15,8
25,0	1,72	3,33	4,84	6,30	9,14	11,9	13,3	16,0	18,6	21,3	1,73	3,37	4,90	6,39	9,28	12,1	13,5	16,3	19,0
10,0	2,84	4,78	6,52	8,16	11,3	14,3	15,7	18,6	21,4	24,2	2,88	4,86	6,65	8,35	11,6	14,7	16,2	19,3	22,2
5,0	3,68	5,79	7,66	9,41	12,7	15,8	17,3	20,3	23,2	26,0	3,74	5,93	7,87	9,69	13,1	16,4	18,0	21,2	24,3
1,0	5,59	8,01	10,1	12,0	15,6	18,9	20,5	23,6	26,6	29,5	5,76	8,30	10,5	12,6	16,4	20,0	21,8	25,2	28,5
	0,25	1,0	1,5	2,5	4,0	6,5	10	15	2,5	4,0	6,5	10	15	2,5	4,0	6,5	10	15	2,5

NOTE Binomial distribution used for entries corresponding to inspection for nonconforming items, Poisson for inspection for number of nonconformities.

Table 10-J-2 — Sampling plans for sample size code letter J

Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)																		
Type of sampling plan	Cumulative sample size	< 0,15	0,15	0,25	0,40	0,65	1,0	1,5	2,5	4,0	6,5	10	15	> 15				
		Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re			
Single	80	↓	0 1			1 2	2 3	3 4	5 6	7 8	8 9	10 11	12 13	14 15	18 19	21 22	↑	
Double	50	↓	*	use	use	0 2	0 3	1 3	2 5	3 6	4 7	5 9	6 10	7 11	9 14	11 16	↑	
	100			code letter	code letter	1 2	3 4	4 5	6 7	9 10	10 11	12 13	15 16	18 19	23 24	26 27		
Multiple	20	↓	*	H	L	# 2	# 2	# 3	# 4	0 4	0 4	0 5	0 6	1 7	1 8	2 9	↑	
	40					0 2	0 3	0 3	1 5	1 6	2 7	3 8	3 9	4 10	6 12	7 14		
	60					0 2	0 3	1 4	2 6	3 8	4 9	6 10	7 12	8 13	11 17	13 19		
	80					0 2	1 3	2 5	4 7	5 9	6 11	9 12	11 15	12 17	16 22	20 25		
	100					1 2	3 4	4 5	6 7	9 10	10 11	12 13	15 16	18 19	23 24	26 27		
		< 0,25	0,25	0,40	0,65	1,0	1,5	2,5	4,0	6,5	10	15	> 15	Acceptance Quality Limit, tightened inspection (in percent nonconforming and nonconformities per 100 items)				

- ↑ = use next preceding sample size code letter for which acceptance and rejection numbers are available
 ↓ = use next subsequent sample size code letter for which acceptance and rejection numbers are available
 Ac = Acceptance number
 Re = Rejection number
 * = use single sampling plan above (or alternatively use code letter M)
 # = acceptance not permitted at this sample size

Chart K Operating characteristic curves for single sampling plans
(Curves for double and multiple sampling are matched as closely as practicable)

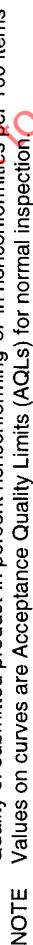


Table 10-K-1 — Tabulated values for operating characteristic curves for single sampling plans

NOTE Binomial distribution used for entries corresponding to inspection for nonconforming items, Poisson for inspection for number of nonconformities.

NOTE Binomial distribution used for entries corresponding to inspection for nonconforming items, Poisson for inspection for number of nonconformities.

Table 10-K-2 — Sampling plans for sample size code letter K

Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)																			
Type of sampling plan	Cumulative sample size	< 0,10	0,10	0,15		0,25	0,40	0,65	1,0	1,5	2,5			4,0		6,5		10	> 10
		Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re
Single	125	↓	0 1				1 2	2 3	3 4	5 6	7 8	8 9		10 11	12 13	14 15	18 19	21 22	↑
Double	80	↓	*	use	use	0 2	0 3	1 3	2 5	3 6	4 7	5 9	6 10	7 11	9 14	11 16			↑
	160			code letter	code letter	1 2	3 4	4 5	6 7	9 10	10 11	12 13	15 16	18 19	23 24	26 27			
Multiple		↓	*	J	M	L													
	32					# 2	# 2	# 3	# 4	0 4	0 4	0 4	0 5	0 6	1 7	1 8	2 9		↑
	64					0 2	0 3	0 3	1 5	1 6	2 7	3 8	3 9	4 10	6 12	7 14			
	96					0 2	0 3	1 4	2 6	3 8	4 9	6 10	7 12	8 13	11 17	13 19			
	128					0 2	1 3	2 5	4 7	5 9	6 11	9 12	11 15	12 17	16 22	20 25			
	160					1 2	3 4	4 5	6 7	9 10	10 11	12 13	15 16	18 19	23 24	26 27			
		< 0,15	0,15		0,25	0,40	0,65	1,0	1,5	2,5		4,0		6,5		10		> 10	
Acceptance Quality Limit, tightened inspection (in percent nonconforming and nonconformities per 100 items)																			

↑ = use next preceding sample size code letter for which acceptance and rejection numbers are available
 ↓ = use next subsequent sample size code letter for which acceptance and rejection numbers are available

Ac = Acceptance number

Re = Rejection number

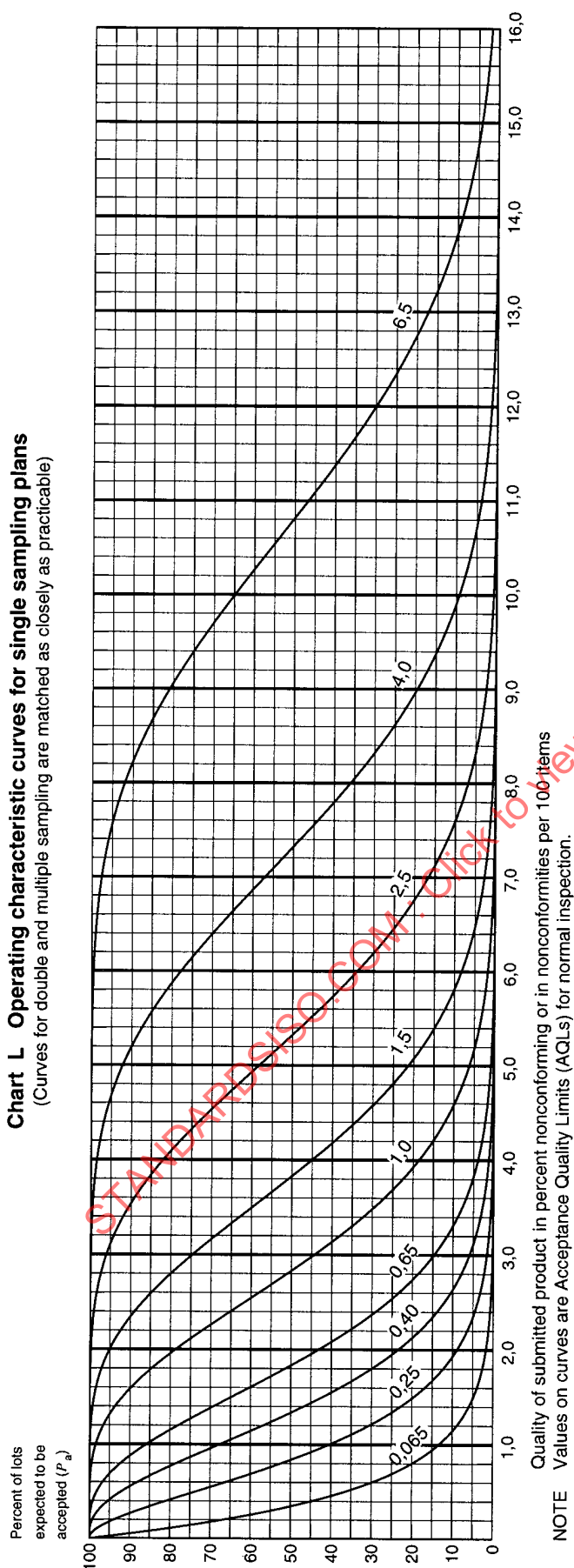
* = use single sampling plan above (or alternatively use code letter N)

= acceptance not permitted at this sample size

K

Table 10-L — Tables for sample size code letter L (Individual plans)

Chart L Operating characteristic curves for single sampling plans



NOTE
Quality of submitted product in percent nonconforming or in nonconformities per 100 items
Values on curves are Acceptance Quality Limits (AQLs) for normal inspection.

NOTE Values on curves are Acceptance Quality Limits (AQLs) for normal inspection. Values on curves are Acceptance Quality Limits (AQLs) for normal inspection.

Table 10-L-1 — Tabulated values for operating characteristic curves for single sampling plans

P_a	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)																							
	p (in percent nonconforming)									p (in nonconformities per 100 items)														
	0,065	0,25	0,40	0,65	1,0	1,5	2,5	4,0	6,5	0,065	0,25	0,40	0,65	1,0	1,5	2,5	4,0	6,5						
99,0	0,00503	0,074	0,219	0,414	0,900	1,47	1,77	2,42	3,10	3,80	5,28	6,43	0,00503	0,074	0,218	0,412	0,893	1,45	1,75	2,39	3,05	3,74	5,17	6,29
95,0	0,0256	0,178	0,410	0,686	1,31	2,01	2,37	3,11	3,89	4,68	6,31	7,57	0,0256	0,178	0,409	0,683	1,31	1,99	2,35	3,08	3,84	4,62	6,22	7,45
90,0	0,0527	0,266	0,552	0,875	1,58	2,34	2,73	3,54	4,36	5,20	6,91	8,22	0,0527	0,266	0,551	0,872	1,58	2,33	2,72	3,51	4,32	5,15	6,84	8,12
75,0	0,144	0,481	0,864	1,27	2,11	2,99	3,43	4,33	5,23	6,15	8,00	9,40	0,144	0,481	0,864	1,27	2,11	2,98	3,42	4,31	5,21	6,12	7,95	9,34
50,0	0,346	0,838	1,33	1,83	2,83	3,83	4,33	5,33	6,32	7,32	9,32	10,8	0,347	0,839	1,34	1,84	2,84	3,83	4,33	5,33	6,33	7,33	9,33	10,8
25,0	0,691	1,34	1,95	2,54	3,69	4,81	5,36	6,46	7,55	8,63	10,8	12,4	0,693	1,35	1,96	2,55	3,71	4,84	5,40	6,51	7,61	8,70	10,9	12,5
10,0	1,14	1,93	2,64	3,31	4,59	5,82	6,42	7,60	8,76	9,91	12,2	13,8	1,15	1,94	2,66	3,34	4,64	5,89	6,50	7,70	8,89	10,1	12,4	14,1
5,0	1,49	2,35	3,11	3,83	5,18	6,47	7,10	8,33	9,54	10,7	13,1	14,8	1,50	2,37	3,15	3,88	5,26	6,57	7,22	8,48	9,72	10,9	13,3	15,1
1,0	2,28	3,27	4,14	4,93	6,42	7,82	8,50	9,82	11,1	12,4	14,8	16,6	2,30	3,32	4,20	5,02	6,55	8,00	8,70	10,1	11,4	12,7	15,3	17,2
	0,10	0,40	0,65	1,0	1,5		2,5		4,0		6,5		0,10	0,40	0,65	1,0	1,5		2,5		4,0		6,5	

NOTE Binomial distribution used for entries corresponding to inspection for nonconforming items, Poisson for inspection for number of nonconformities.

Table 10-L-2 — Sampling plans for sample size code letter L

Type of sampling plan		Cumulative sample size	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)																	
			< 0,065 Ac Re	0,065 Ac Re	0,10 Ac Re	0,15 Ac Re	0,25 Ac Re	0,40 Ac Re	0,65 Ac Re	1,0 Ac Re	1,5 Ac Re	2,5 Ac Re	4,0 Ac Re	6,5 Ac Re	> 6,5 Ac Re					
Single	200	↓	0 1			1 2	2 3	3 4	5 6	7 8	8 9	10 11	12 13	14 15	18 19	21 22	↑			
						0 2	0 3	1 3	2 5	3 6	4 7	5 9	6 10	7 11	9 14	11 16	↑			
Double	125 250	↓	*			1 2	3 4	4 5	6 7	9 10	10 11	12 13	15 16	18 19	23 24	26 27				
Multiple	50	↓	*	K	N	#	2 #	3	4	0 4	0 4	0 5	0 6	1 7	1 8	2 9	↑			
	100					0 2	0 3	0 3	1 5	1 6	2 7	3 8	3 9	4 10	6 12	7 14				
	150					0 2	0 3	1 4	2 6	3 8	4 9	6 10	7 12	8 13	11 17	13 19				
	200					0 2	1 3	2 5	4 7	5 9	6 11	9 12	11 15	12 17	16 22	20 25				
	250					1 2	3 4	4 5	6 7	9 10	10 11	12 13	15 16	18 19	23 24	26 27				
		< 0,10	0,10	0,15	0,25	0,40	0,65	1,0	1,5	2,5	4,0	6,5					> 6,5			
Acceptance Quality Limit, tightened inspection (in percent nonconforming and nonconformities per 100 items)																				

- ↑ = use next preceding sample size code letter for which acceptance and rejection numbers are available
 ↓ = use next subsequent sample size code letter for which acceptance and rejection numbers are available
 Ac = Acceptance number
 Re = Rejection number
 * = use single sampling plan above (or alternatively use code letter P)
 # = acceptance not permitted at this sample size