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TECHNICAL CORRIGENDUM 1

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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

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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)

RECTIFICATIF TECHNIQUE 1

Technical Corrigendum 1 to International Standard ISO 2859-1:1999 was prepared by Technical Committee ISO/TC 69, *Applications of statistical methods*, Subcommittee SC 5, *Acceptance sampling*.

Page 83, Table 11-C

In the column "Sample size" corresponding to the row for sample size code letter H, replace the value "50" with the value "20".

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INTERNATIONAL STANDARD

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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.

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:

a) the quality department within a supplier's organization (first party);

b) the purchaser or procurement organization (second party);

c) 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 sublot or stratum is proportional to the size of that sublot 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.

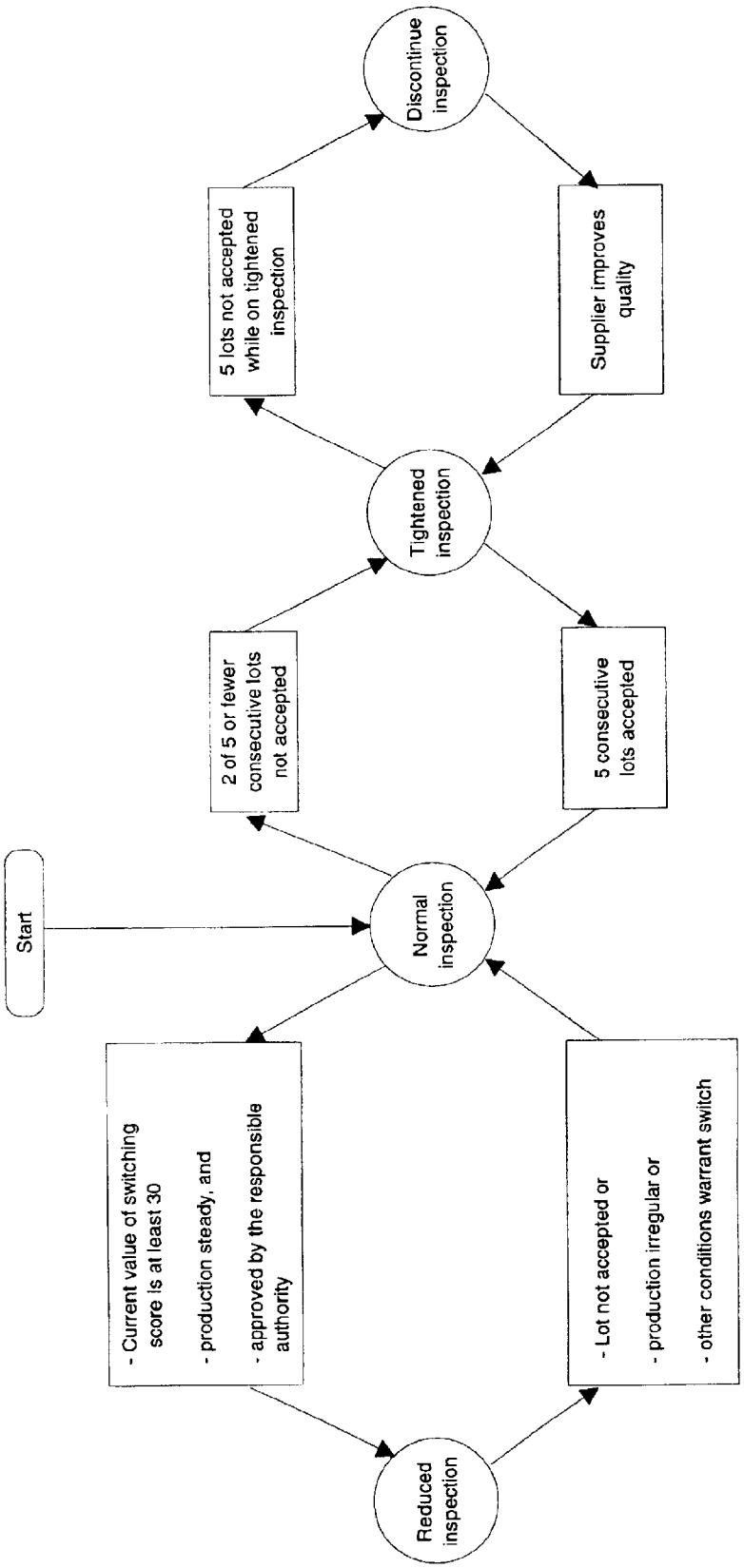

Figure 1 - Outline of the switching rules (see 9.3)

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.

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)

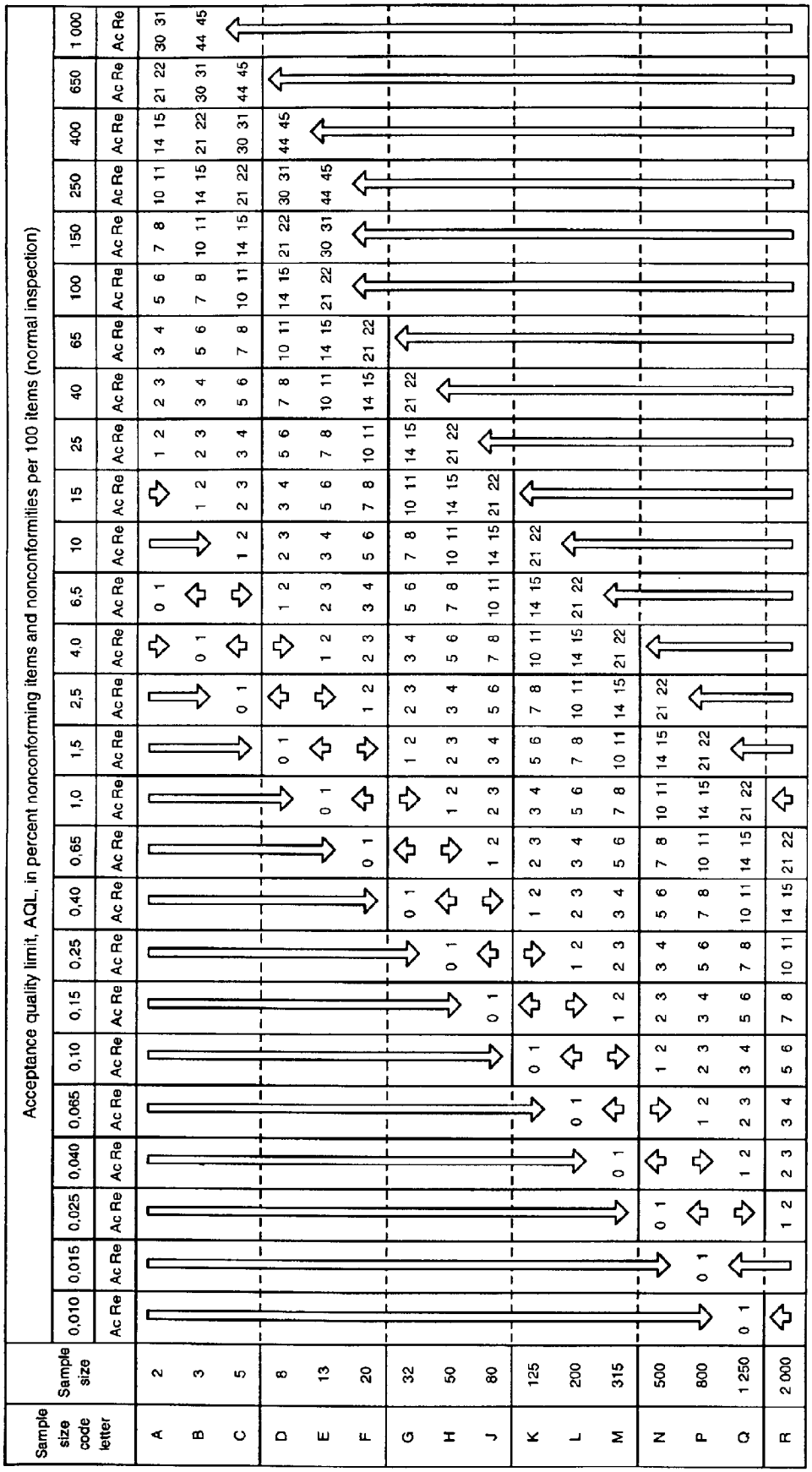

Table 2-B — Single sampling plans for tightened inspection (Master table)

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
		Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	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	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	0 1	⇩	⇩	1 2	2 3	3 4	5 6	8 9	12 13	18 19	27 28	
B	3	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	0 1	⇩	⇩	1 2	2 3	3 4	5 6	8 9	12 13	18 19	27 28	41 42	
C	5	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	0 1	⇩	⇩	1 2	2 3	3 4	5 6	8 9	12 13	18 19	27 28	41 42		
D	8	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	0 1	⇩	⇩	1 2	2 3	3 4	5 6	8 9	12 13	18 19	27 28	41 42			
E	13	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	0 1	⇩	⇩	1 2	2 3	3 4	5 6	8 9	12 13	18 19	27 28	41 42				
F	20	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	0 1	⇩	⇩	1 2	2 3	3 4	5 6	8 9	12 13	18 19							
G	32	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	0 1	⇩	⇩	1 2	2 3	3 4	5 6	8 9	12 13	18 19	⇧	⇧	⇧	⇧	⇧	⇧	⇧	
H	50	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	0 1	⇩	⇩	1 2	2 3	3 4	5 6	8 9	12 13	18 19	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	
J	80	⇩	⇩	⇩	⇩	⇩	⇩	⇩	0 1	⇩	⇩	1 2	2 3	3 4	5 6	8 9	12 13	18 19	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	
K	125	⇩	⇩	⇩	⇩	⇩	⇩	0 1	⇩	⇩	1 2	2 3	3 4	5 6	8 9	12 13	18 19	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	
L	200	⇩	⇩	⇩	⇩	⇩	0 1	⇩	⇩	1 2	2 3	3 4	5 6	8 9	12 13	18 19	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	
M	315	⇩	⇩	⇩	⇩	0 1	⇩	⇩	1 2	2 3	3 4	5 6	8 9	12 13	18 19	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	
N	500	⇩	⇩	⇩	0 1	⇩	⇩	1 2	2 3	3 4	5 6	8 9	12 13	18 19	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	
P	800	⇩	⇩	0 1	⇩	⇩	1 2	2 3	3 4	5 6	8 9	12 13	18 19	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	
Q	1 250	⇩	0 1	⇩	⇩	1 2	2 3	3 4	5 6	8 9	12 13	18 19	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	
R	2 000	0 1	⇧	⇩	1 2	2 3	3 4	5 6	8 9	12 13	18 19	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	
S	3 150			1 2																								

⇩ = 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-C — Single sampling plans for reduced inspection (Master table)

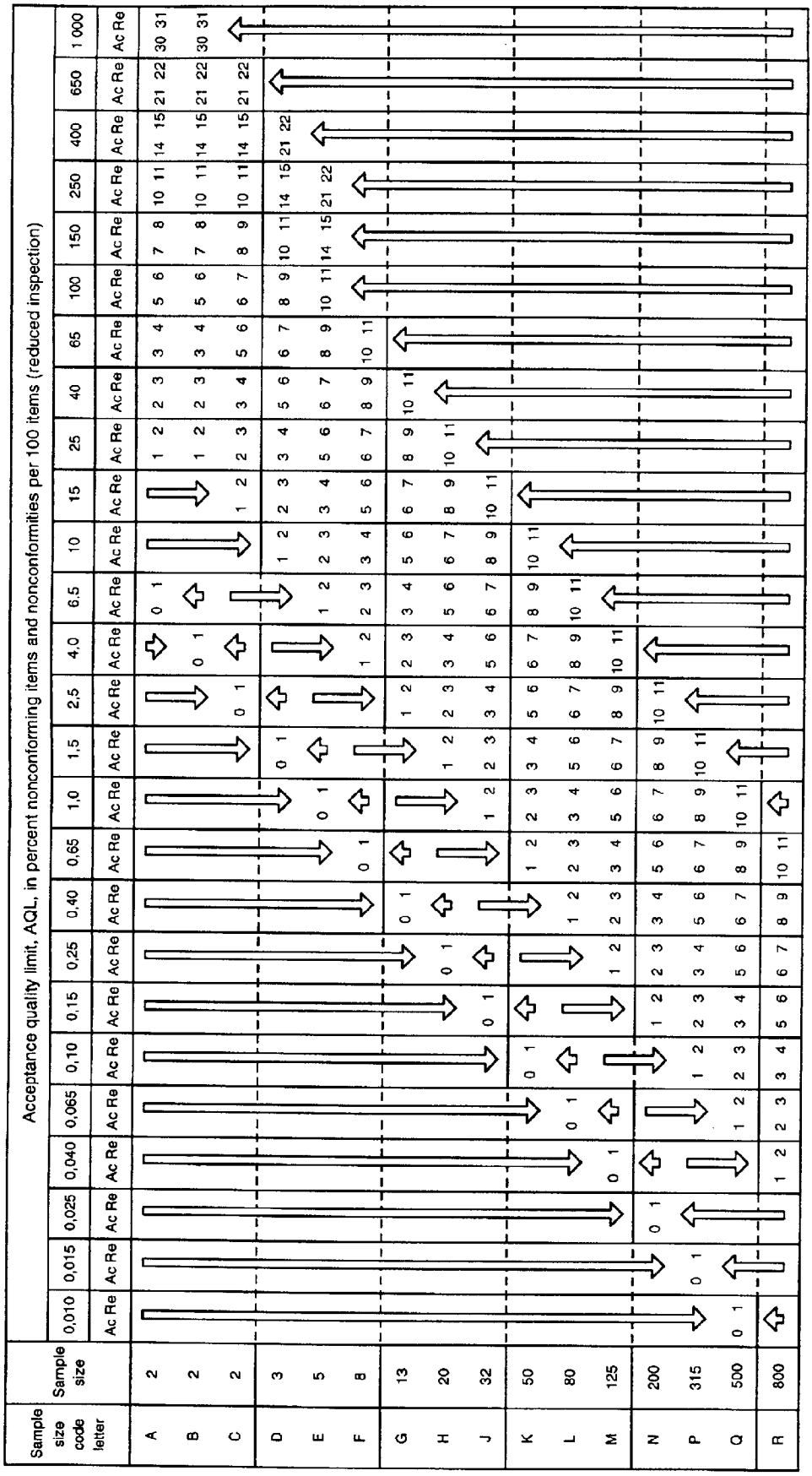

Table 3-A — Double sampling plans for normal inspection (Master table)

Sample size code letter	Sample	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	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	Ac Re
A				⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	*		⇩	*	*	*	*	*	*	*	*	*	*
B	First	2	2														*	⇧	⇩	0 2	0 3	1 3	2 5	3 6	5 9	7 11	11 16	17 22	25 31
	Second	2	4																	1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27	37 38	56 57
C	First	3	3														⇧	⇩	0 2	0 3	1 3	2 5	3 6	5 9	7 11	11 16	17 22	25 31	
	Second	3	6																1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27	37 38	56 57	
D	First	5	5														⇧	⇩	0 2	0 3	1 3	2 5	3 6	5 9	7 11	11 16	17 22	25 31	
	Second	5	10																1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27	37 38	56 57	
E	First	8	8														⇧	⇩	0 2	0 3	1 3	2 5	3 6	5 9	7 11	11 16	17 22	25 31	
	Second	8	16																1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27	37 38	56 57	
F	First	13	13														⇧	⇩	0 2	0 3	1 3	2 5	3 6	5 9	7 11	11 16			
	Second	13	26																1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27			
G	First	20	20														⇧	⇩	0 2	0 3	1 3	2 5	3 6	5 9	7 11	11 16			
	Second	20	40																1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27			
H	First	32	32														⇧	⇩	0 2	0 3	1 3	2 5	3 6	5 9	7 11	11 16			
	Second	32	64																1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27			
J	First	50	50														⇧	⇩	0 2	0 3	1 3	2 5	3 6	5 9	7 11	11 16			
	Second	50	100																1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27			
K	First	80	80														⇧	⇩	0 2	0 3	1 3	2 5	3 6	5 9	7 11	11 16			
	Second	80	160																1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27			
L	First	125	125														⇧	⇩	0 2	0 3	1 3	2 5	3 6	5 9	7 11	11 16			
	Second	125	250																1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27			
M	First	200	200														⇧	⇩	0 2	0 3	1 3	2 5	3 6	5 9	7 11	11 16			
	Second	200	400																1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27			
N	First	315	315														⇧	⇩	0 2	0 3	1 3	2 5	3 6	5 9	7 11	11 16			
	Second	315	630																1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27			
P	First	500	500														⇧	⇩	0 2	0 3	1 3	2 5	3 6	5 9	7 11	11 16			
	Second	500	1 000																1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27			
Q	First	800	800														⇧	⇩	0 2	0 3	1 3	2 5	3 6	5 9	7 11	11 16			
	Second	800	1 600																1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27			
R	First	1 250	1 250														⇧	⇩	0 2	0 3	1 3	2 5	3 6	5 9	7 11	11 16			
	Second	1 250	2 500																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).

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

Sample size code letter	Sample	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	0,040	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
A																		⇩			⇩	*	*	*	*	*	*	*	*
B	First	2	2															*			0 2	0 3	1 3	2 5	4 7	6 10	9 14	15 20	23 29
	Second	2	4																		1 2	3 4	4 5	6 7	10 11	15 16	23 24	34 35	52 53
C	First	3	3																	0 2	0 3	1 3	2 5	4 7	6 10	9 14	15 20	23 29	
	Second	3	6																	1 2	3 4	4 5	6 7	10 11	15 16	23 24	34 35	52 53	
D	First	5	5																0 2	0 3	1 3	2 5	4 7	6 10	9 14	15 20	23 29		
	Second	5	10																1 2	3 4	4 5	6 7	10 11	15 16	23 24	34 35	52 53		
E	First	8	8															0 2	0 3	1 3	2 5	4 7	6 10	9 14	15 20	23 29			
	Second	8	16															1 2	3 4	4 5	6 7	10 11	15 16	23 24	34 35	52 53			
F	First	13	13														0 2	0 3	1 3	2 5	4 7	6 10	9 14						
	Second	13	26														1 2	3 4	4 5	6 7	10 11	15 16	23 24						
G	First	20	20													0 2	0 3	1 3	2 5	4 7	6 10	9 14							
	Second	20	40													1 2	3 4	4 5	6 7	10 11	15 16	23 24							
H	First	32	32												0 2	0 3	1 3	2 5	4 7	6 10	9 14								
	Second	32	64												1 2	3 4	4 5	6 7	10 11	15 16	23 24								
J	First	50	50											0 2	0 3	1 3	2 5	4 7	6 10	9 14									
	Second	50	100											1 2	3 4	4 5	6 7	10 11	15 16	23 24									
K	First	80	80										0 2	0 3	1 3	2 5	4 7	6 10	9 14										
	Second	80	160										1 2	3 4	4 5	6 7	10 11	15 16	23 24										
L	First	125	125									0 2	0 3	1 3	2 5	4 7	6 10	9 14											
	Second	125	250									1 2	3 4	4 5	6 7	10 11	15 16	23 24											
M	First	200	200								0 2	0 3	1 3	2 5	4 7	6 10	9 14												
	Second	200	400								1 2	3 4	4 5	6 7	10 11	15 16	23 24												
N	First	315	315							0 2	0 3	1 3	2 5	4 7	6 10	9 14													
	Second	315	630							1 2	3 4	4 5	6 7	10 11	15 16	23 24													
P	First	500	500						0 2	0 3	1 3	2 5	4 7	6 10	9 14														
	Second	500	1 000						1 2	3 4	4 5	6 7	10 11	15 16	23 24														
Q	First	800	800					0 2	0 3	1 3	2 5	4 7	6 10	9 14															
	Second	800	1 600					1 2	3 4	4 5	6 7	10 11	15 16	23 24															
R	First	1 250	1 250				0 2	0 3	1 3	2 5	4 7	6 10	9 14	⇧															
	Second	1 250	2 500	*	⇧	⇩	1 2	3 4	4 5	6 7	10 11	15 16	23 24																
S	First	2 000	2 000			0 2																							
	Second	2 000	4 000			1 2																							

⇩ = 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)

Sample size code letter	Sample	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	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
A				⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	*	⇩	⇩	*	*	*	*	*	*	*	*	*
B				⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	*	⇧	⇩	⇩	*	*	*	*	*	*	*	*	*
C				⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	*	⇧	⇩	⇩	*	*	*	*	*	*	*	*	*
D	First	2	2	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇧	⇩	⇩	0 2	0 3	1 3	2 4	3 6	4 7	5 9	7 11	11 16		
	Second	2	4	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	*	⇧	⇩	⇩	1 2	3 4	4 5	5 6	7 8	10 11	12 13	18 19	26 27		
E	First	3	3	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	*	⇧	⇩	⇩	0 2	0 3	1 3	2 4	3 6	4 7	5 9	7 11	11 16		
	Second	3	6	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	*	⇧	⇩	⇩	1 2	3 4	4 5	5 6	7 8	10 11	12 13	18 19	26 27		
F	First	5	5	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	*	⇧	⇩	⇩	⇩	0 2	0 3	1 3	2 4	3 6	4 7	5 9				
	Second	5	10	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	*	⇧	⇩	⇩	⇩	1 2	3 4	4 5	5 6	7 8	10 11	12 13				
G	First	8	8	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	*	⇧	⇩	⇩	0 2	0 3	1 3	2 4	3 6	4 7	5 9						
	Second	8	16	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	1 2	3 4	4 5	5 6	7 8	10 11	12 13						
H	First	13	13	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	*	⇧	⇩	⇩	0 2	0 3	1 3	2 4	3 6	4 7	5 9								
	Second	13	26	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	1 2	3 4	4 5	5 6	7 8	10 11	12 13								
J	First	20	20	⇩	⇩	⇩	⇩	⇩	⇩	⇩	*	⇧	⇩	⇩	0 2	0 3	1 3	2 4	3 6	4 7	5 9									
	Second	20	40	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	1 2	3 4	4 5	5 6	7 8	10 11	12 13									
K	First	32	32	⇩	⇩	⇩	⇩	⇩	*	⇧	⇩	⇩	⇩	0 2	0 3	1 3	2 4	3 6	4 7	5 9										
	Second	32	64	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	1 2	3 4	4 5	5 6	7 8	10 11	12 13										
L	First	50	50	⇩	⇩	⇩	⇩	*	⇧	⇩	⇩	⇩	0 2	0 3	1 3	2 4	3 6	4 7	5 9											
	Second	50	100	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	1 2	3 4	4 5	5 6	7 8	10 11	12 13											
M	First	80	80	⇩	⇩	⇩	*	⇧	⇩	⇩	0 2	0 3	1 3	2 4	3 6	4 7	5 9													
	Second	80	160	⇩	⇩	⇩	⇩	⇩	⇩	⇩	1 2	3 4	4 5	5 6	7 8	10 11	12 13													
N	First	125	125	⇩	⇩	*	⇧	⇩	⇩	0 2	0 3	1 3	2 4	3 6	4 7	5 9														
	Second	125	250	⇩	⇩	⇩	⇩	⇩	⇩	1 2	3 4	4 5	5 6	7 8	10 11	12 13														
P	First	200	200	⇩	*	⇧	⇩	⇩	0 2	0 3	1 3	2 4	3 6	4 7	5 9	⇧														
	Second	200	400	⇩	⇩	⇩	⇩	⇩	1 2	3 4	4 5	5 6	7 8	10 11	12 13	⇧														
Q	First	315	315	*	⇧	⇧	⇩	0 2	0 3	1 3	2 4	3 6	4 7	5 9	⇧	⇧														
	Second	315	630	⇩	⇩	⇩	⇩	1 2	3 4	4 5	5 6	7 8	10 11	12 13	⇧	⇧														
R	First	500	500	⇧	⇧	⇧	0 2	0 3	1 3	2 4	3 6	4 7	5 9	⇧	⇧	⇧														
	Second	500	1 000	⇩	⇩	⇩	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).

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

Sample size code letter	Sample	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	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
A				⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	*	⇩	⇩	⇩	*	*	*	*	*	*	*	*
B																	*	⇧			++	++	++	++	++	++	++	++	++
C																*	⇧	⇩		++	++	++	++	++	++	++	++	++	⇧
D	First	2	2													⇧	⇩	# 2	# 2	# 3	# 4	0 4	0 5	1 7	2 9	4 12	6 16	⇧	
	Second	2	4															0 2	0 3	0 3	1 5	1 6	3 8	4 10	7 14	11 19	17 27		
	Third	2	6												*			0 2	0 3	1 4	2 6	3 8	6 10	8 13	13 19	19 27	29 38		
	Fourth	2	8															0 2	1 3	2 5	4 7	5 9	9 12	12 17	20 25	28 34	40 48		
	Fifth	2	10															1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27	37 38	56 57		
E	First	3	3												⇧	⇩	# 2	# 2	# 3	# 4	0 4	0 5	1 7	2 9	4 12	6 16	⇧		
	Second	3	6														0 2	0 3	0 3	1 5	1 6	3 8	4 10	7 14	11 19	17 27			
	Third	3	9											*			0 2	0 3	1 4	2 6	3 8	6 10	8 13	13 19	19 27	29 38			
	Fourth	3	12														0 2	1 3	2 5	4 7	5 9	9 12	12 17	20 25	28 34	40 48			
	Fifth	3	15														1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27	37 38	56 57			
F	First	5	5											⇧	⇩	# 2	# 2	# 3	# 4	0 4	0 5	1 7	2 9	⇧	⇧	⇧			
	Second	5	10													0 2	0 3	0 3	1 5	1 6	3 8	4 10	7 14						
	Third	5	15										*			0 2	0 3	1 4	2 6	3 8	6 10	8 13	13 19						
	Fourth	5	20													0 2	1 3	2 5	4 7	5 9	9 12	12 17	20 25						
	Fifth	5	25													1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27						
G	First	8	8										⇧	⇩	# 2	# 2	# 3	# 4	0 4	0 5	1 7	2 9	⇧						
	Second	8	16												0 2	0 3	0 3	1 5	1 6	3 8	4 10	7 14							
	Third	8	24									*			0 2	0 3	1 4	2 6	3 8	6 10	8 13	13 19							
	Fourth	8	32												0 2	1 3	2 5	4 7	5 9	9 12	12 17	20 25							
	Fifth	8	40												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 mutliple 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*)

Sample size code letter	Sample	Sample size	Cumu-lative 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
				Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (normal inspection)																									
				Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	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	13	⇩	⇩	⇩	⇩	⇩	⇩	⇩		⇧	⇩	# 2	# 2	# 3	# 4	0 4	0 5	1 7	2 9	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧
	Second	13	26											0 2	0 3	0 3	1 5	1 6	3 8	4 10	7 14								
	Third	13	39								*			0 2	0 3	1 4	2 6	3 8	6 10	8 13	13 19								
	Fourth	13	52											0 2	1 3	2 5	4 7	5 9	9 12	12 17	20 25								
	Fifth	13	65											1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27								
J	First	20	20	⇩	⇩	⇩	⇩	⇩	⇩		⇧	⇩	# 2	# 2	# 3	# 4	0 4	0 5	1 7	2 9	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧
	Second	20	40										0 2	0 3	0 3	1 5	1 6	3 8	4 10	7 14									
	Third	20	60							*			0 2	0 3	1 4	2 6	3 8	6 10	8 13	13 19									
	Fourth	20	80										0 2	1 3	2 5	4 7	5 9	9 12	12 17	20 25									
	Fifth	20	100										1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27									
K	First	32	32	⇩	⇩	⇩	⇩	⇩		⇧	⇩	# 2	# 2	# 3	# 4	0 4	0 5	1 7	2 9	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧
	Second	32	64									0 2	0 3	0 3	1 5	1 6	3 8	4 10	7 14										
	Third	32	96						*			0 2	0 3	1 4	2 6	3 8	6 10	8 13	13 19										
	Fourth	32	128									0 2	1 3	2 5	4 7	5 9	9 12	12 17	20 25										
	Fifth	32	160									1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27										
L	First	50	50	⇩	⇩	⇩	⇩		⇧	⇩	# 2	# 2	# 3	# 4	0 4	0 5	1 7	2 9	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧
	Second	50	100								0 2	0 3	0 3	1 5	1 6	3 8	4 10	7 14											
	Third	50	150					*			0 2	0 3	1 4	2 6	3 8	6 10	8 13	13 19											
	Fourth	50	200								0 2	1 3	2 5	4 7	5 9	9 12	12 17	20 25											
	Fifth	50	250								1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27											
M	First	80	80	⇩	⇩	⇩		⇧	⇩	# 2	# 2	# 3	# 4	0 4	0 5	1 7	2 9	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧
	Second	80	160							0 2	0 3	0 3	1 5	1 6	3 8	4 10	7 14												
	Third	80	240				*			0 2	0 3	1 4	2 6	3 8	6 10	8 13	13 19												
	Fourth	80	320							0 2	1 3	2 5	4 7	5 9	9 12	12 17	20 25												
	Fifth	80	400							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 mutliple 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*)

Sample size code letter	Sample	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	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	Ac Re	Ac Re	Ac Re
N	First	125	125	⇩	⇩		⇧	⇩	# 2	# 2	# 3	# 4	0 4	0 5	1 7	2 9	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧
	Second	125	250						0 2	0 3	0 3	1 5	1 6	3 8	4 10	7 14																
	Third	125	375			*			0 2	0 3	1 4	2 6	3 8	6 10	8 13	13 19																
	Fourth	125	500						0 2	1 3	2 5	4 7	5 9	9 12	12 17	20 25																
	Fifth	125	625						1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27																
P	First	200	200	⇩		⇧	⇩		# 2	# 2	# 3	# 4	0 4	0 5	1 7	2 9	⇧																
	Second	200	400						0 2	0 3	0 3	1 5	1 6	3 8	4 10	7 14																
	Third	200	600		*				0 2	0 3	1 4	2 6	3 8	6 10	8 13	13 19																
	Fourth	200	800						0 2	1 3	2 5	4 7	5 9	9 12	12 17	20 25																
	Fifth	200	1 000						1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27																
Q	First	315	315		⇧	⇩		# 2	# 2	# 3	# 4	0 4	0 5	1 7	2 9		⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧
	Second	315	630					0 2	0 3	0 3	1 5	1 6	3 8	4 10	7 14																	
	Third	315	945	*				0 2	0 3	1 4	2 6	3 8	6 10	8 13	13 19																	
	Fourth	315	1 260					0 2	1 3	2 5	4 7	5 9	9 12	12 17	20 25																	
	Fifth	315	1 575					1 2	3 4	4 5	6 7	9 10	12 13	18 19	26 27																	
R	First	500	500	⇧		⇩		# 2	# 2	# 3	# 4	0 4	0 5	1 7	2 9		⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧
	Second	500	1 000					0 2	0 3	0 3	1 5	1 6	3 8	4 10	7 14																	
	Third	500	1 500					0 2	0 3	1 4	2 6	3 8	6 10	8 13	13 19																	
	Fourth	500	2 000					0 2	1 3	2 5	4 7	5 9	9 12	12 17	20 25																	
	Fifth	500	2 500					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 mutliple sampling plan below, where available).

\# = Acceptance is not permitted for this sample size.

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

Sample size code letter	Sample	Sample size	Cumu-lative* 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
				Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (tightened inspection)																									
				Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	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	2													*	⇩		# 2	# 2	# 3	# 4	0 4	0 6	1 8	3 10	6 15	⇧	
	Second	2	4																0 2	0 3	0 3	1 5	2 7	3 9	6 12	10 17	16 25		
	Third	2	6																0 2	0 3	1 4	2 6	4 9	7 12	11 17	17 24	26 35		
	Fourth	2	8																0 2	1 3	2 5	4 7	6 11	11 15	16 22	25 31	38 45		
	Fifth	2	10																1 2	3 4	4 5	6 7	10 11	15 16	23 24	34 35	52 53		
E	First	3	3												*	⇩		# 2	# 2	# 3	# 4	0 4	0 6	1 8	3 10	6 15	⇧		
	Second	3	6															0 2	0 3	0 3	1 5	2 7	3 9	6 12	10 17	16 25			
	Third	3	9															0 2	0 3	1 4	2 6	4 9	7 12	11 17	17 24	26 35			
	Fourth	3	12															0 2	1 3	2 5	4 7	6 11	11 15	16 22	25 31	38 45			
	Fifth	3	15															1 2	3 4	4 5	6 7	10 11	15 16	23 24	34 35	52 53			
F	First	5	5											*	⇩		# 2	# 2	# 3	# 4	0 4	0 6	1 8	⇧	⇧	⇧			
	Second	5	10														0 2	0 3	0 3	1 5	2 7	3 9	6 12						
	Third	5	15														0 2	0 3	1 4	2 6	4 9	7 12	11 17						
	Fourth	5	20														0 2	1 3	2 5	4 7	6 11	11 15	16 22						
	Fifth	5	25														1 2	3 4	4 5	6 7	10 11	15 16	23 24						
G	First	8	8										*	⇩		# 2	# 2	# 3	# 4	0 4	0 6	1 8	⇧						
	Second	8	16													0 2	0 3	0 3	1 5	2 7	3 9	6 12							
	Third	8	24													0 2	0 3	1 4	2 6	4 9	7 12	11 17							
	Fourth	8	32													0 2	1 3	2 5	4 7	6 11	11 15	16 22							
	Fifth	8	40													1 2	3 4	4 5	6 7	10 11	15 16	23 24							

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= Acceptance is not permitted for this sample size.

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

Sample size code letter	Sample	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	0,040	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	Ac Re	Ac Re	Ac Re	Ac Re
H	First	13	13	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	*	⇩	⇩	# 2	# 2	# 3	# 4	0 4	0 6	1 8	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧
	Second	13	26												0 2	0 3	0 3	1 5	2 7	3 9	6 12											
	Third	13	39												0 2	0 3	1 4	2 6	4 9	7 12	11 17											
	Fourth	13	52												0 2	1 3	2 5	4 7	6 11	11 15	16 22											
	Fifth	13	65												1 2	3 4	4 5	6 7	10 11	15 16	23 24											
J	First	20	20											# 2	# 2	# 3	# 4	0 4	0 6	1 8	⇧												
	Second	20	40											0 2	0 3	0 3	1 5	2 7	3 9	6 12													
	Third	20	60								*			0 2	0 3	1 4	2 6	4 9	7 12	11 17													
	Fourth	20	80											0 2	1 3	2 5	4 7	6 11	11 15	16 22													
	Fifth	20	100											1 2	3 4	4 5	6 7	10 11	15 16	23 24													
K	First	32	32										# 2	# 2	# 3	# 4	0 4	0 6	1 8	⇧													
	Second	32	64										0 2	0 3	0 3	1 5	2 7	3 9	6 12														
	Third	32	96									*	0 2	0 3	1 4	2 6	4 9	7 12	11 17														
	Fourth	32	128										0 2	1 3	2 5	4 7	6 11	11 15	16 22														
	Fifth	32	160										1 2	3 4	4 5	6 7	10 11	15 16	23 24														
L	First	50	50									# 2	# 2	# 3	# 4	0 4	0 6	1 8	⇧															
	Second	50	100									0 2	0 3	0 3	1 5	2 7	3 9	6 12															
	Third	50	150									0 2	0 3	1 4	2 6	4 9	7 12	11 17															
	Fourth	50	200									0 2	1 3	2 5	4 7	6 11	11 15	16 22															
	Fifth	50	250									1 2	3 4	4 5	6 7	10 11	15 16	23 24															
M	First	80	80								# 2	# 2	# 3	# 4	0 4	0 6	1 8	⇧															
	Second	80	160								0 2	0 3	0 3	1 5	2 7	3 9	6 12																
	Third	80	240								0 2	0 3	1 4	2 6	4 9	7 12	11 17																
	Fourth	80	320								0 2	1 3	2 5	4 7	6 11	11 15	16 22																
	Fifth	80	400								1 2	3 4	4 5	6 7	10 11	15 16	23 24																

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

Sample size code letter	Sample	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		0,040		0,065		0,10		0,15		0,25		0,40		0,65		1,0		1,5		2,5		4,0		6,5		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
N	First	125	125													#	2	#	2	#	3	#	4	0	4	0	6	1	8				
	Second	125	250													0	2	0	3	0	3	1	5	2	7	3	9	6	12				
	Third	125	375							*						0	2	0	3	1	4	2	6	4	9	7	12	11	17				
	Fourth	125	500													0	2	1	3	2	5	4	7	6	11	11	15	16	22				
	Fifth	125	625													1	2	3	4	4	5	6	7	10	11	15	16	23	24				
P	First	200	200											#	2	#	2	#	3	#	4	0	4	0	6	1	8						
	Second	200	400											0	2	0	3	0	3	1	5	2	7	3	9	6	12						
	Third	200	600							*				0	2	0	3	1	4	2	6	4	9	7	12	11	17						
	Fourth	200	800											0	2	1	3	2	5	4	7	6	11	11	15	16	22						
	Fifth	200	1 000											1	2	3	4	4	5	6	7	10	11	15	16	23	24						
Q	First	315	315									#	2	#	2	#	3	#	4	0	4	0	6	1	8								
	Second	315	630									0	2	0	3	0	3	1	5	2	7	3	9	6	12								
	Third	315	945			*						0	2	0	3	1	4	2	6	4	9	7	12	11	17								
	Fourth	315	1 260									0	2	1	3	2	5	4	7	6	11	11	15	16	22								
	Fifth	315	1 575									1	2	3	4	4	5	6	7	10	11	15	16	23	24								
R	First	500	500							#	2	#	2	#	3	#	4	0	4	0	6	1	8										
	Second	500	1 000							0	2	0	3	0	3	1	5	2	7	3	9	6	12										
	Third	500	1 500	*						0	2	0	3	1	4	2	6	4	9	7	12	11	17										
	Fourth	500	2 000							0	2	1	3	2	5	4	7	6	11	11	15	16	22										
	Fifth	500	2 500							1	2	3	4	4	5	6	7	10	11	15	16	23	24										
S	First	800	800					#	2																								
	Second	800	1 600					0	2																								
	Third	800	2 400					0	2																								
	Fourth	800	3 200					0	2																								
	Fifth	800	4 000					1	2																								

Sample size code letter	Sample	Sample size	Cumulative sample size	Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (tightened inspection)																												
				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									
N	First	125	125																													
	Second	125	250																													
	Third	125	375																													
	Fourth	125	500																													
	Fifth	125	625																													
P	First	200	200																													
	Second	200	400																													
	Third	200	600																													
	Fourth	200	800																													
	Fifth	200	1 000																													
Q	First	315	315																													
	Second	315	630																													
	Third	315	945																													
	Fourth	315	1 260																													
	Fifth	315	1 575																													
R	First	500	500																													
	Second	500	1 000																													
	Third	500	1 500																													
	Fourth	500	2 000																													
	Fifth	500	2 500																													
S	First	800	800																													
	Second	800	1 600																													
	Third	800	2 400																													
	Fourth	800	3 200																													
	Fifth	800	4 000																													

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

Sample size code letter	Sample	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		0,10		0,15		0,25		0,40		0,65		1,0		1,5		2,5		4,0		6,5		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
A				⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		*		⇩	
B				⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		*		⇧		⇩	
C				⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇧		⇩		⇩	
D				⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		*		⇧		⇩		⇩	
E				⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		*		⇧		⇩		⇩		⇩	
F	First	2	2	⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		*		⇧		⇩		#	2	#	2	#	3
	Second	2	4	⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩				⇧		⇩		0	2	0	3	0	3
	Third	2	6	⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩				⇧		⇩		0	2	0	3	1	4
	Fourth	2	8	⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩				⇧		⇩		0	2	1	3	2	5
	Fifth	2	10	⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩				⇧		⇩		1	2	3	4	4	5
G	First	3	3	⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇧		⇧		⇩		#	2	#	2	#	3
	Second	3	6	⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩				⇧		⇩		0	2	0	3	0	3
	Third	3	9	⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩				⇧		⇩		0	2	0	3	1	4
	Fourth	3	12	⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩				⇧		⇩		0	2	1	3	2	5
	Fifth	3	15	⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩				⇧		⇩		1	2	3	4	4	5
H	First	5	5	⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇧		⇧		#	2	#	2	#	3	#	3
	Second	5	10	⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩				⇧		0	2	0	3	0	3	1	4
	Third	5	15	⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩				⇧		0	2	0	3	1	4	2	5
	Fourth	5	20	⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩				⇧		0	2	1	3	2	5	3	5
	Fifth	5	25	⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩		⇩				⇧		1	2	3	4	4	5	5	6

Sample size code letter	Sample	Sample size	Cumulative sample size	Acceptance quality limit, AQL, in percent nonconforming items and nonconformities per 100 items (reduced inspection)																													
				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										
A				*		*		*		*		*		*		*		*		*		*											
B				*		*		*		*		*		*		*		*		*		*											
C				*		*		*		*		*		*		*		*		*		*											
D				*		*		*		*		*		*		*		*		*		*											
E				++		++		++		++		++		++		++		++				⇧											
F	First	2	2	#	3	0	4	0	4	0	5																						
	Second	2	4	1	4	1	6	2	7	3	8																						
	Third	2	6	2	5	2	7	4	9	6	10																						
	Fourth	2	8	3	5	4	8	6	11	9	12																						
	Fifth	2	10	5	6	7	8	10	11	12	13																						
G	First	3	3	0	4	0	4	0	5																								
	Second	3	6	1	6	2	7	3	8																								
	Third	3	9	2	7	4	9	6	10																								
	Fourth	3	12	4	8	6	11	9	12																								
	Fifth	3	15	7	8	10	11	12	13																								
H	First	5	5	0	4	0	4	0	5																								
	Second	5	10	2	7	3	8																										
	Third	5	15	4	9	6	10																										
	Fourth	5	20	6	11	9	12																										
	Fifth	5	25	7	8	10	11	12	13																								

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

Sample size code letter	Sample	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	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
J	First	8	8	⇩	⇩	⇩	⇩	⇩	⇩	*	⇧	⇩	⇩	# 2	# 2	# 3	# 3	0 4	0 4	0 5	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧
	Second	8	16											0 2	0 3	0 3	1 4	1 6	2 7	3 8									
	Third	8	24											0 2	0 3	1 4	2 5	2 7	4 9	6 10									
	Fourth	8	32											0 2	1 3	2 5	3 5	4 8	6 11	9 12									
	Fifth	8	40											1 2	3 4	4 5	5 6	7 8	10 11	12 13									
K	First	13	13	⇩	⇩	⇩	⇩	⇩	*	⇧	⇩	⇩	# 2	# 2	# 3	# 3	0 4	0 4	0 5	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧
	Second	13	26										0 2	0 3	0 3	1 4	1 6	2 7	3 8										
	Third	13	39										0 2	0 3	1 4	2 5	2 7	4 9	6 10										
	Fourth	13	52										0 2	1 3	2 5	3 5	4 8	6 11	9 12										
	Fifth	13	65										1 2	3 4	4 5	5 6	7 8	10 11	12 13										
L	First	20	20	⇩	⇩	⇩	⇩	*	⇧	⇩	⇩	# 2	# 2	# 3	# 3	0 4	0 4	0 5	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧
	Second	20	40									0 2	0 3	0 3	1 4	1 6	2 7	3 8											
	Third	20	60									0 2	0 3	1 4	2 5	2 7	4 9	6 10											
	Fourth	20	80									0 2	1 3	2 5	3 5	4 8	6 11	9 12											
	Fifth	20	100									1 2	3 4	4 5	5 6	7 8	10 11	12 13											
M	First	32	32	⇩	⇩	⇩	*	⇧	⇩	⇩	# 2	# 2	# 3	# 3	0 4	0 4	0 5	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧
	Second	32	64								0 2	0 3	0 3	1 4	1 6	2 7	3 8												
	Third	32	96								0 2	0 3	1 4	2 5	2 7	4 9	6 10												
	Fourth	32	128								0 2	1 3	2 5	3 5	4 8	6 11	9 12												
	Fifth	32	160								1 2	3 4	4 5	5 6	7 8	10 11	12 13												

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

Sample size code letter	Sample	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	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	Ac Re	Ac Re	Ac Re
N	First	50	50	⇩	⇩		⇧	⇩	⇩	# 2	# 2	# 3	# 3	0 4	0 4	0 5	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧
	Second	50	100							0 2	0 3	0 3	1 4	1 6	2 7	3 8																
	Third	50	150			*				0 2	0 3	1 4	2 5	2 7	4 9	6 10																
	Fourth	50	200							0 2	1 3	2 5	3 5	4 8	6 11	9 12																
	Fifth	50	250						⇩	1 2	3 4	4 5	5 6	7 8	10 11	12 13																
P	First	80	80	⇩		⇧	⇩		# 2	# 2	# 3	# 3	0 4	0 4	0 5	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧
	Second	80	160						0 2	0 3	0 3	1 4	1 6	2 7	3 8																	
	Third	80	240		*				0 2	0 3	1 4	2 5	2 7	4 9	6 10																	
	Fourth	80	320						0 2	1 3	2 5	3 5	4 8	6 11	9 12																	
	Fifth	80	400					⇩	1 2	3 4	4 5	5 6	7 8	10 11	12 13																	
Q	First	125	125		⇧	⇧	⇩	# 2	# 2	# 3	# 3	0 4	0 4	0 5	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧
	Second	125	250					0 2	0 3	0 3	1 4	1 6	2 7	3 8																		
	Third	125	375	*				0 2	0 3	1 4	2 5	2 7	4 9	6 10																		
	Fourth	125	500					0 2	1 3	2 5	3 5	4 8	6 11	9 12																		
	Fifth	125	625				⇩	1 2	3 4	4 5	5 6	7 8	10 11	12 13																		
R	First	200	200	⇧	⇧	⇧	# 2	# 2	# 3	# 3	0 4	0 4	0 5	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧	⇧
	Second	200	400				0 2	0 3	0 3	1 4	1 6	2 7	3 8																			
	Third	200	600				0 2	0 3	1 4	2 5	2 7	4 9	6 10																			
	Fourth	200	800				0 2	1 3	2 5	3 5	4 8	6 11	9 12																			
	Fifth	200	1 000				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 mutliple 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	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															12,2 12,6	7,15* 7,19*	9,45*	9,02	4,74	4,31	1,66	1,19	1,37	1,73	1,41	1,35
B	3														11,3 11,5	6,85* 6,87*	9,45* 9,39*	7,54	4,05	3,38	1,48	1,19	0,667	1,03	0,607	0,979	0,627
C	5													11,8 11,9	7,15* 7,17*	10,8* 10,8*	9,02 8,15	4,05	3,83	1,66	1,83	1,37	1,03	0,940	1,35	2,17	
D	8												11,3 11,4	7,15* 7,16*	10,5* 10,5*	9,63 9,10	4,74 3,81	3,38	1,66	1,68	1,77	1,73	0,607	1,35	1,73		
E	13											12,2 12,2	6,85* 6,86*	10,8* 10,8*	9,63 9,32	5,41 4,80	4,31 3,42	1,48	1,83	1,77	2,62	1,41	0,979	2,17			
F	20										12,2 12,2	7,15* 7,16*	9,45* 9,45*	9,02 8,82	4,74 4,39	4,31 3,74	1,66 1,13	1,19	1,37	1,73	1,41						
G	32									12,0 12,0	7,63* 7,64*	10,5* 10,5*	8,42 8,30	4,74 4,52	4,11 3,77	1,96 1,58	1,68 1,17	1,04	1,73	1,20							
H	50								11,8 11,8	7,15* 7,15*	10,8* 10,8*	9,02 8,94	4,05 3,92	3,83 3,62	1,66 1,44	1,83 1,47	1,37 0,935	1,03	0,940								
J	80							11,3 11,3	7,15* 7,15*	10,5* 10,5*	9,63 9,58	4,74 4,66	3,38 3,26	1,66 1,52	1,68 1,47	1,77 1,43	1,73 1,23	0,607									
K	125						11,8 11,8	6,41* 6,41*	10,1* 10,1*	9,02 8,99	4,92 4,87	3,83 3,74	1,25 1,18	1,48 1,36	1,37 1,19	1,95 1,60	0,940 0,626										
L	200					12,2 12,2	7,15* 7,15*	9,45* 9,45*	9,02 9,00	4,74 4,71	4,31 4,25	1,66 1,60	1,19 1,13	1,37 1,26	1,73 1,52	1,41 1,13											
M	315				11,8 11,8	7,44* 7,44*	10,2* 10,2*	8,20 8,19	4,56 4,54	3,92 3,89	1,83 1,80	1,55 1,50	0,936 0,882	1,52 1,41	1,02 0,883												
N	500			11,8 11,8	7,15* 7,15*	10,8* 10,8*	9,02 9,01	4,05 4,04	3,83 3,81	1,66 1,63	1,83 1,79	1,37 1,32	1,03 0,971	0,940 0,857													
P	800		11,3 11,3	7,15* 7,15*	10,5* 10,5*	9,63 9,63	4,74 4,73	3,38 3,37	1,66 1,64	1,68 1,66	1,77 1,74	1,73 1,68	0,607 0,570													
Q	1 250	11,8 11,8	6,41* 6,41*	10,1* 10,1*	9,02 9,02	4,92 4,92	3,83 3,82	1,25 1,24	1,48 1,47	1,37 1,35	1,95 1,91	0,940 0,907															
R	2 000	7,15* 7,15*	9,45* 9,45*	9,02 9,02	4,74 4,74	4,31 4,30	1,66 1,65	1,19 1,18	1,37 1,36	1,73 1,71	1,41 1,38															

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)

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																18,1 19,0	13,7*	21,0*	19,1	14,3	14,3	8,39	6,81	6,38	6,98	5,25
B	3															17,7 18,3	13,7* 14,2*	17,9*	17,3	12,1	13,4	8,39	4,03	4,27	3,74	4,09	2,21
C	5														18,1 18,5	15,5* 15,9*	21,0* 21,6*	17,3	13,2	14,3	11,1	6,81	4,27	5,19	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	10,5	8,19	6,38	3,74	5,25	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	8,79	6,98	4,09	6,16			
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	6,98						
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	6,38	6,22							
H	50									18,1 18,2	15,5* 15,5*	21,0* 21,0*	17,3 17,3	13,2 12,9	14,3 13,9	11,1 10,4	6,81 5,79	4,27	5,19								
J	80								18,1 18,1	15,1* 15,2*	22,2* 22,2*	19,1 19,1	12,1 11,9	14,3 14,1	10,5 10,1	8,19 7,51	6,38 5,38	3,74									
K	125							17,1 17,1	14,6* 14,6*	21,0* 21,0*	19,6 19,5	13,2 13,1	12,1 12,0	9,70 9,44	6,81 6,41	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	14,3 14,2	8,39 8,24	6,81 6,56	6,38 5,99	6,98 6,32											
M	315					18,5 18,5	14,8* 14,8*	19,3* 19,3*	18,7 18,7	13,4 13,3	15,2 15,1	9,98 9,88	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	14,3 14,3	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	14,3 14,3	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	12,1 12,1	9,70 9,68	6,81 6,77	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	14,3 14,3	8,39 8,38	6,81 6,78	6,38 6,34	6,98 6,92																
S	3 150			18,7 18,7																							

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)

Sample size code letter	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	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															12,2 12,6	7,15* 7,19*	9,45*	9,02	4,74	4,31	1,66	1,19	1,37	1,73	1,41	1,35
B	2														7,69 7,84	5,40* 5,48*	7,15* 7,19*	9,45*	9,02	4,74	4,31	1,66	1,19	1,37	1,73	1,41	1,35
C	2													4,88 4,94	2,33* 2,30*	3,39* 3,29*	4,72* 4,42*	3,69	1,44	0,908	1,07	0,453	0,380	1,37	1,73	1,41	
D	3												4,40 4,43	2,07* 2,05*	2,94* 2,87*	4,51* 4,33*	3,69 2,80	1,09	0,729	0,775	0,396	0,38	0,667	1,03	0,607		
E	5											4,88 4,90	2,07* 2,06*	3,16* 3,12*	4,72* 4,61*	4,27 3,70	1,44 0,856	0,729	0,912	0,453	0,629	1,37	1,03	0,940			
F	8										5,07 5,08	2,33* 2,32*	2,94* 2,91*	4,72* 4,65*	4,15 3,81	1,59 1,20	0,908 0,502	0,775	0,453	0,571	1,77						
G	13									5,07 5,08	2,56* 2,56*	3,39* 3,37*	4,51* 4,47*	4,27 4,06	1,59 1,35	1,09 0,793	1,07 0,646	0,396	0,629	1,77							
H	20								4,88 4,88	2,33* 2,32*	3,39* 3,38*	4,72* 4,69*	3,69 3,57	1,44 1,30	0,908 0,741	1,07 0,788	0,453 0,239	0,380	1,37								
J	32							4,69 4,69	2,33* 2,32*	3,30* 3,29*	5,06* 5,04*	4,15 4,07	1,29 1,21	0,908 0,803	1,00 0,836	0,558 0,389	0,571 0,330	1,04									
K	50						4,88 4,88	2,07* 2,07*	3,16* 3,16*	4,72* 4,71*	4,27 4,21	1,44 1,38	0,729 0,674	0,912 0,813	0,453 0,361	0,629 0,454	1,37 0,935										
L	80					5,07 5,07	2,33* 2,33*	2,94* 2,93*	4,72* 4,71*	4,15 4,12	1,59 1,56	0,908 0,866	0,775 0,720	0,453 0,395	0,571 0,468	1,77 1,43											
M	125				4,88 4,88	2,39* 2,39*	3,16* 3,16*	4,21* 4,21*	3,98 3,96	1,44 1,42	0,957 0,929	0,912 0,873	0,321 0,293	0,493 0,434	1,37 1,19												
N	200			4,88 4,88	2,33* 2,33*	3,39* 3,39*	4,72* 4,72*	3,69 3,68	1,44 1,42	0,908 0,891	1,07 1,04	0,453 0,430	0,380 0,350	1,37 1,26												
P	315		4,62 4,62	2,26* 2,26*	3,20* 3,20*	4,92* 4,92*	4,03 4,02	1,24 1,23	0,861 0,851	0,942 0,926	0,513 0,496	0,518 0,493	0,936 0,882														
Q	500	4,88 4,88	2,07* 2,07*	3,16* 3,16*	4,72* 4,72*	4,27 4,26	1,44 1,43	0,729 0,724	0,912 0,902	0,453 0,444	0,629 0,611	1,37 1,32														
R	800	2,33* 2,33*	2,94* 2,94*	4,72* 4,72*	4,15 4,15	1,59 1,59	0,908 0,904	0,775 0,769	0,453 0,447	0,571 0,561	1,77 1,74														

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-C).

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*	0,311*	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*	0,311	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	2,64	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*	0,485	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	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	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)

Sample size code letter	Sample size	Acceptance quality limit, AQL, nonconformities per 100 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	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	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																115	116*	125*	194	266	334	464	650	889	1 238	1 748
B	3															76,8	77,5*	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			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 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	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															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	4,61*	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)

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	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	224	326	470	733	1 085
B	3														12,3 10,5			28,0	45,7	64,7	106	149	218	313	489	723	1 102
C	5													7,36 6,70			16,8 16,0	27,4	38,8	63,4	89,4	131	188	293	434	661	
D	8												4,60 4,33			10,5 10,1	17,1 17,0	24,3	39,6	55,9	81,6	117	183	271	413		
E	13											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			
F	20										1,84 1,79			4,20 4,14	6,86 6,82	9,71 9,75	15,8 16,2	22,4	32,6	47,0	73,3						
G	32									1,15 1,13			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								0,736 0,728			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							0,460 0,457			1,05 1,05	1,71 1,71	2,43 2,43	3,96 3,98	5,59 5,63	8,16 8,27	11,7 12,0	18,3										
K	125						0,294 0,293			0,672 0,670	1,10 1,10	1,55 1,55	2,53 2,54	3,58 3,60	5,22 5,26	7,52 7,61	11,7 11,9											
L	200					0,184 0,183			0,420 0,419	0,686 0,685	0,971 0,971	1,58 1,59	2,24 2,24	3,26 3,28	4,70 4,73	7,33 7,41												
M	315				0,117 0,117			0,267 0,266	0,435 0,435	0,617 0,617	1,01 1,01	1,42 1,42	2,07 2,08	2,98 3,00	4,65 4,69													
N	500			0,0736 0,0735			0,168 0,168	0,274 0,274	0,388 0,388	0,634 0,634	0,894 0,895	1,31 1,31	1,88 1,89	2,93 2,94													
P	800		0,0460 0,0460			0,105 0,105	0,171 0,171	0,243 0,243	0,396 0,396	0,559 0,559	0,816 0,817	1,17 1,18	1,83 1,84														
Q	1 250	0,0294 0,0294			0,0672 0,0672	0,110 0,110	0,155 0,155	0,253 0,254	0,358 0,358	0,522 0,523	0,752 0,753	1,17 1,17															
R	2 000			0,0420 0,0420	0,0686 0,0686	0,0971 0,0971	0,158 0,158	0,224 0,224	0,326 0,327	0,470 0,470	0,733 0,734																

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.

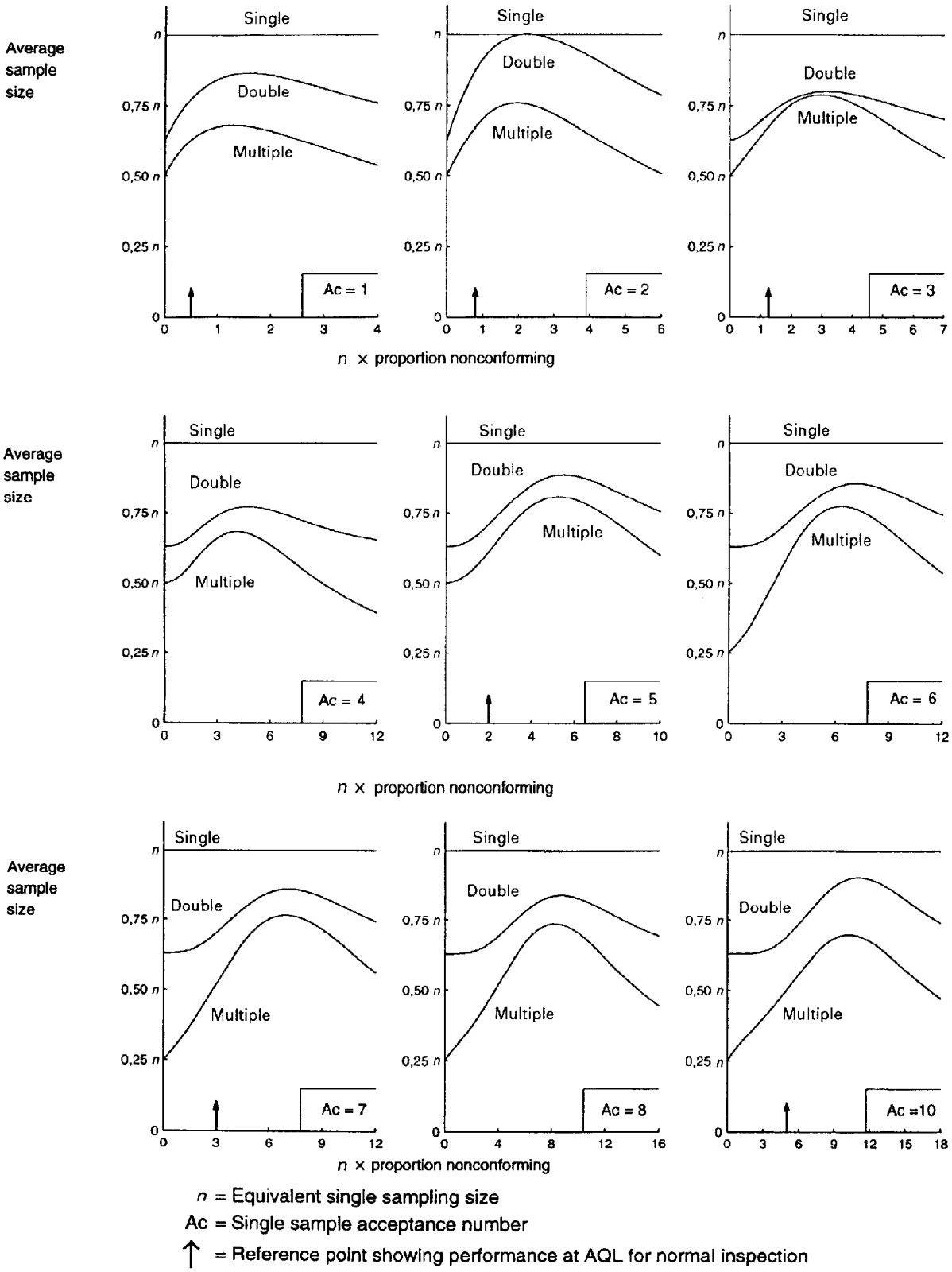
Table 8-B — Average outgoing quality limits for tightened inspection (Single sampling plans)

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	6,86 6,82	9,71 9,75	15,8	25,7	39,7	61,9						
G	32										1,15 1,13			2,62 2,60	4,28 4,27	6,07 6,08	9,90 10,0	16,1	24,8	38,7							
H	50									0,736 0,728			1,68 1,67	2,74 2,74	3,88 3,89	6,34 6,38	10,3 10,5	15,9	24,7								
J	80								0,460 0,457			1,05 1,05	1,71 1,71	2,43 2,43	3,96 3,98	6,43 6,49	9,93 10,1	15,5										
K	125							0,294 0,293			0,672 0,670	1,10 1,10	1,55 1,55	2,53 2,54	4,12 4,14	6,36 6,42	9,90 10,1											
L	200						0,184 0,183			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	0,0184 0,0184			0,0420 0,0420	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)

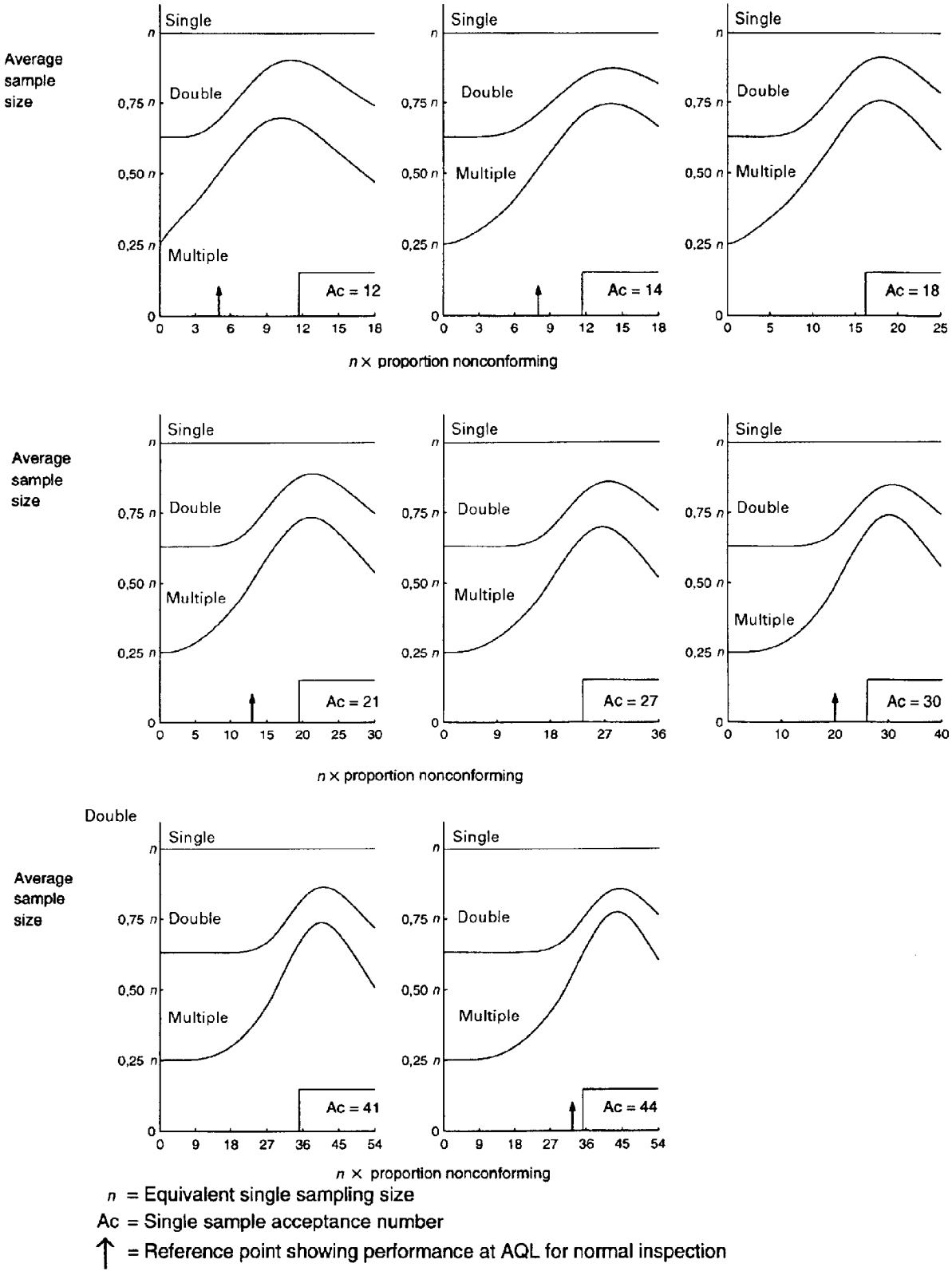


n = Equivalent single sampling size

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

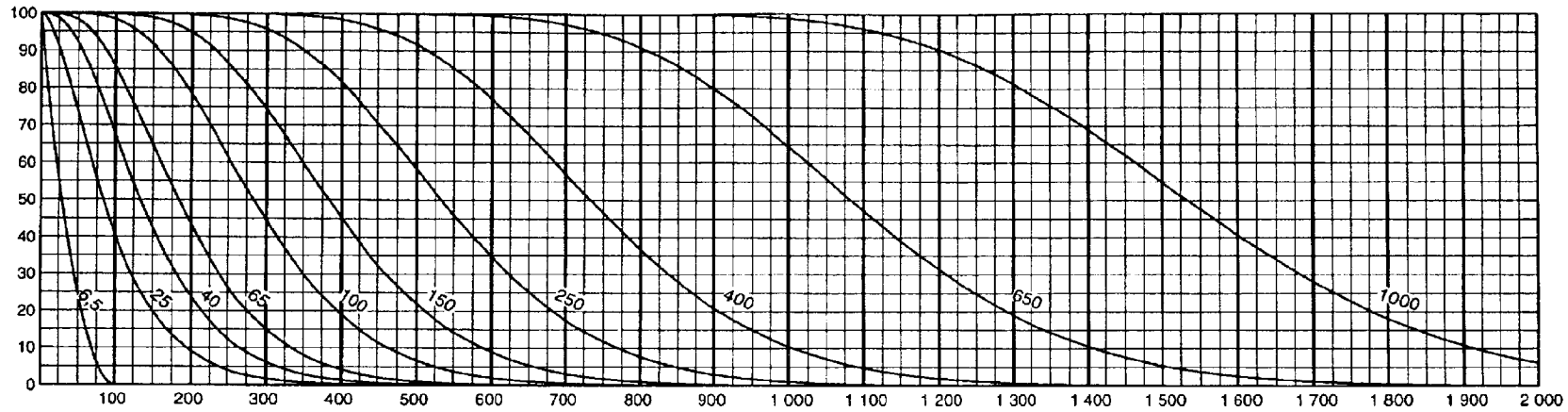
↑ = Reference point showing performance at AQL for normal inspection

A

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)



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

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	6,5	25	40	65	100	150		250		400		650		1 000
	p (in percent nonconforming)	p (in nonconformities per 100 items)													
99,0	0,501	0,503	7,43	21,8	41,2	89,3	145	175	239	305	374	517	629	859	977
95,0	2,53	2,56	17,8	40,9	68,3	131	199	235	308	384	462	622	745	995	1 122
90,0	5,13	5,27	26,6	55,1	87,2	158	233	272	351	432	515	684	812	1 073	1 206
75,0	13,4	14,4	48,1	86,4	127	211	298	342	431	521	612	795	934	1 214	1 354
50,0	29,3	34,7	83,9	134	184	284	383	433	533	633	733	933	1 083	1 383	1 533
25,0	50,0	69,3	135	196	255	371	484	540	651	761	870	1 087	1 248	1 568	1 728
10,0	68,4	115	194	266	334	464	589	650	770	889	1 006	1 238	1 409	1 748	1 916
5,0	77,6	150	237	315	388	526	657	722	848	972	1 094	1 335	1 512	1 862	2 035
1,0	90,0	230	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	
	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

Type of sampling plan	Cumulative sample size	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)																	
		< 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	Ac Re	Ac Re
Single	2	⇓	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
Double		⇓	*	use code letter	use code letter	use code letter	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
Multiple		⇓	*	D	C	B	*	*	*	*	*	*	*	*	*	*	*	*	*
		< 10		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 D)

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

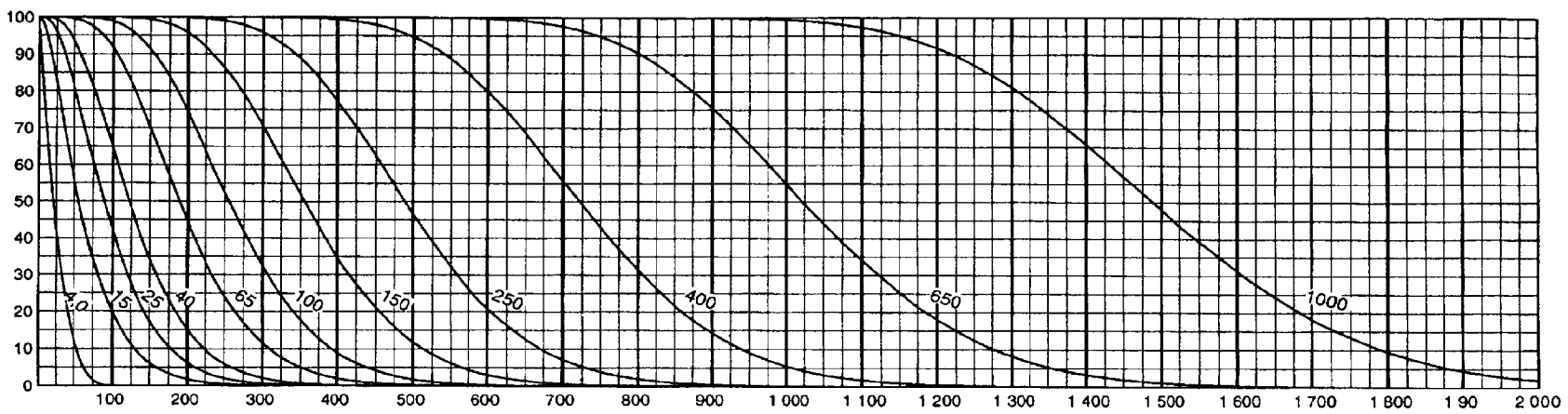
A

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

B

Chart B 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-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	4,0	15	25	40	65	100		150		250		400		650		1 000
	p (in percent nonconforming)	p (in nonconformities per 100 items)															
99,0	0,334	0,335	4,95	14,5	27,4	59,5	96,9	117	159	203	249	345	419	572	651	947	1 029
95,0	1,70	1,71	11,8	27,3	45,5	87,1	133	157	206	256	308	415	496	663	748	1 065	1 152
90,0	3,45	3,51	17,7	36,7	58,2	105	144	181	234	288	343	456	541	716	804	1 131	1 222
75,0	9,14	9,59	32,0	57,6	84,5	141	199	228	287	347	408	530	623	809	903	1 249	1 344
50,0	20,6	23,1	55,9	89,1	122	189	256	289	356	422	489	622	722	922	1 022	1 389	1 489
25,0	37,0	46,2	89,8	131	170	247	323	360	434	507	580	724	832	1 045	1 152	1 539	1 644
10,0	53,6	76,8	130	177	223	309	392	433	514	593	671	825	939	1 165	1 277	1 683	1 793
5,0	63,2	99,9	158	210	258	350	438	481	565	648	730	890	1 008	1 241	1 356	1 773	1 886
1,0	78,5	154	221	280	335	437	533	580	671	761	848	1 019	1 145	1 392	1 513	1 951	2 069
	6,5	6,5	25	40	65	100		150		250		400		650		1 000	
	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					
		Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re
Single	3	⇓		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	2	⇓		*		use		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
	4					code		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		⇓		*		letter		letter	letter	++		++		++		++		++		++		++		++		++		++		++		++		++		++	
		A						D	C																												
		6,5		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 E)

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

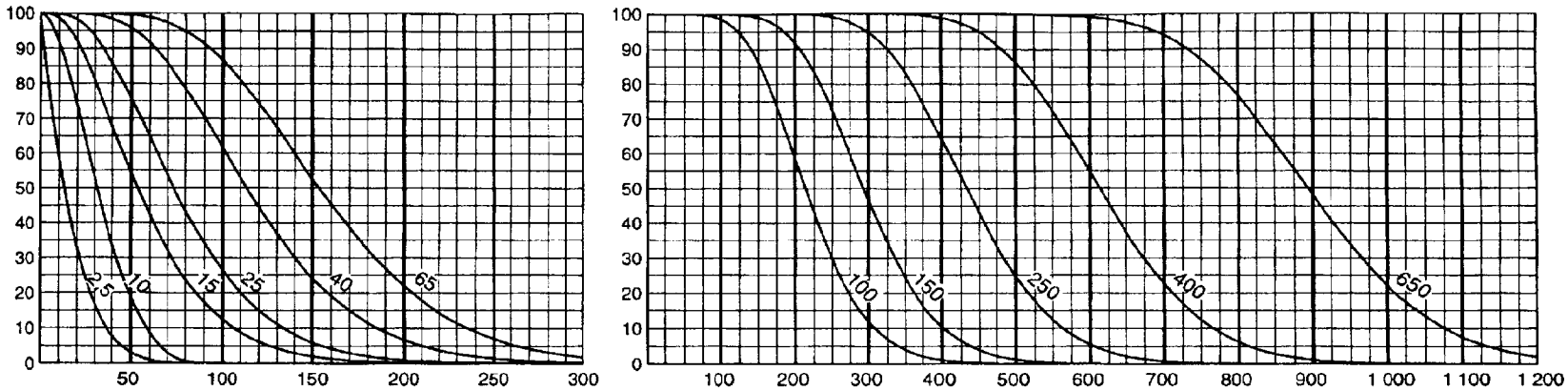
B

C

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)



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-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)																	
	2,5	10	2,5	10	15	25	40	65		100		150		250		400		650
	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	0 806
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	1 010	1 076
5,0	45,1	65,7	59,9	94,9	126	155	210	263	289	339	389	438	534	605	745	814	1 064	1 131
1,0	60,2	77,8	92,1	133	168	201	262	320	348	403	456	509	612	687	835	908	1 171	1 241
	4,0		4,0	15	25	40	65		100		150		250		400		650	
	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-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	
		Ac	Re	Ac	Re	Ac	Re	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	5	⇓		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	3	⇓		*		use		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	use	
	6					code		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	code	
Multiple		⇓		*		letter		letter		letter																																letter	
						B		E		D																																B	
		< 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)

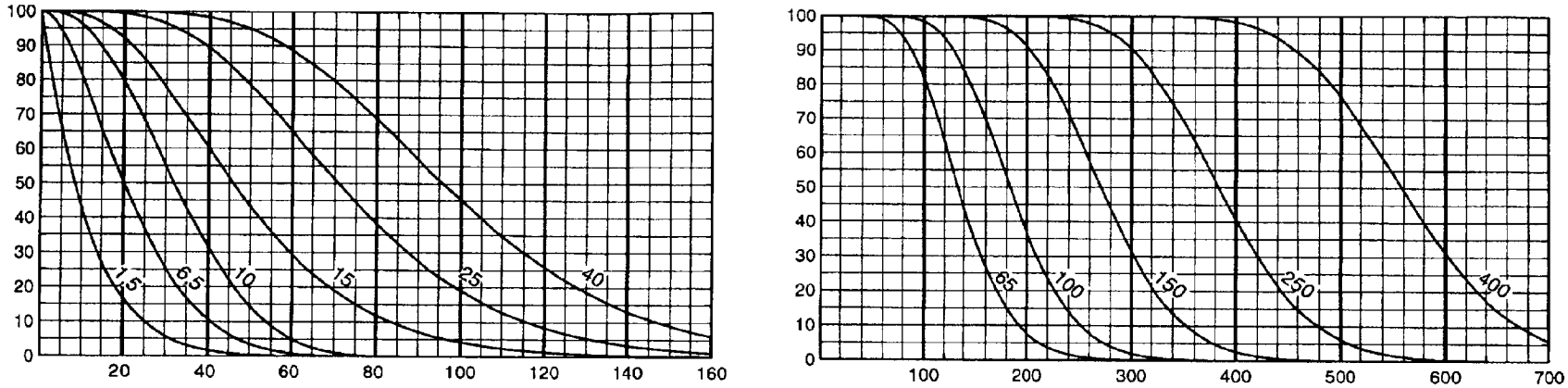
C

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)



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

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	1,5	6,5	10	15	25	40		65		100		150		250		400
	p (in percent nonconforming)			p (in nonconformities per 100 items)															
99,0	0,126	1,97	6,08	0,126	1,86	5,45	10,3	22,3	36,3	43,8	59,6	76,2	93,5	129	157	215	244	355	386
95,0	0,639	4,64	11,1	0,641	4,44	10,2	17,1	32,7	49,8	58,7	77,1	96,1	116	156	186	249	281	399	432
90,0	1,31	6,86	14,7	1,32	6,65	13,8	21,8	39,4	58,2	67,9	87,8	108	129	171	203	268	301	424	458
75,0	3,53	12,1	22,1	3,60	12,0	21,6	31,7	52,7	74,5	85,5	108	130	153	199	234	303	339	468	504
50,0	8,30	20,1	32,1	8,66	21,0	33,4	45,9	70,9	95,9	108	133	158	183	233	271	346	383	521	558
25,0	15,9	30,3	43,3	17,3	33,7	49,0	63,9	92,8	121	135	163	190	217	272	312	392	432	577	617
10,0	25,0	40,6	53,8	28,8	48,6	66,5	83,5	116	147	162	193	222	252	309	352	437	479	631	672
5,0	31,2	47,1	60,0	37,4	59,3	78,7	96,9	131	164	180	212	243	274	334	378	465	509	665	707
1,0	43,8	59,0	70,7	57,6	83,0	105	126	164	200	218	252	285	318	382	429	522	568	732	776
	2,5	10		2,5	10	15	25	40		65		100		150		250		400	
	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-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	X	4,0	6,5	10	15	25	40	X	65	X	100	X	150	X	250	X	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	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re
Single	8	⇓	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	5	⇓	*	use	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	⇑
	10			code	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	
				letter	letter	letter																
Multiple	2	⇓	*	C	F	E	# 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	X	4,0	6,5	10	15	25	40	X	65	X	100	X	150	X	250	X	400	X	> 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)

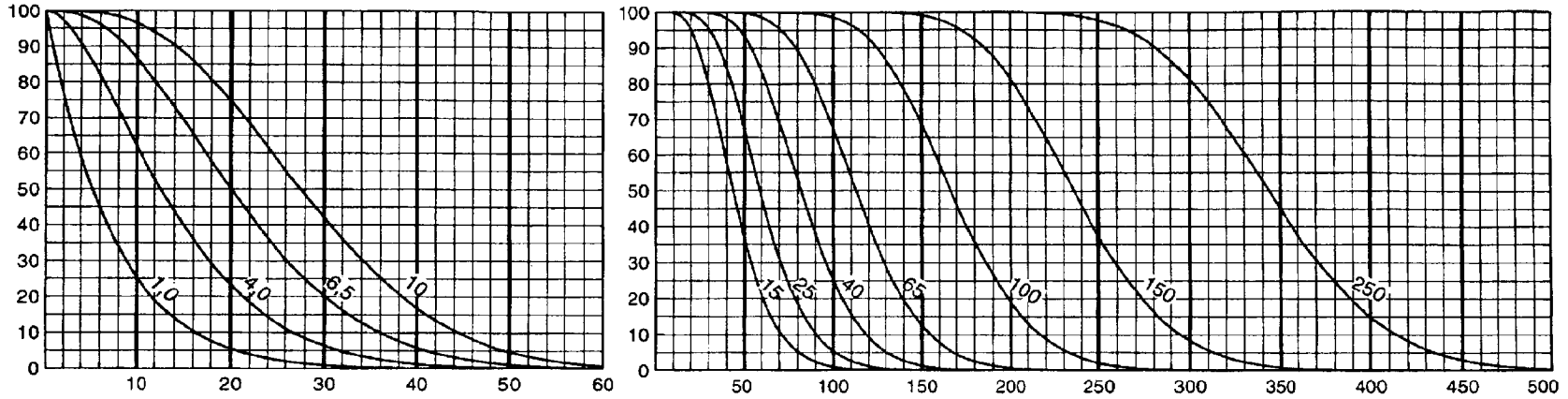
= acceptance not permitted at this sample size

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)



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

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)				p (in 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	96,7	132	150	219	238
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	115	153	173	246	266
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	125	165	185	261	282
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	144	187	208	288	310
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	167	213	236	321	344
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	192	241	266	355	379
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	217	269	295	388	414
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	233	286	313	409	435
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	264	321	349	450	477
	1,5	6,5	10		1,5	6,5	10	15	25		40		65		100		150		250	
	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-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	X	2,5	4,0	6,5	10	15	25	X	40	X	65	X	100	X	150	X	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	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 code letter D	use code letter G	use code letter F	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						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	⇓	*				# 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	⇑
	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	X	2,5	4,0	6,5	10	15	25	X	40	X	65	X	100	X	150	X	250	X	> 250
		Acceptance Quality Limit, tightened inspection (in percent nonconforming and nonconformities per 100 items)																				

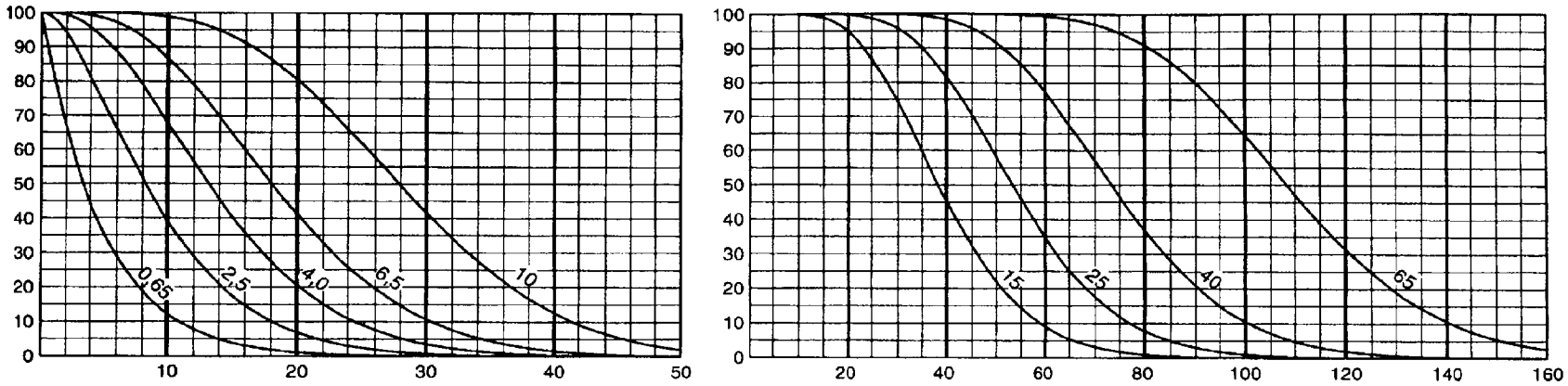
⇑ = use next preceding sample size code letter for which acceptance and rejection numbers are available
⇓ = use next subsequent sample size code letter for which acceptance and rejection numbers are available
Ac = Acceptance number
Re = Rejection number
* = use single sampling plan above (or alternatively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

E

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)



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)															
	0,65	2,5	4,0	6,5	10	0,65	2,5	4,0	6,5	10	15		25		40		65
	p (in percent nonconforming)					p (in nonconformities per 100 items)											
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

Type of sampling plan	Cumulative sample size	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)																
		< 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	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 code letter	use code letter	use code letter	0 2	0 3	1 3	2 5	3 6	4 7	5 9	6 10	7 11	9 14	11 16	⇑
	26						1 2	3 4	4 5	6 7	9 10	10 11	12 13	15 16	18 19	23 24	26 27	
Multiple	5	⇓	*	E	H	G	# 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)

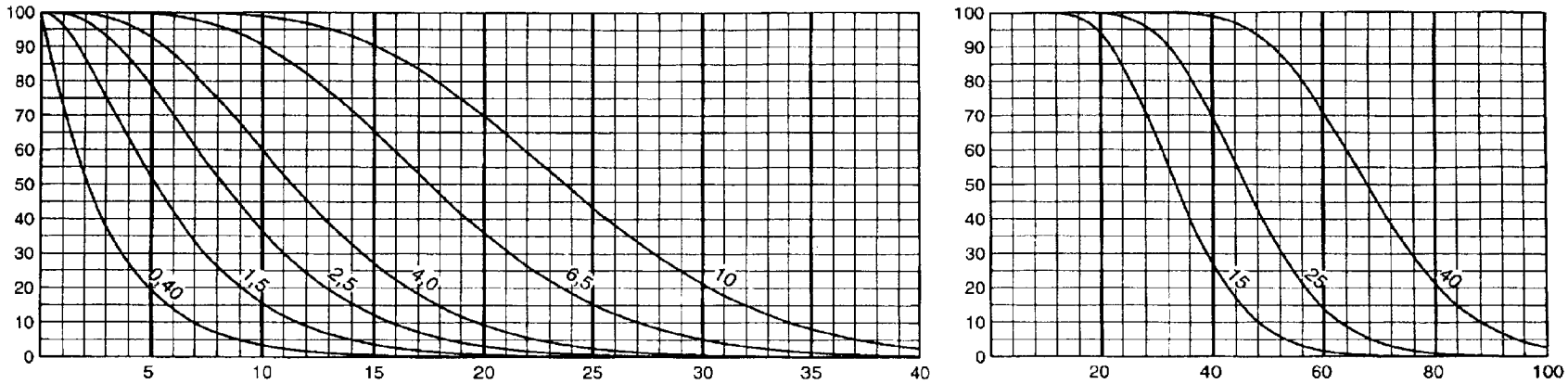
\# = acceptance not permitted at this sample size

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

G

Chart G 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-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)						p (in nonconformities per 100 items)											
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	23,4	32,3	39,3
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	28,9	38,9	46,5
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	32,2	42,7	50,8
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	38,2	49,7	58,4
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	45,8	58,3	67,7
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	54,4	67,9	78,0
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	62,9	77,4	88,1
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	68,4	83,4	94,5
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	79,5	95,6	107
	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	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	8	9	10	11	12	13	14	15	18	19	21	22	⇑
Double	20	⇓		*		use		use	0	2	0	3	1	3	2	5	3	6	4	7	5	9	6	10	7	11	9	14	11	16	⇑
	40					code		code	1	2	3	4	4	5	6	7	9	10	10	11	12	13	15	16	18	19	23	24	26	27	
						letter		letter																							
Multiple	8	⇓		*		F		J	#	2	#	2	#	3	#	4	0	4	0	4	0	5	0	6	1	7	1	8	2	9	⇑
	16								0	2	0	3	0	3	1	5	1	6	2	7	3	8	3	9	4	10	6	12	7	14	
	24								0	2	0	3	1	4	2	6	3	8	4	9	6	10	7	12	8	13	11	17	13	19	
	32								0	2	1	3	2	5	4	7	5	9	6	11	9	12	11	15	12	17	16	22	20	25	
	40								1	2	3	4	4	5	6	7	9	10	10	11	12	13	15	16	18	19	23	24	26	27	
		< 0,65		0,65				1,0	1,5		2,5		4,0		6,5		10		15		25		40		> 40					
		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 K)

\# = acceptance not permitted at this sample size

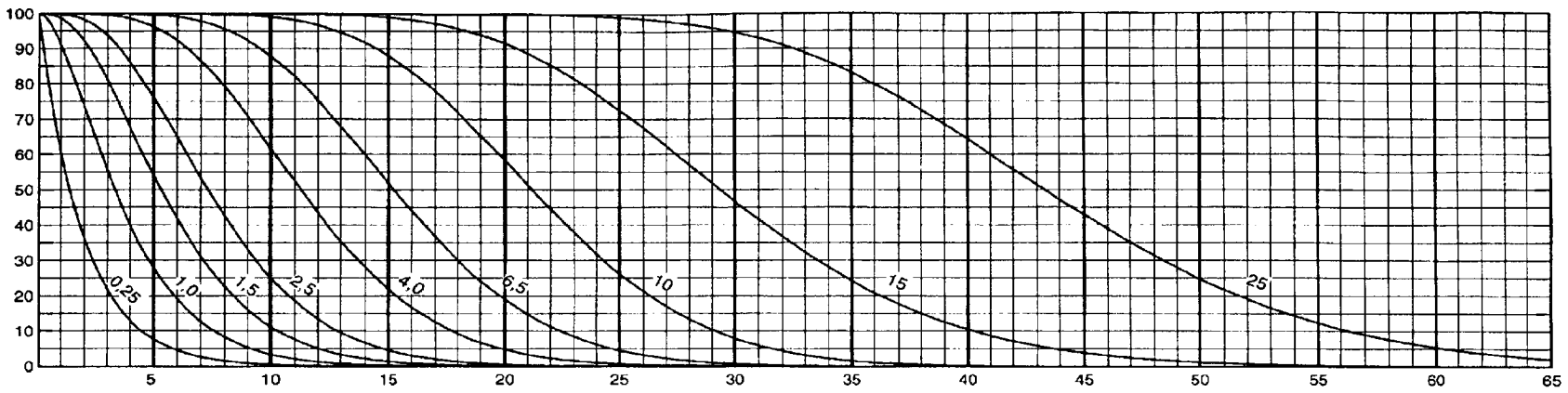
G

H

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

Type of sampling plan	Cumulative sample size	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)																					
		< 0,25		0,25		0,40			0,65	1,0		1,5		2,5		4,0		6,5		10		15		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
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 code letter		use code letter	use code letter	0	2	0	3	1	3	2	5	3	6	4	7	5	9	6	10	7 11	9 14	11 16	⇑
	64									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	J	#	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	1,0	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)

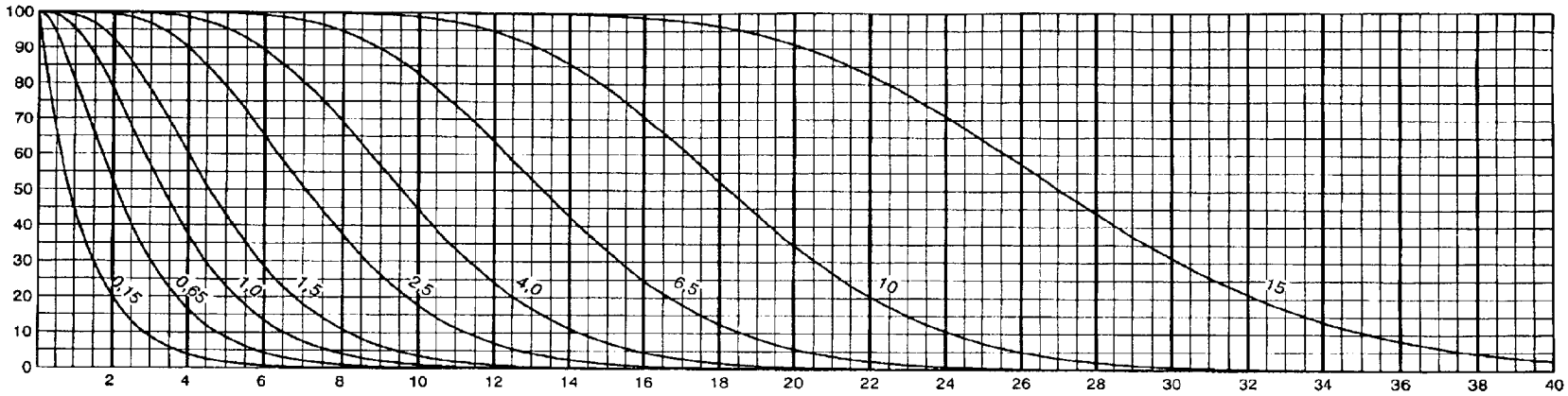
\# = acceptance not permitted at this sample size

H

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)



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-J-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)																					
	0,15	0,65	1,0	1,5	2,5	4,0		6,5		10	0,15	0,65	1,0	1,5	2,5	4,0		6,5		10		15
	p (in percent nonconforming)										p (in nonconformities per 100 items)											
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	9,35	12,9	15,7
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	11,6	15,6	18,6
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	12,9	17,1	20,3
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	15,3	19,9	23,4
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	18,3	23,3	27,1
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	21,7	27,2	31,2
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	25,2	30,9	35,2
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	27,4	33,4	37,8
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	31,8	38,2	42,9
	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		15	
	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-J-2 — Sampling plans for sample size code letter J

Type of sampling plan	Cumulative sample size	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)																					
		< 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	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 code letter		use code letter	use code letter		0	2	0	3	1	3	2	5	3	6	4	7	5	9	6	10	7	11	9	14	11	16	⇑
	100										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	K		#	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)

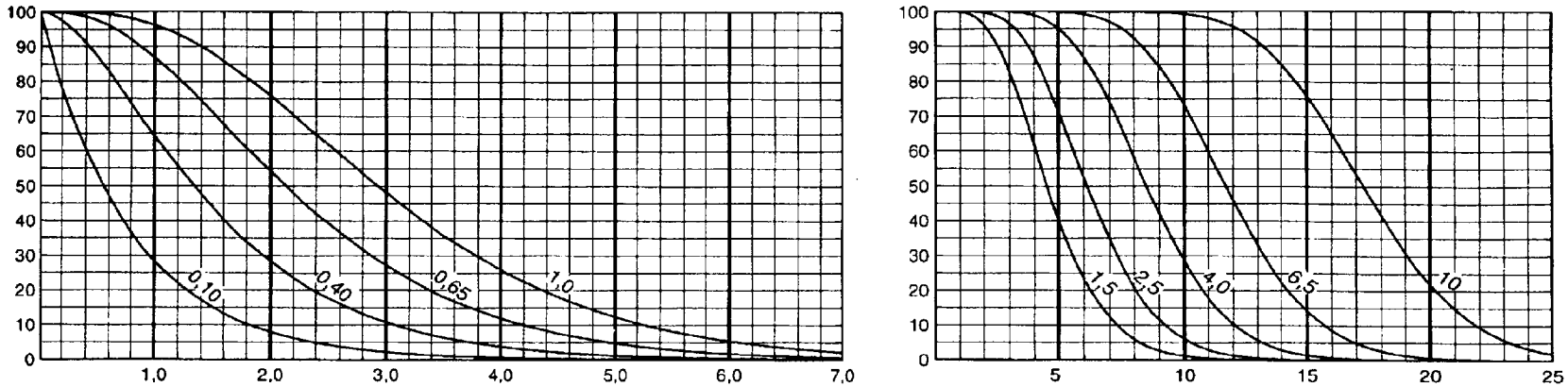
\# = acceptance not permitted at this sample size

K

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

Chart K 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-K-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)																						
	0,10	0,40	0,65	1,0	1,5	2,5		4,0		6,5		10	0,10	0,40	0,65	1,0	1,5	2,5		4,0		6,5		10
	p (in percent nonconforming)												p (in nonconformities per 100 items)										
99,0	0,00804	0,119	0,351	0,664	1,45	2,36	2,86	3,90	5,00	6,15	8,55	10,4	0,00804	0,119	0,349	0,659	1,43	2,32	2,81	3,82	4,88	5,98	8,28	10,1
95,0	0,0410	0,285	0,657	1,10	2,11	3,22	3,81	5,01	6,26	7,54	10,2	12,2	0,0410	0,284	0,654	1,09	2,09	3,18	3,76	4,94	6,15	7,40	9,95	11,9
90,0	0,0843	0,426	0,885	1,40	2,54	3,76	4,39	5,69	7,01	8,37	11,1	13,3	0,0843	0,425	0,882	1,40	2,52	3,72	4,35	5,62	6,92	8,24	10,9	13,0
75,0	0,230	0,769	1,38	2,03	3,39	4,79	5,50	6,94	8,39	9,86	12,8	15,1	0,230	0,769	1,38	2,03	3,38	4,76	5,47	6,90	8,34	9,79	12,7	14,9
50,0	0,553	1,34	2,13	2,93	4,52	6,12	6,92	8,51	10,1	11,7	14,9	17,3	0,555	1,34	2,14	2,94	4,54	6,14	6,94	8,53	10,1	11,7	14,9	17,3
25,0	1,10	2,14	3,11	4,05	5,88	7,66	8,54	10,3	12,0	13,7	17,1	19,6	1,11	2,15	3,14	4,09	5,94	7,75	8,64	10,4	12,2	13,9	17,4	20,0
10,0	1,83	3,08	4,20	5,27	7,29	9,24	10,2	12,1	13,9	15,7	19,3	21,9	1,84	3,11	4,26	5,34	7,42	9,42	10,4	12,3	14,2	16,1	19,8	22,5
5,0	2,37	3,74	4,95	6,09	8,23	10,3	11,3	13,2	15,1	17,0	20,6	23,3	2,40	3,80	5,04	6,20	8,41	10,5	11,5	13,6	15,6	17,5	21,4	24,2
1,0	3,62	5,19	6,55	7,81	10,2	12,3	13,4	15,5	17,5	19,4	23,2	26,0	3,68	5,31	6,72	8,04	10,5	12,8	13,9	16,1	18,3	20,4	24,5	27,5
	0,15	0,65	1,0	1,5	2,5		4,0		6,5		10		0,15	0,65	1,0	1,5	2,5		4,0		6,5		10	
	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-K-2 — Sampling plans for sample size code letter K

Type of sampling plan	Cumulative sample size	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)																			
		< 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			
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	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	code	code	1 2	3 4	4 5	6 7	9 10	10 11	12 13	15 16	18 19	23 24	26 27				
				letter	letter	letter															
Multiple	32	⇓	*	J	M	L	# 2	# 2	# 3	# 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

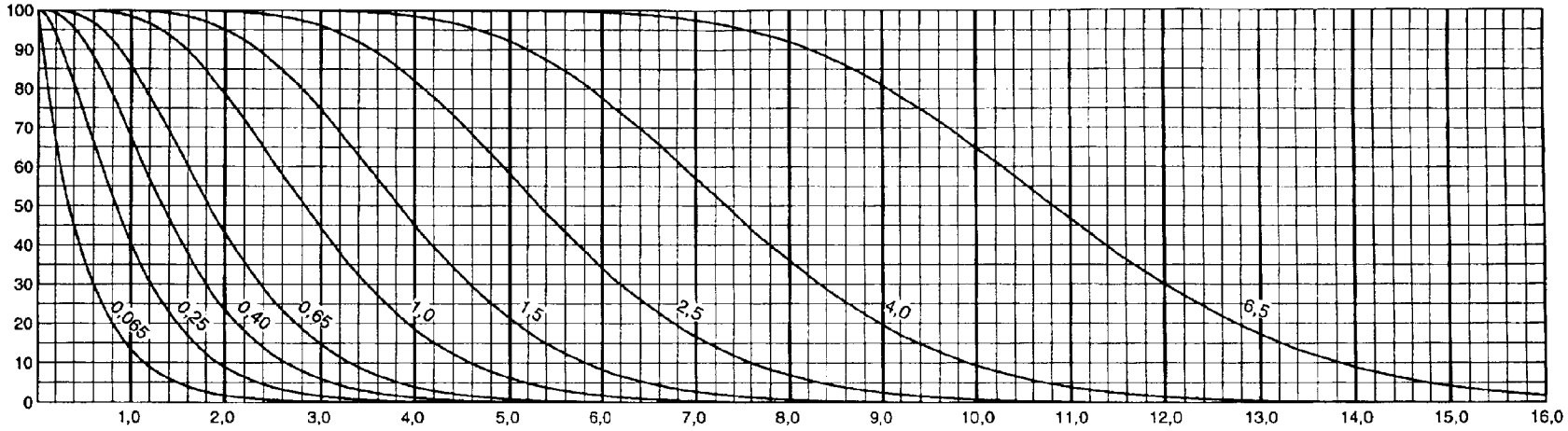
* = use single sampling plan above (or alternatively use code letter N)

\# = acceptance not permitted at this sample size

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

Chart L Operating characteristic curves for single sampling plans

(Curves for double and multiple sampling are matched as closely as practicable)



Quality of submitted product in percent nonconforming or in nonconformities per 100 items

NOTE 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)																							
	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
	p (in percent nonconforming)												p (in nonconformities per 100 items)											
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	
	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-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	0,065	0,10		0,15	0,25	0,40	0,65	1,0	1,5		2,5		4,0		6,5	> 6,5	
		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	Ac Re	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	⇑	
Double	125	⇓	*	use code letter	use code letter	use code letter	0 2	0 3	1 3	2 5	3 6	4 7	5 9	6 10	7 11	9 14	11 16	⇑	
	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	M	# 2	# 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)

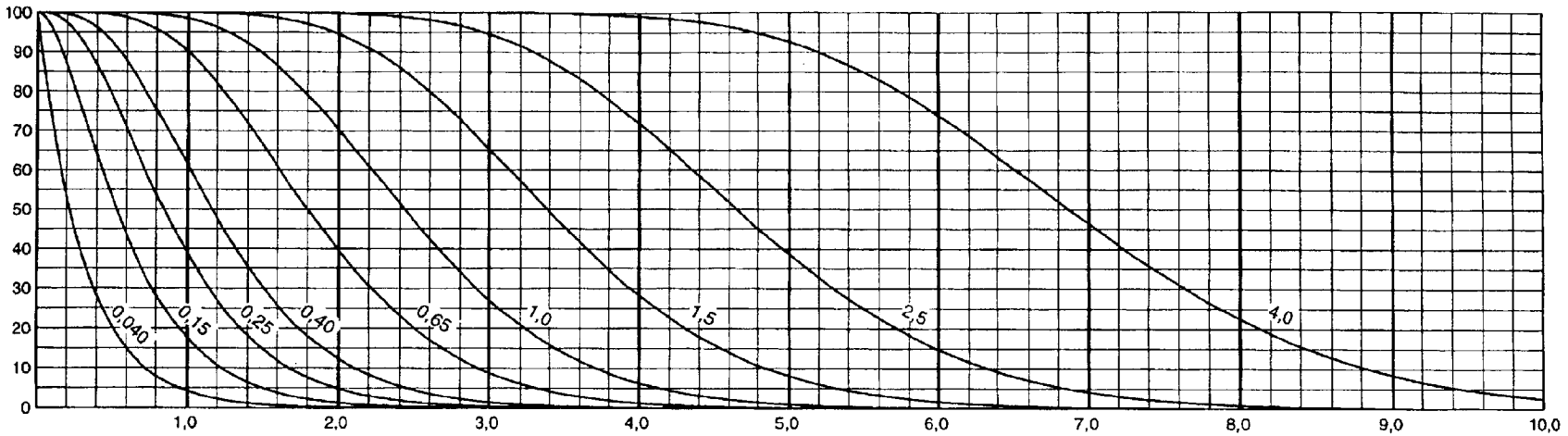
\# = acceptance not permitted at this sample size

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

M

Chart M 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-M-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)																						
	0,040	0,15	0,25	0,40	0,65	1,0		1,5		2,5		4,0	0,040	0,15	0,25	0,40	0,65	1,0		1,5		2,5		4,0
	p (in percent nonconforming)												p (in nonconformities per 100 items)										
99,0	0,00319	0,047	0,139	0,262	0,570	0,929	1,12	1,53	1,95	2,40	3,33	4,05	0,00319	0,047	0,138	0,261	0,567	0,923	1,11	1,51	1,94	2,37	3,28	3,99
95,0	0,0163	0,113	0,260	0,435	0,833	1,27	1,50	1,97	2,46	2,96	3,99	4,78	0,0163	0,113	0,260	0,434	0,830	1,26	1,49	1,96	2,44	2,94	3,95	4,73
90,0	0,0334	0,169	0,350	0,555	1,00	1,48	1,73	2,24	2,76	3,29	4,37	5,20	0,0334	0,169	0,350	0,554	1,00	1,48	1,72	2,23	2,74	3,27	4,34	5,16
75,0	0,0913	0,305	0,549	0,805	1,34	1,89	2,17	2,74	3,32	3,90	5,07	5,95	0,0913	0,305	0,548	0,805	1,34	1,89	2,17	2,74	3,31	3,89	5,05	5,93
50,0	0,220	0,532	0,848	1,16	1,80	2,43	2,75	3,38	4,02	4,65	5,92	6,87	0,220	0,533	0,849	1,17	1,80	2,43	2,75	3,39	4,02	4,66	5,93	6,88
25,0	0,439	0,853	1,24	1,62	2,35	3,06	3,41	4,11	4,81	5,49	6,86	7,87	0,440	0,855	1,24	1,62	2,36	3,07	3,43	4,13	4,83	5,52	6,90	7,92
10,0	0,728	1,23	1,68	2,11	2,92	3,71	4,09	4,85	5,59	6,33	7,77	8,84	0,731	1,23	1,69	2,12	2,94	3,74	4,13	4,89	5,64	6,39	7,86	8,95
5,0	0,947	1,50	1,99	2,44	3,31	4,13	4,54	5,33	6,10	6,86	8,36	9,46	0,951	1,51	2,00	2,46	3,34	4,17	4,58	5,38	6,17	6,95	8,47	9,60
1,0	1,45	2,09	2,64	3,15	4,11	5,01	5,44	6,29	7,12	7,93	9,51	10,7	1,46	2,11	2,67	3,19	4,16	5,08	5,52	6,40	7,24	8,08	9,71	10,9
	0,065	0,25	0,40	0,65	1,0		1,5		2,5		4,0		0,065	0,25	0,40	0,65	1,0		1,5		2,5		4,0	
	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-M-2 — Sampling plans for sample size code letter M

Type of sampling plan	Cumulative sample size	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)																	
		< 0,040	0,040	0,065		0,10	0,15	0,25	0,40	0,65	1,0		1,5		2,5		4,0	< 4,0
		Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	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	315	⇓	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	200	⇓	*	use	use	use	0 2	0 3	1 3	2 5	3 6	4 7	5 9	6 10	7 11	9 14	11 16	⇑
	400			code	code	code	1 2	3 4	4 5	6 7	9 10	10 11	12 13	15 16	18 19	23 24	26 27	
				letter	letter	letter												
Multiple	80	⇓	*	L	P	N	# 2	# 2	# 3	# 4	0 4	0 4	0 5	0 6	1 7	1 8	2 9	⇑
	160						0 2	0 3	0 3	1 5	1 6	2 7	3 8	3 9	4 10	6 12	7 14	
	240						0 2	0 3	1 4	2 6	3 8	4 9	6 10	7 12	8 13	11 17	13 19	
	320						0 2	1 3	2 5	4 7	5 9	6 11	9 12	11 15	12 17	16 22	20 25	
	400						1 2	3 4	4 5	6 7	9 10	10 11	12 13	15 16	18 19	23 24	26 27	
		< 0,065	0,065		0,10	0,15	0,25	0,40	0,65	1,0		1,5		2,5		4,0		> 4,0
		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 Q)

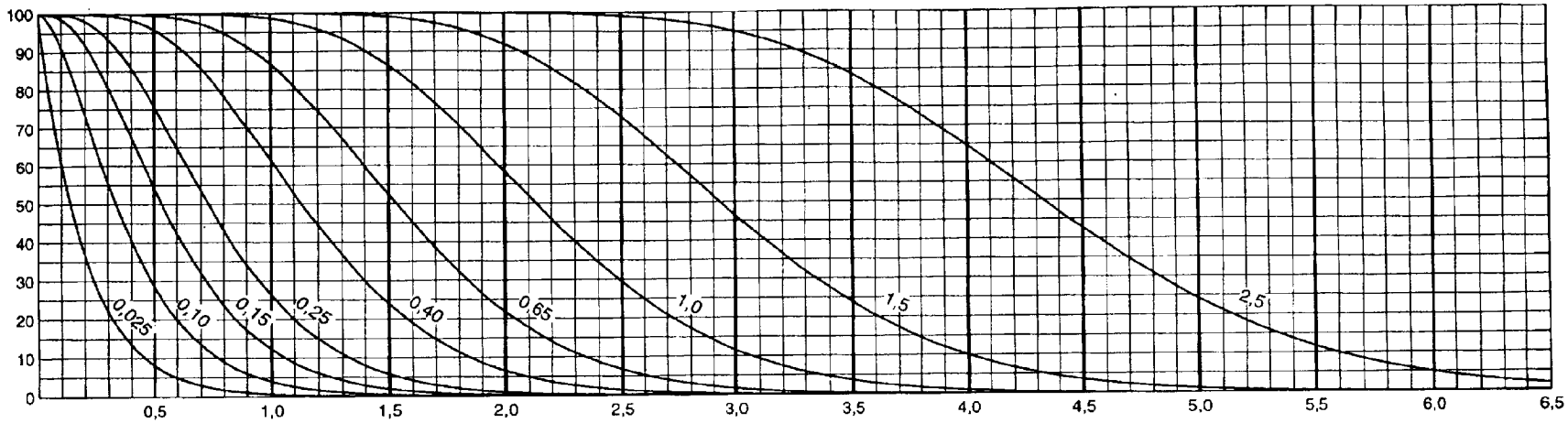
\# = acceptance not permitted at this sample size

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

N

Chart N Operating characteristic curves for single sampling plans

(Curves for double and multiple sampling are matched as closely as practicable)



Quality of submitted product in percent nonconforming or in nonconformities per 100 items

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

Table 10-N-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)																						
	0,025	0,10	0,15	0,25	0,40	0,65	✕	1,0	✕	1,5	✕	2,5	0,025	0,10	0,15	0,25	0,40	0,65	✕	1,0	✕	1,5	✕	2,5
	p (in percent nonconforming)												p (in nonconformities per 100 items)										
99,0	0,00201	0,03	0,087	0,165	0,358	0,584	0,705	0,959	1,23	1,51	2,09	2,54	0,00201	0,03	0,087	0,165	0,357	0,581	0,701	0,954	1,22	1,50	2,07	2,51
95,0	0,0103	0,071	0,164	0,274	0,524	0,799	0,942	1,24	1,54	1,86	2,50	3,00	0,0103	0,071	0,164	0,273	0,523	0,796	0,939	1,23	1,54	1,85	2,49	2,98
90,0	0,0211	0,106	0,221	0,349	0,632	0,933	1,09	1,41	1,74	2,07	2,75	3,26	0,0211	0,106	0,220	0,349	0,630	0,931	1,09	1,40	1,73	2,06	2,73	3,25
75,0	0,0575	0,192	0,346	0,507	0,845	1,19	1,37	1,73	2,09	2,45	3,19	3,75	0,0575	0,192	0,345	0,507	0,844	1,19	1,37	1,72	2,08	2,45	3,18	3,74
50,0	0,139	0,335	0,534	0,734	1,13	1,53	1,73	2,13	2,53	2,93	3,73	4,33	0,139	0,336	0,535	0,734	1,13	1,53	1,73	2,13	2,53	2,93	3,73	4,33
25,0	0,277	0,538	0,783	1,02	1,48	1,93	2,15	2,60	3,03	3,47	4,33	4,97	0,277	0,539	0,784	1,02	1,48	1,94	2,16	2,60	3,04	3,48	4,35	4,99
10,0	0,459	0,776	1,06	1,33	1,85	2,34	2,59	3,06	3,54	4,00	4,92	5,60	0,461	0,778	1,06	1,34	1,85	2,35	2,60	3,08	3,56	4,03	4,95	5,64
5,0	0,597	0,945	1,25	1,54	2,09	2,61	2,87	3,37	3,86	4,34	5,29	5,99	0,599	0,949	1,26	1,55	2,10	2,63	2,89	3,39	3,89	4,38	5,34	6,05
1,0	0,917	1,32	1,67	1,99	2,60	3,17	3,45	3,99	4,51	5,03	6,04	6,78	0,921	1,33	1,68	2,01	2,62	3,20	3,48	4,03	4,56	5,09	6,12	6,87
	0,040	0,15	0,25	0,40	0,65	✕	1,0	✕	1,5	✕	2,5	✕	0,040	0,15	0,25	0,40	0,65	✕	1,0	✕	1,5	✕	2,5	✕
	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-N-2 — Sampling plans for sample size code letter N

Type of sampling plan	Cumulative sample size	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)																					
		< 0,025	0,025	0,040		0,065	0,10		0,15		0,25		0,40		0,65		1,0		1,5		2,5		> 2,5
		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
Single	500	⇓	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	315	⇓	*	use code letter	use code letter	use code letter	0	2	0	3	1	3	2	5	3	6	4	7	5	9	6	10	7	11	9	14	11	16	⇑
	630						1	2	3	4	4	5	6	7	9	10	10	11	12	13	15	16	18	19	23	24	26	27	
Multiple	125	⇓	*	M	Q	P	#	2	#	2	#	3	#	4	0	4	0	4	0	5	0	6	1	7	1	8	2	9	⇑
	250						0	2	0	3	0	3	1	5	1	6	2	7	3	8	3	9	4	10	6	12	7	14	
	375						0	2	0	3	1	4	2	6	3	8	4	9	6	10	7	12	8	13	11	17	13	19	
	500						0	2	1	3	2	5	4	7	5	9	6	11	9	12	11	15	12	17	16	22	20	25	
	625						1	2	3	4	4	5	6	7	9	10	10	11	12	13	15	16	18	19	23	24	26	27	
		< 0,040	0,040		0,065	0,10	0,15		0,25		0,40		0,65				1,0				1,5				2,5			> 2,5
		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 R)

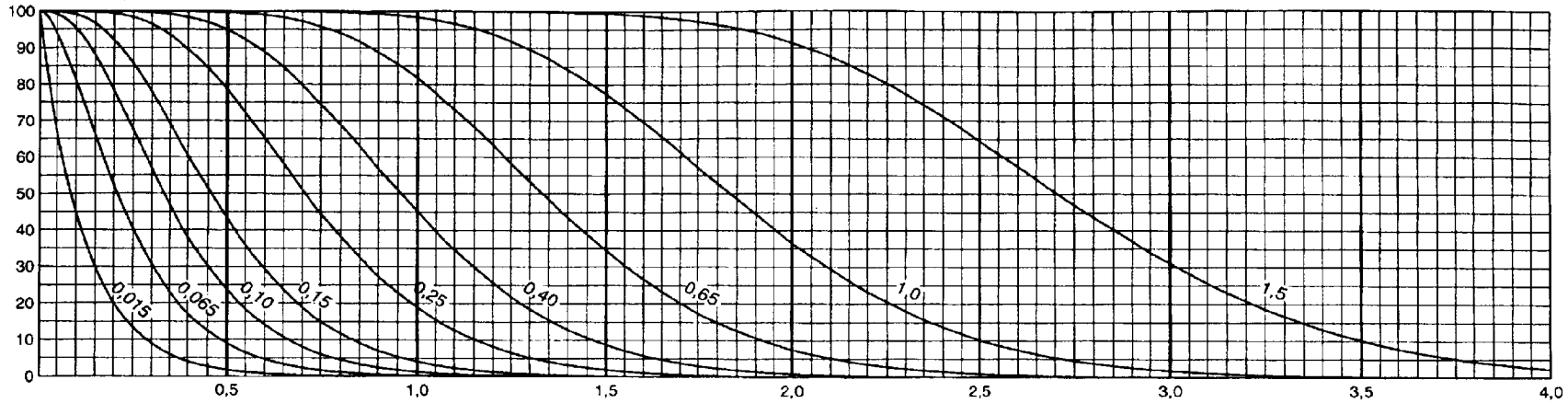
\# = acceptance not permitted at this sample size

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

P

Chart P 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-P-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)																							
	0,015	0,065	0,10	0,15	0,25	0,40		0,65		1,0		1,5	0,015	0,065	0,10	0,15	0,25	0,40		0,65		1,0		1,5
	p (in percent nonconforming)												p (in nonconformities per 100 items)											
99,0	0,00126	0,0186	0,0546	0,103	0,224	0,364	0,440	0,598	0,765	0,938	1,30	1,58	0,00126	0,0186	0,0545	0,103	0,223	0,363	0,438	0,596	0,762	0,935	1,29	1,57
95,0	0,00641	0,0444	0,102	0,171	0,327	0,499	0,588	0,773	0,964	1,16	1,56	1,87	0,00641	0,0444	0,102	0,171	0,327	0,498	0,587	0,771	0,961	1,16	1,56	1,86
90,0	0,0132	0,0665	0,138	0,218	0,394	0,583	0,680	0,879	1,08	1,29	1,71	2,04	0,0132	0,0665	0,138	0,218	0,394	0,582	0,679	0,878	1,08	1,29	1,71	2,03
75,0	0,0360	0,120	0,216	0,317	0,528	0,745	0,855	1,08	1,30	1,53	1,99	2,34	0,0360	0,120	0,216	0,317	0,527	0,745	0,855	1,08	1,30	1,53	1,99	2,34
50,0	0,0866	0,210	0,334	0,459	0,708	0,958	1,08	1,33	1,58	1,83	2,33	2,71	0,0866	0,210	0,334	0,459	0,709	0,959	1,08	1,33	1,58	1,83	2,33	2,71
25,0	0,173	0,336	0,489	0,638	0,926	1,21	1,35	1,62	1,90	2,17	2,71	3,11	0,173	0,337	0,490	0,639	0,928	1,21	1,35	1,63	1,90	2,17	2,72	3,12
10,0	0,287	0,485	0,664	0,833	1,16	1,47	1,62	1,92	2,21	2,51	3,08	3,51	0,288	0,486	0,665	0,835	1,16	1,47	1,62	1,93	2,22	2,52	3,09	3,52
5,0	0,374	0,592	0,785	0,966	1,31	1,64	1,80	2,11	2,42	2,72	3,32	3,76	0,374	0,593	0,787	0,969	1,31	1,64	1,80	2,12	2,43	2,74	3,34	3,78
1,0	0,574	0,827	1,05	1,25	1,63	1,99	2,16	2,50	2,83	3,16	3,79	4,26	0,576	0,830	1,05	1,26	1,64	2,00	2,18	2,52	2,85	3,18	3,82	4,29
	0,025	0,10	0,15	0,25	0,40		0,65		1,0		1,5		0,025	0,10	0,15	0,25	0,40		0,65		1,0		1,5	
	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-P-2 — Sampling plans for sample size code letter P

Type of sampling plan	Cumulative sample size	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 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		> 1,5
		Ac	Re	Ac	Re	Ac	Re	Ac	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	
Single	800	⇓		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	500	⇓		*		use code letter		use code letter	use code letter		0	2	0	3	1	3	2	5	3	6	4	7	5	9	6	10	7	11	9	14	11	16	⇑
	1 000										1	2	3	4	4	5	6	7	9	10	10	11	12	13	15	16	18	19	23	24	26	27	
Multiple	200	⇓		*		N		R	Q		#	2	#	2	#	3	#	4	0	4	0	4	0	5	0	6	1	7	1	8	2	9	⇑
	400										0	2	0	3	0	3	1	5	1	6	2	7	3	8	3	9	4	10	6	12	7	14	
	600										0	2	0	3	1	4	2	6	3	8	4	9	6	10	7	12	8	13	11	17	13	19	
	800										0	2	1	3	2	5	4	7	5	9	6	11	9	12	11	15	12	17	16	22	20	25	
	1 000										1	2	3	4	4	5	6	7	9	10	10	11	12	13	15	16	18	19	23	24	26	27	
		< 0,025		0,025				0,040	0,065		0,10		0,15		0,25		0,40		0,65		1,0		1,5		> 1,5						
		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

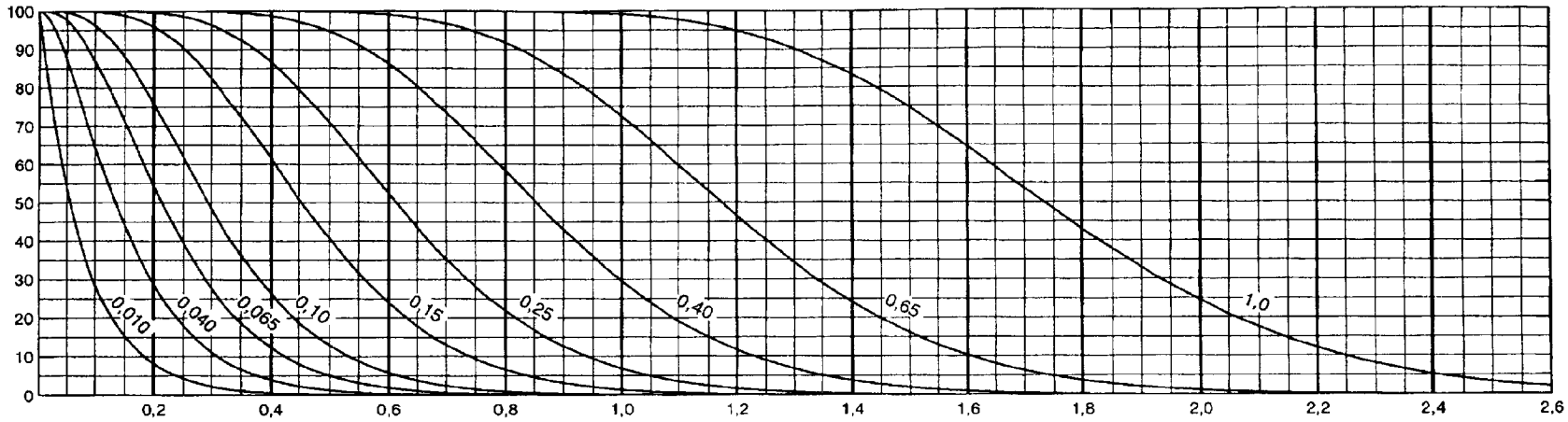
* = use single sampling plan above

\# = acceptance not permitted at this sample size

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

Chart Q 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-Q-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)																							
	0,010	0,040	0,065	0,10	0,15	0,25	X	0,40	X	0,65	X	1,0	0,010	0,040	0,065	0,10	0,15	0,25	X	0,40	X	0,65	X	1,0
	p (in percent nonconforming)												p (in nonconformities per 100 items)											
99,0	0,0008	0,0119	0,0349	0,0659	0,143	0,233	0,281	0,383	0,489	0,600	0,830	1,01	0,0008	0,0119	0,0349	0,0659	0,143	0,232	0,281	0,382	0,488	0,598	0,828	1,01
95,0	0,0041	0,0284	0,0654	0,109	0,209	0,319	0,376	0,494	0,616	0,741	0,998	1,19	0,00410	0,0284	0,0654	0,109	0,209	0,318	0,376	0,494	0,615	0,740	0,995	1,19
90,0	0,00843	0,0426	0,0882	0,140	0,252	0,373	0,435	0,562	0,693	0,825	1,10	1,30	0,00843	0,0425	0,0882	0,140	0,252	0,372	0,435	0,562	0,692	0,824	1,09	1,30
75,0	0,0230	0,0769	0,138	0,203	0,338	0,477	0,547	0,690	0,834	0,980	1,27	1,50	0,0230	0,0769	0,138	0,203	0,338	0,476	0,547	0,690	0,834	0,979	1,27	1,49
50,0	0,0554	0,134	0,214	0,294	0,453	0,613	0,693	0,853	1,01	1,17	1,49	1,73	0,0555	0,134	0,214	0,294	0,454	0,614	0,694	0,853	1,01	1,17	1,49	1,73
25,0	0,111	0,215	0,313	0,408	0,593	0,774	0,863	1,04	1,22	1,39	1,74	1,99	0,111	0,215	0,314	0,409	0,594	0,775	0,864	1,04	1,22	1,39	1,74	2,00
10,0	0,184	0,311	0,425	0,534	0,741	0,940	1,04	1,23	1,42	1,61	1,98	2,25	0,184	0,311	0,426	0,534	0,742	0,942	1,04	1,23	1,42	1,61	1,98	2,25
5,0	0,239	0,379	0,503	0,619	0,839	1,05	1,15	1,35	1,55	1,75	2,13	2,41	0,240	0,380	0,504	0,620	0,841	1,05	1,15	1,36	1,56	1,75	2,14	2,42
1,0	0,368	0,530	0,671	0,801	1,05	1,28	1,39	1,61	1,82	2,03	2,43	2,73	0,368	0,531	0,672	0,804	1,05	1,28	1,39	1,61	1,83	2,04	2,45	2,75
	0,015	0,065	0,10	0,15	0,25	X	0,40	X	0,65	X	1,0	X	0,015	0,065	0,10	0,15	0,25	X	0,40	X	0,65	X	1,0	X
	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-Q-2 — Sampling plans for sample size code letter Q

Type of sampling plan	Cumulative sample size	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)																			
		⇑	0,010	0,015	⇑	0,025	0,040	0,065	0,10	0,15	0,25	⇑	0,40	⇑	0,65	⇑	1,0	⇑	> 1,0
		Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	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	1250		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	800	use code letter	*	use code letter	use code letter	use code letter	0 2	0 3	1 3	2 5	3 6	4 7	5 9	6 10	7 11	9 14	11 16	⇑	
	1 600						1 2	3 4	4 5	6 7	9 10	10 11	12 13	15 16	18 19	23 24	26 27		
Multiple	315	R	*	P	S	R	# 2	# 2	# 3	# 4	0 4	0 4	0 5	0 6	1 7	1 8	2 9	⇑	
	630						0 2	0 3	0 3	1 5	1 6	2 7	3 8	3 9	4 10	6 12	7 14		
	945						0 2	0 3	1 4	2 6	3 8	4 9	6 10	7 12	8 13	11 17	13 19		
	1 260						0 2	1 3	2 5	4 7	5 9	6 11	9 12	11 15	12 17	16 22	20 25		
	1 575						1 2	3 4	4 5	6 7	9 10	10 11	12 13	15 16	18 19	23 24	26 27		
		0,010	0,015	⇑	0,025	0,040	0,065	0,10	0,15	0,25	⇑	0,40	⇑	0,65	⇑	1,0	⇑	> 1,0	
		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

Ac = Acceptance number

Re = Rejection number

* = use single sampling plan above

\# = acceptance not permitted at this sample size

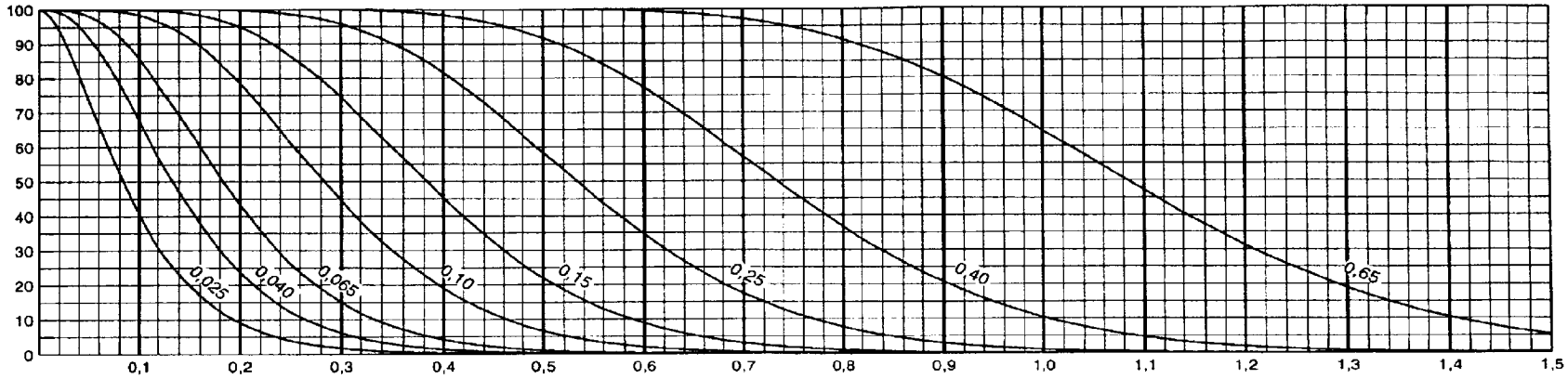
Q

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

R

Chart R 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-R-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)																				
	0,025	0,040	0,065	0,10	0,15	✕	0,25	✕	0,40	✕	0,65	0,025	0,040	0,065	0,10	0,15	✕	0,25	✕	0,40	✕	0,65
	p (in percent nonconforming)											p (in nonconformities per 100 items)										
99,0	0,00743	0,0218	0,0412	0,0893	0,145	0,176	0,239	0,305	0,374	0,518	0,630	0,00743	0,0218	0,0412	0,0893	0,145	0,175	0,239	0,305	0,374	0,517	0,629
95,0	0,0178	0,0409	0,0683	0,131	0,199	0,235	0,309	0,385	0,463	0,623	0,746	0,0178	0,0409	0,0683	0,131	0,199	0,235	0,308	0,384	0,462	0,622	0,745
90,0	0,0266	0,0551	0,0873	0,158	0,233	0,272	0,351	0,433	0,515	0,684	0,813	0,0266	0,0551	0,0872	0,158	0,233	0,272	0,351	0,432	0,515	0,684	0,812
75,0	0,0481	0,0864	0,127	0,211	0,298	0,342	0,431	0,521	0,612	0,796	0,935	0,0481	0,0864	0,127	0,211	0,298	0,342	0,431	0,521	0,612	0,795	0,934
50,0	0,0839	0,134	0,184	0,283	0,383	0,433	0,533	0,633	0,733	0,933	1,08	0,0839	0,134	0,184	0,284	0,383	0,433	0,533	0,633	0,733	0,933	1,08
25,0	0,135	0,196	0,255	0,371	0,484	0,540	0,650	0,760	0,869	1,09	1,25	0,135	0,196	0,255	0,371	0,484	0,540	0,651	0,761	0,870	1,09	1,25
10,0	0,194	0,266	0,334	0,463	0,588	0,649	0,769	0,888	1,00	1,24	1,41	0,194	0,266	0,334	0,464	0,589	0,650	0,770	0,889	1,01	1,24	1,41
5,0	0,237	0,314	0,387	0,525	0,656	0,721	0,847	0,970	1,09	1,33	1,51	0,237	0,315	0,388	0,526	0,657	0,722	0,848	0,972	1,09	1,33	1,51
1,0	0,331	0,420	0,501	0,654	0,798	0,868	1,00	1,14	1,27	1,52	1,71	0,332	0,420	0,502	0,655	0,800	0,870	1,01	1,14	1,27	1,53	1,72
	0,040	0,065	0,10	0,15	✕	0,25	✕	0,40	✕	0,65	✕	0,040	0,065	0,10	0,15	✕	0,25	✕	0,40	✕	0,65	✕
	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-R-2 — Sampling plans for sample size code letter R

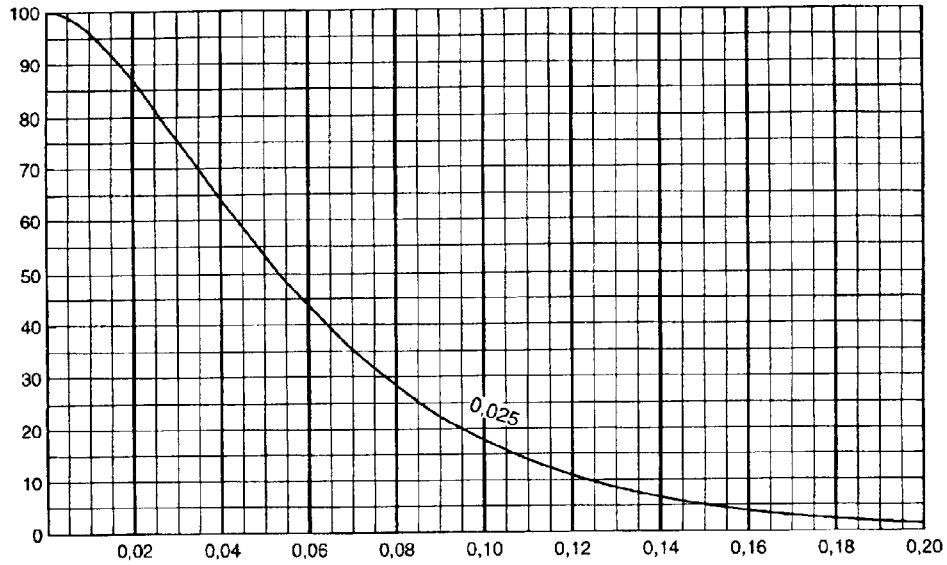
Type of sampling plan	Cumulative sample size	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)																													
				0,010		0,015				0,025		0,040		0,065		0,10		0,15				0,25				0,40				0,65		> 0,65	
		Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re
Single	2 000	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	1 250	*		use code letter Q		use code letter P		use code letter S		0	2	0	3	1	3	2	5	3	6	4	7	5	9	6	10	7	11	9	14	11	16	⇑	
	2 500									1	2	3	4	4	5	6	7	9	10	10	11	12	13	15	16	18	19	23	24	26	27		
Multiple	500	*								#	2	#	2	#	3	#	4	0	4	0	4	0	5	0	6	1	7	1	8	2	9	⇑	
	1 000									0	2	0	3	0	3	1	5	1	6	2	7	3	8	3	9	4	10	6	12	7	14		
	1 500									0	2	0	3	1	4	2	6	3	8	4	9	6	10	7	12	8	13	11	17	13	19		
	2 000									0	2	1	3	2	5	4	7	5	9	6	11	9	12	11	15	12	17	16	22	20	25		
	2 500									1	2	3	4	4	5	6	7	9	10	10	11	12	13	15	16	18	19	23	24	26	27		
		0,010		0,015				0,025		0,040		0,065		0,10		0,15				0,25				0,40				0,65		> 0,65	
		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
Ac = Acceptance number
Re = Rejection number
* = use single sampling plan above
\# = acceptance not permitted at this sample size

R

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

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



NOTE Value on curve are Acceptance Quality Limit (AQL) for tightened inspection.

Table 10-S-1 — Tabulated values for operating characteristic curve for single sampling plan

	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)	
P_a	p (in percent nonconforming)	p (in nonconformities per 100 items)
99,0	0,00472	0,00472
95,0	0,0113	0,0113
90,0	0,0169	0,0169
75,0	0,0305	0,0305
50,0	0,0533	0,0533
25,0	0,0855	0,0855
10,0	0,123	0,123
5,0	0,151	0,151
1,0	0,211	0,211
	0,025	0,025
	Acceptance Quality Limit, tightened inspection (in percent nonconforming and nonconformities per 100 items)	

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

Type of sampling plan	Cumulative sample size	Acceptance Quality Limit, normal inspection (in percent nonconforming and nonconformities per 100 items)	
		Ac	Re
Single	3 150	1	2
Double	2 000	0	2
	4 000	1	2
Multiple	800	#	2
	1 600	0	2
	2 400	0	2
	3 200	0	2
	4000	1	2
		0,025	
		Acceptance Quality Limit, tightened inspection (in percent nonconforming and nonconformities per 100 items)	

Ac = Acceptance number
Re = Rejection number
\# = acceptance not permitted at this sample size

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

S

Table 11-A — Single sampling plans for normal inspection (Auxiliary master table)

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	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
A	2	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	30 31
B	3	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	30 31	44 45
C	5	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	30 31	44 45	↑
D	8	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	30 31	44 45	↑	↑
E	13	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	30 31	44 45	↑	↑	↑
F	20	↓	↓	↓	↓	↓	↓	↓	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑
G	32	↓	↓	↓	↓	↓	↓	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑
H	50	↓	↓	↓	↓	↓	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	↑
J	80	↓	↓	↓	↓	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	↑	↑
K	125	↓	↓	↓	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
L	200	↓	↓	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
M	315	↓	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
N	500	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
P	800	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Q	1 250	0 1	1/3	1/2	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
R	2 000	1/3	1/2	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑

↓ = 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 11-B — Single sampling plans for tightened inspection (Auxiliary master table)

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
		Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	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	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	⇩	0 1	1/3	1/2	1 2	2 3	3 4	5 6	8 9	12 13	18 19	27 28	
B	3	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	8 9	12 13	18 19	27 28	41 42	
C	5	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	8 9	12 13	18 19	27 28	41 42		
D	8	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	8 9	12 13	18 19	27 28	41 42			
E	13	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	8 9	12 13	18 19	27 28	41 42				
F	20	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	8 9	12 13	18 19	↑	↑	↑				
G	32	↓	↓	↓	↓	↓	↓	↓	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	8 9	12 13	18 19	↑	↑	↑	↑				
H	50	↓	↓	↓	↓	↓	↓	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	8 9	12 13	18 19	↑	↑	↑	↑	↑				
J	80	↓	↓	↓	↓	↓	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	8 9	12 13	18 19	↑	↑	↑	↑	↑	↑				
K	125	↓	↓	↓	↓	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	8 9	12 13	18 19	↑	↑	↑	↑	↑	↑	↑				
L	200	↓	↓	↓	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	8 9	12 13	18 19	↑	↑	↑	↑	↑	↑	↑	↑				
M	315	↓	↓	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	8 9	12 13	18 19	↑	↑	↑	↑	↑	↑	↑	↑	↑				
N	500	↓	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	8 9	12 13	18 19	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑				
P	800	↓	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	8 9	12 13	18 19	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑				
Q	1 250	↓	0 1	1/3	1/2	1 2	2 3	3 4	5 6	8 9	12 13	18 19	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑				
R	2 000	0 1	1/3	1/2	1 2	2 3	3 4	5 6	8 9	12 13	18 19	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑

⇩ = 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 11-C — Single sampling plans for reduced inspection (Auxiliary master table)

Sample size code letter	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		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
A	2																									⇩		0	1	1/3		1/2		1	2	2	3	3	4	5	6	7	8	10	11	14	15	21	22	30	31
B	2																											0	1	1/5		1/3		1/2		1	2	2	3	3	4	5	6	7	8	10	11	14	15	21	22	30	31
C	2																											0	1	1/5		1/3		1/2		1	2	2	3	3	4	4	5	6	7	8	9	10	11	14	15	21	22		
D	3																							0	1	1/5		1/3		1/2		1	2	2	3	3	4	4	5	6	7	8	9	10	11	14	15	21	22				
E	5																					0	1	1/5		1/3		1/2		1	2	2	3	3	4	4	5	6	7	8	9	10	11	14	15	21	22						
F	8																					0	1	1/5		1/3		1/2		1	2	2	3	3	4	4	5	6	7	8	9	10	11										
G	13																													0	1	1/5		1/3		1/2		1	2	2	3	3	4	4	5	6	7	8	9	10	11				
H	50																															0	1	1/5		1/3		1/2		1	2	2	3	3	4	4	5	6	7	8	9	10	11			
J	32																																	0	1	1/5		1/3		1/2		1	2	2	3	3	4	4	5	6	7	8	9	10	11			
K	50																																			0	1	1/5		1/3		1/2		1	2	2	3	3	4	4	5	6	7	8	9	10	11			
L	80																																					0	1	1/5		1/3		1/2		1	2	2	3	3	4	4	5	6	7	8	9	10	11			
M	125																																							0	1	1/5		1/3		1/2		1	2	2	3	3	4	4	5	6	7	8	9	10	11			
N	200																																																			
P	315																																																			
Q	500																																																		
R	800																																																		

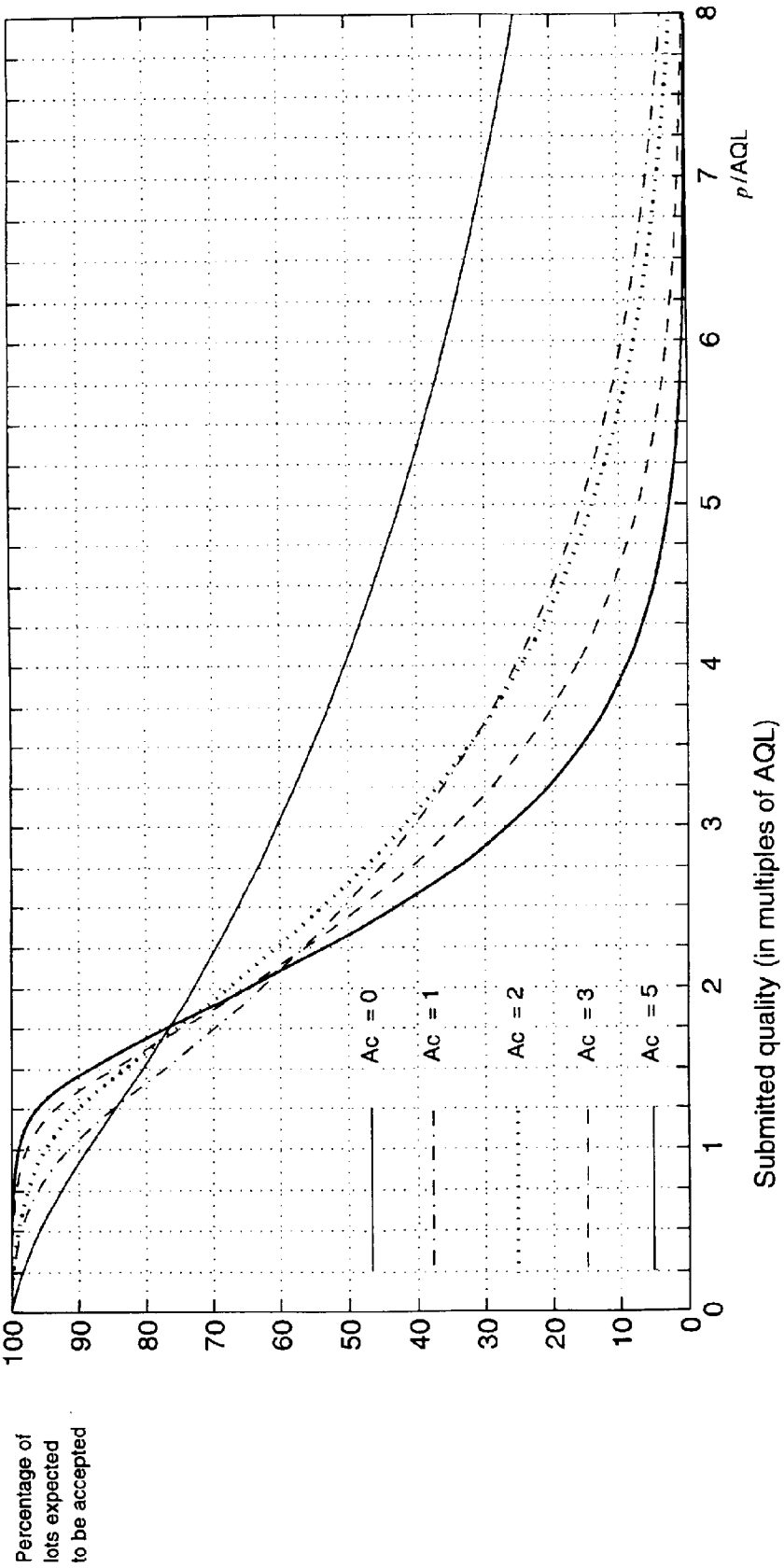
⇩ = Use the first sampling plan below the arrow. If sample size equals, or exceeds, lot size, carry out 100 % inspection.

⇧ = Use the first sampling plan above the arrow.

Ac = Acceptance number

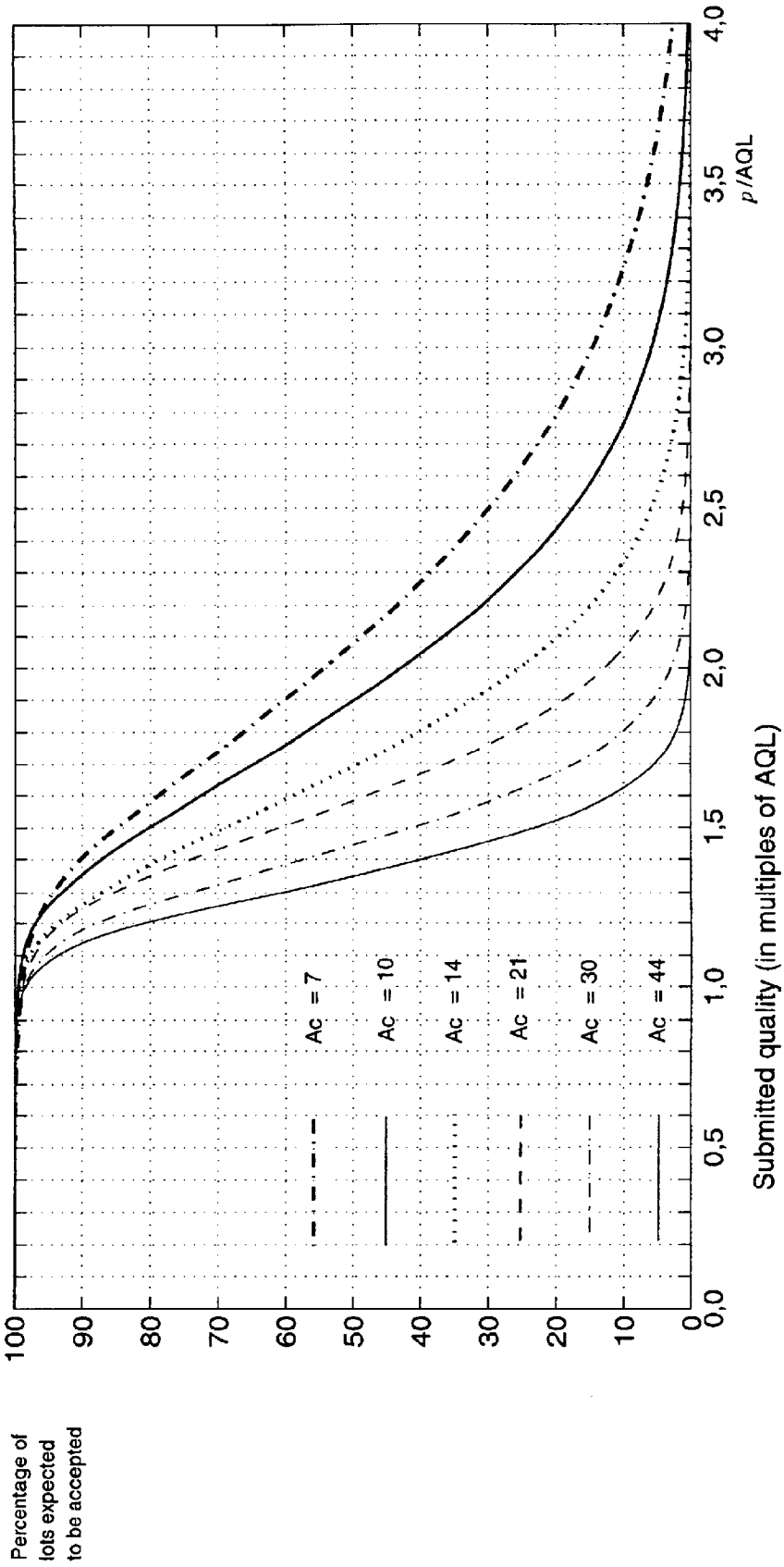
Re = Rejection number

Table 12 — Scheme OC curves (Normalized)



NOTE Ac at each curve denotes the acceptance number for normal inspection.

Table 12 — Scheme OC curves (Normalized) (*concluded*)



NOTE Ac at each curve denotes the acceptance number for normal inspection.

Annex A
(informative)

Example for non-constant sampling plan

Lot number	Lot size N	Sample size code letter	Sample size n	Given Ac	Acceptance score (before inspection)	Applic-able Ac	Noncon-forming items d	Accept-ability	Acceptance score (after inspection)	Switching score	Future action
1	180	G	32	1/2	5	0	0	A	5	2	Continue normal
2	200	G	32	1/2	10	1	1	A	0	4	Continue normal
3	250	G	32	1/2	5	0	1	R	0	0	Continue normal
4	450	H	50	1	7	1	1	A	0	2	Continue normal
5	300	H	50	1	7	1	1	A	0	4	Continue normal
6	80	E	13	0	0	0	1	R	0	0	Switch to tightened
7	800	J	80	1	7	1	1	A	0	—	Continue tightened
8	300	H	50	1/2	5	0	0	A	5	—	Continue tightened
9	100	F	20	0	5	0	0	A	5	—	Continue tightened
10	600	J	80	1	12	1	0	A	12	—	Continue tightened
11	200	G	32	1/3	15	1	1	A	0*	—	Restore normal
12	250	G	32	1/2	5	0	0	A	5	2	Continue normal
13	600	J	80	2	12	2	1	A	0	5	Continue normal
14	80	E	13	0	0	0	0	A	0	7	Continue normal
15	200	G	32	1/2	5	0	0	A	5	9	Continue normal
16	500	H	50	1	12	1	0	A	12	11	Continue normal
17	100	F	20	1/3	15	1	0	A	15	13	Continue normal
18	120	F	20	1/3	18	1	0	A	18	15	Continue normal
19	85	E	13	0	18	0	0	A	18	17	Continue normal
20	300	H	50	1	25	1	1	A	0	19	Continue normal
21	500	H	50	1	7	1	0	A	7	21	Continue normal
22	700	J	80	2	14	2	1	A	0	24	Continue normal
23	600	J	80	2	7	2	0	A	7	27	Continue normal
24	550	J	80	2	14	2	0	A	0*	30	Switch to reduced
25	400	H	20	1/2	5	0	0	A	5	—	Continue reduced

NOTES: A = acceptable R = not acceptable

* denotes the acceptance score after switching

Bibliography

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