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SAMPLING PROCEDURES AND TABLES FOR INSPECTION BY ATTRIBUTES



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SAMPLING PROCEDURES AND TABLES FOR INSPECTION BY ATTRIBUTES

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1. This standard has been approved by the Department of Defense and is mandatory for use by the Departments of the Army, the Navy, the Air Force and the Defense Supply Agency. This revision supersedes MIL-STD-105C, dated 18 July 1961.
2. This publication provides sampling procedures and reference tables for use in planning and conducting inspection by attributes. This publication was developed by a working group representing the military services of Canada, the United Kingdom and the United States of America with the assistance and cooperation of American and European organizations for quality control. The international designation of this document is AXC-STD-105. When revision or cancellation of this standard is proposed, the departmental custodians will inform their respective Departmental Standardization Office so that appropriate action may be taken respecting the international agreement concerned.
3. The U.S. Army Munitions Command is designated as preparing activity for this standard. Recommended corrections, additions, or deletions should be addressed to the Commanding Officer, U. S. Army CRR Engineering Office, Attn: SMUCE-ED-S, Army Chemical Center, Maryland.

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SAMPLING PROCEDURES AND TABLES FOR INSPECTION BY ATTRIBUTES

1. SCOPE

1.1 PURPOSE. This publication establishes sampling plans and procedures for inspection by attributes. When specified by the responsible authority, this publication shall be referenced in the specification, contract, inspection instructions, or other documents and the provisions set forth herein shall govern. The "responsible authority" shall be designated in one of the above documents.

1.2 APPLICATION. Sampling plans designated in this publication are applicable, but not limited, to inspection of the following:

- a. End items.
- b. Components and raw materials.
- c. Operations.
- d. Materials in process.
- e. Supplies in storage.
- f. Maintenance operations.
- g. Data or records.
- h. Administrative procedures.

These plans are intended primarily to be used for a continuing series of lots or batches.

The plans may also be used for the inspection of isolated lots or batches, but, in this latter case, the user is cautioned to consult the operating characteristic curves to find a plan which will yield the desired protection (see 11.6).

1.3 INSPECTION. Inspection is the process of measuring, examining, testing, or otherwise comparing the unit of product (see 1.5) with the requirements.

1.4 INSPECTION BY ATTRIBUTES. Inspection by attributes is inspection whereby either the unit of product is classified simply as defective or nondefective, or the number of defects in the unit of product is counted, with respect to a given requirement or set of requirements.

1.5 UNIT OF PRODUCT. The unit of product is the thing inspected in order to determine its classification as defective or nondefective or to count the number of defects. It may be a single article, a pair, a set, a length, an area, an operation, a volume, a component of an end product, or the end product itself. The unit of product may or may not be the same as the unit of purchase, supply, production, or shipment.

2. CLASSIFICATION OF DEFECTS AND DEFECTIVES

2.1 METHOD OF CLASSIFYING DEFECTS.

A classification of defects is the enumeration of possible defects of the unit of product classified according to their seriousness. A defect is any nonconformance of the unit of product with specified requirements. Defects will normally be grouped into one or more of the following classes; however, defects may be grouped into other classes, or into subclasses within these classes.

2.1.1 CRITICAL DEFECT. A critical defect is a defect that judgment and experience indicate is likely to result in hazardous or unsafe conditions for individuals using, maintaining, or depending upon the product; or a defect that judgment and experience indicate is likely to prevent performance of the tactical function of a major end item such as a ship, aircraft, tank, missile or space vehicle. NOTE: For a special provision relating to critical defects, see 6.3.

2.1.2 MAJOR DEFECT. A major defect is a defect, other than critical, that is likely to result in failure, or to reduce materially the usability of the unit of product for its intended purpose.

2.1.3 MINOR DEFECT. A minor defect is a defect that is not likely to reduce materially the usability of the unit of product for its intended purpose, or is a departure from established standards having little bearing on the effective use or operation of the unit.

2.2 METHOD OF CLASSIFYING DEFECTIVES. A defective is a unit of product which contains one or more defects. Defectives will usually be classified as follows:

2.2.1 CRITICAL DEFECTIVE. A critical defective contains one or more critical defects and may also contain major and or minor defects. NOTE: For a special provision relating to critical defectives, see 6.3.

2.2.2 MAJOR DEFECTIVE. A major defective contains one or more major defects, and may also contain minor defects but contains no critical defect.

2.2.3 MINOR DEFECTIVE. A minor defective contains one or more minor defects but contains no critical or major defect.

3. PERCENT DEFECTIVE AND DEFECTS PER HUNDRED UNITS

3.1 EXPRESSION OF NONCONFORMANCE. The extent of nonconformance of product shall be expressed either in terms of percent defective or in terms of defects per hundred units.

3.2 PERCENT DEFECTIVE. The percent defective of any given quantity of units of product is one hundred times the number of defective units of product contained therein divided by the total number of units of product, i.e.:

$$\text{Percent defective} = \frac{\text{Number of defectives}}{\text{Number of units inspected}} \times 100$$

3.3 DEFECTS PER HUNDRED UNITS. The number of defects per hundred units of any given quantity of units of product is one hundred times the number of defects contained therein (one or more defects being possible in any unit of product) divided by the total number of units of product, i.e.:

$$\text{Defects per hundred units} = \frac{\text{Number of defects}}{\text{Number of units inspected}} \times 100$$

4. ACCEPTABLE QUALITY LEVEL (AQL)

4.1 USE. The AQL, together with the Sample Size Code Letter, is used for indexing the sampling plans provided herein.

4.2 DEFINITION. The AQL is the maximum percent defective (or the maximum number of defects per hundred units) that, for purposes of sampling inspection, can be considered satisfactory as a process average (see 11.2).

4.3 NOTE ON THE MEANING OF AQL. When a consumer designates some specific value of AQL for a certain defect or group of defects, he indicates to the supplier that his (the consumer's) acceptance sampling plan will accept the great majority of the lots or batches that the supplier submits, provided the process average level of percent defective (or defects per hundred units) in these lots or batches be no greater than the designated value of AQL. Thus, the AQL is a designated value of percent defective (or defects per hundred units) that the consumer indicates will be accepted most of the time by the acceptance sampling procedure to be used. The sampling plans provided herein are so arranged that the probability of acceptance at the designated AQL value depends upon the sample size, being generally higher for large samples than for small ones, for a given AQL. The AQL alone does not

describe the protection to the consumer for individual lots or batches but more directly relates to what might be expected from a series of lots or batches, provided the steps indicated in this publication are taken. It is necessary to refer to the operating characteristic curve of the plan, to determine what protection the consumer will have.

4.4 LIMITATION. The designation of an AQL shall not imply that the supplier has the right to supply knowingly any defective unit of product.

4.5 SPECIFYING AQLs. The AQL to be used will be designated in the contract or by the responsible authority. Different AQLs may be designated for groups of defects considered collectively, or for individual defects. An AQL for a group of defects may be designated in addition to AQLs for individual defects, or subgroups, within that group. AQL values of 10.0 or less may be expressed either in percent defective or in defects per hundred units; those over 10.0 shall be expressed in defects per hundred units only.

4.6 PREFERRED AQLs. The values of AQLs given in these tables are known as preferred AQLs. If, for any product, an AQL be designated other than a preferred AQL, these tables are not applicable.

5. SUBMISSION OF PRODUCT

5.1 LOT OR BATCH. The term lot or batch shall mean "inspection lot" or "inspection batch," i.e., a collection of units of product from which a sample is to be drawn and inspected to determine conformance with the acceptability criteria, and may differ from a collection of units designated as a lot or batch

for other purposes (e.g., production, shipment, etc.).

5.2 FORMATION OF LOTS OR BATCHES. The product shall be assembled into identifiable lots, sublots, batches, or in such other manner as may be prescribed (see 5.4). Each lot or batch shall, as far as is practicable,

5. SUBMISSION OF PRODUCT (Continued)

consist of units of product of a single type, grade, class, size, and composition, manufactured under essentially the same conditions, and at essentially the same time.

5.3 LOT OR BATCH SIZE. The lot or batch size is the number of units of product in a lot or batch.

5.4 PRESENTATION OF LOTS OR BATCHES. The formation of the lots or

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

6. ACCEPTANCE AND REJECTION

6.1 ACCEPTABILITY OF LOTS OR BATCHES. Acceptability of a lot or batch will be determined by the use of a sampling plan or plans associated with the designated AQL or AQLs.

6.2 DEFECTIVE UNITS. The right is reserved to reject any unit of product found defective during inspection whether that unit of product forms part of a sample or not, and whether the lot or batch as a whole is accepted or rejected. Rejected units may be repaired or corrected and resubmitted for inspection with the approval of, and in the manner specified by, the responsible authority.

6.3 SPECIAL RESERVATION FOR CRITICAL DEFECTS. The supplier may be required at the discretion of the responsible authority to inspect every unit of the lot or batch for

critical defects. The right is reserved to inspect every unit submitted by the supplier for critical defects, and to reject the lot or batch immediately, when a critical defect is found. The right is reserved also to sample, for critical defects, every lot or batch submitted by the supplier and to reject any lot or batch if a sample drawn therefrom is found to contain one or more critical defects.

6.4 RESUBMITTED LOTS OR BATCHES. Lots or batches found unacceptable shall be resubmitted for reinspection only after all units are re-examined or retested and all defective units are removed or defects corrected. The responsible authority shall determine whether normal or tightened inspection shall be used, and whether reinspection shall include all types or classes of defects or for the particular types or classes of defects which caused initial rejection.

7. DRAWING OF SAMPLES

7.1 SAMPLE. A sample consists of one or more units of product drawn from a lot or batch, the units of the sample being selected at random without regard to their quality. The number of units of product in the sample is the sample size.

7.2 REPRESENTATIVE SAMPLING. When appropriate, the number of units in the sample shall be selected in proportion to the size of sublots or subbatches, or parts of the lot or batch, identified by some rational criterion.

7. DRAWING OF SAMPLES (Continued)

When representative sampling is used, the units from each part of the lot or batch shall be selected at random.

7.3 TIME OF SAMPLING. Samples may be drawn after all the units comprising the lot or batch have been assembled, or sam-

ples may be drawn during assembly of the lot or batch.

7.4 DOUBLE OR MULTIPLE SAMPLING. When double or multiple sampling is to be used, each sample shall be selected over the entire lot or batch.

8. NORMAL, TIGHTENED AND REDUCED INSPECTION

8.1 INITIATION OF INSPECTION. Normal inspection will be used at the start of inspection unless otherwise directed by the responsible authority.

8.2 CONTINUATION OF INSPECTION. Normal, tightened or reduced inspection shall continue unchanged for each class of defects or defectives on successive lots or batches except where the switching procedures given below require change. The switching procedures given below require a change. The switching procedures shall be applied to each class of defects or defectives independently.

8.3 SWITCHING PROCEDURES.

8.3.1 NORMAL TO TIGHTENED. When normal inspection is in effect, tightened inspection shall be instituted when 2 out of 5 consecutive lots or batches have been rejected on original inspection (i.e., ignoring resubmitted lots or batches for this procedure).

8.3.2 TIGHTENED TO NORMAL. When tightened inspection is in effect, normal inspection shall be instituted when 5 consecutive lots or batches have been considered acceptable on original inspection.

8.3.3 NORMAL TO REDUCED. When normal inspection is in effect, reduced inspection shall be instituted providing that all of the following conditions are satisfied:

a. The preceding 10 lots or batches (or more, as indicated by the note to Table VIII) have been on normal inspection and none has been rejected on original inspection; and

b. The total number of defectives (or defects) in the samples from the preceding 10 lots or batches (or such other number as was used for condition "a" above) is equal to or less than the applicable number given in Table VIII. If double or multiple sampling is in use, all samples inspected should be included, not "first" samples only; and

c. Production is at a steady rate; and

d. Reduced inspection is considered desirable by the responsible authority.

8.3.4 REDUCED TO NORMAL. When reduced inspection is in effect, normal inspection shall be instituted if any of the following occur on original inspection:

a. A lot or batch is rejected; or

b. A lot or batch is considered acceptable under the procedures of 10.1.4; or

c. Production becomes irregular or delayed; or

d. Other conditions warrant that normal inspection shall be instituted.

8.4 DISCONTINUATION OF INSPECTION. In the event that 10 consecutive lots or batches remain on tightened inspection (or such other number as may be designated by the responsible authority), inspection under the provisions of this document should be discontinued pending action to improve the quality of submitted material.

9. SAMPLING PLANS

9.1 SAMPLING PLAN. A sampling plan indicates the number of units of product from each lot or batch which are to be inspected (sample size or series of sample sizes) and the criteria for determining the acceptability of the lot or batch (acceptance and rejection numbers).

9.2 INSPECTION LEVEL. The inspection level determines the relationship between the lot or batch size and the sample size. The inspection level to be used for any particular requirement will be prescribed by the responsible authority. Three inspection levels: I, II, and III, are given in Table I for general use. Unless otherwise specified, Inspection Level II will be used. However, Inspection Level I may be specified when less discrimination is needed, or Level III may be specified for greater discrimination. Four additional special levels: S-1, S-2, S-3 and S-4, are given in the same table and may be used where relatively small sample sizes are necessary and large sampling risks can or must be tolerated.

NOTE: In the designation of inspection levels S-1 to S-4, care must be exercised to avoid AQLs inconsistent with these inspection levels.

9.3 CODE LETTERS. Sample sizes are designated by code letters. Table I shall be used to find the applicable code letter for the particular lot or batch size and the prescribed inspection level.

9.4 OBTAINING SAMPLING PLAN. The AQL and the code letter shall be used to ob-

tain the sampling plan from Tables II, III or IV. When no sampling plan is available for a given combination of AQL and code letter, the tables direct the user to a different letter. The sample size to be used is given by the new code letter not by the original letter. If this procedure leads to different sample sizes for different classes of defects, the code letter corresponding to the largest sample size derived may be used for all classes of defects 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.

9.5 TYPES OF SAMPLING PLANS. Three types of sampling plans: Single, Double and Multiple, are given in Tables II, III and IV, respectively. When several types of plans are available for a given AQL and code letter, any one may be used. A decision as to type of plan, either single, double, or multiple, when available for a given AQL and code letter, will usually be based upon the comparison between the administrative difficulty and the average sample sizes of the available plans. The average sample size of multiple plans is less than for double (except in the case corresponding to single acceptance number 1) and both of these are always less than a single sample size. Usually the administrative difficulty for single sampling and the cost per unit of the sample are less than for double or multiple.

10. DETERMINATION OF ACCEPTABILITY

10.1 PERCENT DEFECTIVE INSPECTION.

To determine acceptability of a lot or batch under percent defective inspection, the applicable sampling plan shall be used in accordance with 10.1.1, 10.1.2, 10.1.3, 10.1.4, and 10.1.5.

10.1.1 SINGLE SAMPLING PLAN. The number of sample units inspected shall be equal to the sample size given by the plan. If the number of defectives found in the sample is equal to or less than the acceptance number, the lot or batch shall be considered acceptable. If the number of defectives is equal to or greater than the rejection number, the lot or batch shall be rejected.

10.1.2 DOUBLE SAMPLING PLAN. The number of sample units inspected shall be equal to the first sample size given by the plan. If the number of defectives found in the first sample is equal to or less than the first acceptance number, the lot or batch shall be considered acceptable. If the number of defectives found in the first sample is equal to or greater than the first rejection number, the lot or batch shall be rejected. If the number of defectives 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 defectives found in the first and second samples shall be accumulated. If the cumulative number of defectives is equal to or less than the second acceptance number, the lot or batch shall be considered acceptable. If the cumulative number of defectives is equal to or greater than the second rejection number, the lot or batch shall be rejected.

10.1.3 MULTIPLE SAMPLE PLAN. Under multiple sampling, the procedure shall be similar to that specified in 10.1.2, except that the number of successive samples required to reach a decision may be more than two.

10.1.4 SPECIAL PROCEDURE FOR REDUCED INSPECTION. Under reduced inspection, the sampling procedure may terminate without either acceptance or rejection criteria having been met. In these circumstances, the lot or batch will be considered acceptable, but normal inspection will be reinstated starting with the next lot or batch (see 8.3.4 (b)).

10.2 DEFECTS PER HUNDRED UNITS INSPECTION. To determine the acceptability of a lot or batch under Defects per Hundred Units inspection, the procedure specified for Percent Defective inspection above shall be used, except that the word "defects" shall be substituted for "defectives."

11. SUPPLEMENTARY INFORMATION

11.1 OPERATING CHARACTERISTIC CURVES. The operating characteristic curves for normal inspection, shown in Table X (pages 30-62), indicate the percentage of lots or batches which may be expected to be accepted under the various sampling plans for a given process quality. The curves shown are for single sampling; curves for double

and multiple sampling are matched as closely as practicable. The O. C. curves shown for AQLs greater than 10.0 are based on the Poisson distribution and are applicable for defects per hundred units inspection; those for AQLs of 10.0 or less and sample sizes of 80 or less are based on the binomial distribution and are applicable for percent defectives.

11. SUPPLEMENTARY INFORMATION (Continued)

tive inspection; those for AQLs of 10.0 or less and sample sizes larger than 80 are based on the Poisson distribution and are applicable either for defects per hundred units inspection, or for percent defective inspection (the Poisson distribution being an adequate approximation to the binomial distribution under these conditions). Tabulated values, corresponding to selected values of probabilities of acceptance (P_a , in percent) are given for each of the curves shown, and, in addition, for tightened inspection, and for defects per hundred units for AQLs of 10.0 or less and sample sizes of 80 or less.

11.2 PROCESS AVERAGE. The process average is the average percent defective or average number of defects per hundred units (whichever is applicable) of product submitted by the supplier for original inspection. Original inspection is the first inspection of a particular quantity of product as distinguished from the inspection of product which has been resubmitted after prior rejection.

11.3 AVERAGE OUTGOING QUALITY (AOQ). The AOQ is the average quality of outgoing product including all accepted lots or batches, plus all rejected lots or batches after the rejected lots or batches have been effectively 100 percent inspected and all defectives replaced by nondefectives.

11.4 AVERAGE OUTGOING QUALITY LIMIT (AOQL). The AOQL is the maximum of the AOQs for all possible incoming qualities for a given acceptance sampling plan. AOQL values are given in Table V-A for each of the single sampling plans for normal inspection and in Table V-B for each of the single sampling plans for tightened inspection.

11.5 AVERAGE SAMPLE SIZE CURVES.

Average sample size curves for double and multiple sampling are in Table IX. These show the average sample sizes which may be expected to occur under the various sampling plans for a given process quality. The curves assume no curtailment of inspection and are approximate to the extent that they are based upon the Poisson distribution, and that the sample sizes for double and multiple sampling are assumed to be $0.631n$ and $0.25n$ respectively, where n is the equivalent single sample size.

11.6 LIMITING QUALITY PROTECTION.

The sampling plans and associated procedures given in this publication were designed for use where the units of product are produced in a continuing series of lots or batches over a period of time. However, if the lot or batch is of an isolated nature, it is desirable to limit the selection of sampling plans to those, associated with a designated AQL value, that provide not less than a specified limiting quality protection. Sampling plans for this purpose can be selected by choosing a Limiting Quality (LQ) and a consumer's risk to be associated with it. Tables VI and VII give values of LQ for the commonly used consumer's risks of 10 percent and 5 percent respectively. If a different value of consumer's risk is required, the O.C. curves and their tabulated values may be used. The concept of LQ may also be useful in specifying the AQL and Inspection Levels for a series of lots or batches, thus fixing minimum sample size where there is some reason for avoiding (with more than a given consumer's risk) more than a limiting proportion of defectives (or defects) in any single lot or batch.

TABLE 1—Sample size code letters

(See 9.2 and 9.3)

Lot or batch 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 1200	C	C	E	F	G	J	K
1201 to 3200	C	D	E	G	H	K	L
3201 to 10000	C	D	F	G	J	L	M
10001 to 35000	C	D	F	H	K	M	N
35001 to 150000	D	E	G	J	L	N	P
150001 to 500000	D	E	G	J	M	P	Q
500001 and over	D	E	H	K	N	Q	R

TABLE II-A—Single sampling plans for normal inspection (Master table)

(See 9.4 and 9.5)

Sample size code letter		Sample size	Acceptable Quality Levels (normal inspection)																							
			0.010	0.015	0.025	0.040	0.065	1.0	1.5	2.5	4.0	6.5	10	15	25	40	65	100	150	250	400	650	1000			
A	B	C	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
			→																							
			→																							
D	E	F	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
			→																							
			→																							
G	H	J	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
			→																							
			→																							
K	L	M	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
			→																							
			→																							
N	P	Q	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
			→																							
			→																							
R			Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
			→																							
			→																							


= Use first sampling plan below arrow. If sample size equals, or exceeds, lot or batch size, do 100 percent inspection.
 = Use first sampling plan above arrow.
 Ac = Acceptance number.
 Re = Rejection number.

SINGLE
NORMAL

TABLE II-B—Single sampling plans for tightened inspection (Master table)

(See 9.4 and 9.5)

Sample size code letter		Acceptable Quality Levels (tightened inspection)																																																				
		0.010	0.015	0.025	0.040	0.065	1.0	1.5	2.5	4.0	6.5	10	15	25	40	65	100	150	250	400	650	1000																																
Sample size	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re																										
																													Ac	Re	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	3	5	D	8	13	20	G	32	50	80	K	125	200	315	N	500	800	1250	R	2000	S	3150																															

 Use first sampling plan below arrow. If sample size equals or exceeds lot or batch size, do 100 percent inspection.

 Use first sampling plan above arrow.

Ac = Acceptance number.

Re = Rejection number.

TABLE II-C—Single sampling plans for reduced inspection (Master table)

(See 9.4 and 9.5)

Sample size code letter		Sample size	Acceptable Quality Levels (reduced inspection)†																											
			0.010	0.015	0.025	0.040	0.065	1.0	1.5	2.5	4.0	6.5	10	15	25	40	65	100	150	250	400	650	1000							
A	2	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re			
B	2	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re			
C	2	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re			
D	3	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re			
E	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			
F	8	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re			
G	13	Ac	Re	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	20	Ac	Re	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	32	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re			
K	50	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re			
L	80	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re			
M	125	Ac	Re	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	200	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re			
P	315	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re			
Q	500	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re			
R	800	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re			

- Use first sampling plan below arrow. If sample size equals or exceeds lot or batch size, do 100 percent inspection.
- Use first sampling plan above arrow.
- Ac = Acceptance number.
- Re = Rejection number.
- ↑ = If the acceptance number has been exceeded, but the rejection number has not been reached, accept the lot, but reinspect normal inspection (see 10.1.4).

SINGLE
REDUCED

TABLE III-B—Double sampling plans for tightened inspection (Master table)

(See 9.4 and 9.5)

Acceptable Quality Levels (tightened inspection)																														
Sample size code letter	Sample size	Cumulative sample size	Acceptable quality levels (tightened inspection)																											
			0.010	0.015	0.025	0.040	0.065	1.0	1.5	2.5	4.0	6.5	10	15	25	40	65	100	150	250	400	650	1000							
A			↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			
B	First Second	2 4	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			
C	First Second	3 5	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			
D	First Second	5 7	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			
E	First Second	8 11	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			
F	First Second	13 17	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			
G	First Second	20 25	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			
H	First Second	32 40	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			
I	First Second	50 63	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			
J	First Second	80 100	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			
K	First Second	125 160	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			
L	First Second	200 250	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			
M	First Second	315 400	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			
N	First Second	500 630	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			
P	First Second	800 1000	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			
Q	First Second	1250 1600	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			
R	First Second	2000 2500	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			
S	First Second	3150 4000	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			

↓ Use first sampling plan below arrow. If sample size equals or exceeds lot or batch size, do 100 percent inspection.
 ↓ Use first sampling plan above arrow.

Ac = Acceptance number

Re = Rejection number

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

DOUBLE
TIGHTENED

TABLE III-C—Double sampling plans for reduced inspection (Master table)

(See 9.4 and 9.5)

Sample size code letter	Sample size	Cumulative sample size	Acceptable Quality Levels (reduced inspection) [†]																										1000
			0.010	0.015	0.025	0.040	0.065	1.0	1.5	2.5	4.0	6.5	10	15	25	40	65	100	150	250	400	650	1000						
			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	2	2	↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		
E	3	3	↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		
F	3	6	↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		
G	5	5	↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		
H	5	10	↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		
I	8	8	↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		
J	13	13	↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		
K	20	20	↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		
L	32	32	↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		
M	50	50	↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		
N	80	80	↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		
O	125	125	↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		
P	200	200	↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		
Q	315	315	↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		
R	500	500	↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		
S	1000	1000	↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		↑		

↑ Use first sampling plan below arrow. If sample size equals or exceeds lot or batch size, do 100 percent inspection.

↑ Use first sampling plan above arrow.

↑ Acceptance number.

↑ Rejection number.

↑ Use corresponding plan for alternative, use double sampling plan below, when available.

↑ If, after the first inspection, the acceptance number has been exceeded, but the rejection number has not been reached, accept the lot, but reinspect normal inspection (see 10.1.4).

(See 9.4 and 9.5)

[illegible]

Use first sampling plan below given (refer to continuation of table on following page, when necessary). If sample size equals or exceeds lot or batch size, do 100 percent inspection.

Acceptance number.
The first sampling plan above applies.
Use core sampling.
Use corresponding double sampling plan for alternative.
Acceptance not permitted in this sample size.

TABLE IV-B—Multiple sampling plans for tightened inspection (Master table)

(See 9.4 and 9.5)

Acceptable Quality Levels (lightened inspection)																									
Sample size code letter	Sample size	Consumer's risk	Acceptable Quality Levels (lightened inspection)																						
			0.010	0.015	0.025	0.040	0.065	1.0	1.5	2.5	4.0	6.5	10	15	25	40	65	100	150	250	400	650	1000		
A	First	2																							
	Second	3																							
	Third	4																							
	Fourth	5																							
	Fifth	6																							
	Sixth	7																							
	Seventh	8																							
B	First	3																							
	Second	4																							
	Third	5																							
	Fourth	6																							
	Fifth	7																							
	Sixth	8																							
	Seventh	9																							
C	First	4																							
	Second	5																							
	Third	6																							
	Fourth	7																							
	Fifth	8																							
	Sixth	9																							
	Seventh	10																							
D	First	5																							
	Second	6																							
	Third	7																							
	Fourth	8																							
	Fifth	9																							
	Sixth	10																							
	Seventh	11																							
E	First	6																							
	Second	7																							
	Third	8																							
	Fourth	9																							
	Fifth	10																							
	Sixth	11																							
	Seventh	12																							
F	First	7																							
	Second	8																							
	Third	9																							
	Fourth	10																							
	Fifth	11																							
	Sixth	12																							
	Seventh	13																							
G	First	8																							
	Second	9																							
	Third	10																							
	Fourth	11																							
	Fifth	12																							
	Sixth	13																							
	Seventh	14																							
H	First	9																							
	Second	10																							
	Third	11																							

— Use first sampling plus below arrow (refer to continuation of table on following page, when necessary). If sample size equals or exceeds lot or batch size, do 100 percent inspection.

- ☐ Use first sampling plan above arrow
- ☐ Acceptance sampling
- ☐ Inspection number
- ☐ Use corresponding single sampling plan (or alternatively, use multiple sampling plan below, where available)
- ☐ Use corresponding double sampling plan (or alternatively, use multiple sampling plan below, where available)
- ☐ Acceptance not permitted at this sample size

TABLE IV-B—Multiple sampling plans for tightened inspection (Master table)
(Continued)

(See 9.4 and 9.5)

Acceptable Quality Levels (tightened inspection)

Sample size code letter	Sample size	Cumulative sample size	0.010	0.015	0.025	0.040	0.065	0.10	0.15	0.25	0.40	0.65	1.0	1.5	2.5	4.0	6.5	10	15	25	40	65	100	150	250	400	650	1000
A	First Second Third Fourth Fifth Sixth Seventh	32 64 96 128 160 192 224	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
L	First Second Third Fourth Fifth Sixth Seventh	50 100 150 200 250 300 350	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
V	First Second Third Fourth Fifth Sixth Seventh	80 160 240 320 400 480 560	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
N	First Second Third Fourth Fifth Sixth Seventh	125 250 375 500 625 750 875	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
P	First Second Third Fourth Fifth Sixth Seventh	200 400 600 800 1000 1200 1400	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
U	First Second Third Fourth Fifth Sixth Seventh	315 630 945 1260 1575 1890 2205	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
R	First Second Third Fourth Fifth Sixth Seventh	500 1000 1500 2000 2500 3000 3500	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
S	First Second Third Fourth Fifth Sixth Seventh	800 1600 2400 3200 4000 4800 5600	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→

Use first sampling plan below arrow. If sample size equals or exceeds lot or batch size, do 100 percent inspection.
 * Use first sampling plan below arrow (refer to preceding page, when necessary).
 Ac Acceptance number
 Re Rejection number
 * Use corresponding single sampling plan (or alternatively, use multiple sampling plan below, where available).
 * Acceptance not permitted at this sample size.

**MULTIPLE
TIGHTENED**

TABLE IV-C—Multiple sampling plans for reduced inspection (Master table)

(See 9.4 and 9.5)

[illegible]

➡ **m** Use first sampling plan below arrow (refer to continuation of table on following page, when necessary) If sample size equals, or exceeds lot or batch size, do 100 percent inspection.

Use first sampling plan above arrow.

Use first sampling point

Acceptance number

Ac = Acceptance number
Re = Rejection number

Rejection number

Use rejection as study sampling or alternatively use multiple sampling plan below where available

• **SEE** Use corresponding single sampling plan (or alternatively, use multiple sampling plan below, where available).

• **SEE** Use recommended double sampling plan (or alternatively, use multiple sampling plan below, where available).

• **SEE** Use recommended double sampling plan (or alternatively, use multiple sampling plan below, where available).

- == Use corresponding double sampling plan (or alternative)
- == Acceptance not permitted at this sample size

- Acceptance not permitted at this sample size
- If after the final sample the acceptance number has been exceeded but the rejection number has not been reached, accept the lot but restate normal inspection (see [0 4])

TABLE IV-C—Multiple sampling plans for reduced inspection (Master table)
(Continued)

(See 9.4 and 9.5)

Sample size code letter	Sample size	Com- muni- cative sample size	Acceptable Quality Levels (reduced inspection)†																							
			0.010	0.015	0.025	0.040	0.065	1.0	1.5	2.5	4.0	6.5	10	15	25	40	65	100	150	250	400	650	1000			
L	First	20	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Second	20	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Third	40	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Fourth	60	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Fifth	80	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Sixth	100	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Seventh	120	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
M	First	32	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Second	32	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Third	64	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Fourth	96	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Fifth	128	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Sixth	160	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Seventh	192	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	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Second	50	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Third	100	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Fourth	150	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Fifth	200	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Sixth	250	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Seventh	300	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
P	First	80	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Second	80	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Third	160	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Fourth	240	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Fifth	320	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Sixth	400	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Seventh	480	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
Q	First	125	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Second	125	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Third	250	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Fourth	375	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Fifth	500	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Sixth	625	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Seventh	750	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
H	First	200	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Second	200	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Third	400	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Fourth	600	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Fifth	800	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Sixth	1000	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		
	Seventh	1200	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		

Use first sampling plan below arrow. If sample size equals, or exceeds, lot or batch size, do 100 percent inspection.

Use first sampling plan above arrow (refer to preceding page when necessary).

Ac Acceptance number

Re Rejection number

He He

† If, after the final sample, the acceptance number has been exceeded, but the rejection number has not been reached, arrange the lot, but release normal inspection (see 10.1.4).

TABLE V-A—Average Outgoing Quality Limit Factors for Normal Inspection (Single sampling)

(See 11.4)

Code Letter	Sample Size	Acceptable Quality Level																				
		0.010	0.015	0.025	0.040	0.065	1.0	1.5	2.5	4.0	6.5	10	15	25	40	65	100	150	250	400	650	1000
A	2																					
B	3																					
C	5																					
D	8																					
E	13																					
F	20																					
G	32																					
H	50																					
J	80																					
K	125																					
L	200																					
M	315																					
N	500																					
P	800																					
Q	1250																					
R	2000																					

Notes: For the exact AOQL, the above values must be multiplied by $(1 - \frac{\text{Sample size}}{\text{Lot or Batch size}})$ (see 11.4)

TABLE VI-A—Limiting Quality (in percent defective) for which $P_d = 10$ Percent
(for Normal Inspection, Single sampling)

(See 11.6)

Code letter	Sample size	Acceptable Quality Level															
		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	0.18	0.29	0.46	0.73	1.2	1.8	2.8	4.5	6.9	11	16	25	37	54	68	58
B	3																
C	5																
D	8	0.20	0.29	0.46	0.73	1.2	1.8	2.8	4.5	6.9	11	16	25	37	54	68	58
E	13																
F	20																
G	32	0.23	0.29	0.46	0.73	1.2	1.8	2.8	4.5	6.9	11	16	25	37	54	68	58
H	50																
J	80																
K	125	0.27	0.29	0.46	0.73	1.2	1.8	2.8	4.5	6.9	11	16	25	37	54	68	58
L	200																
M	315																
N	500	0.31	0.29	0.46	0.73	1.2	1.8	2.8	4.5	6.9	11	16	25	37	54	68	58
P	800																
Q	1250																
R	2000	0.33															

LQ (DEFECTIVES)
10.0%

TABLE VI-B—Limiting Quality (in defects per hundred units) for which $P_a = 10$ Percent
(for Normal Inspection, Single sampling)

(See 11.6)

Code letter	Sample size	Acceptable Quality Level														
		0.010	0.015	0.025	0.040	0.065	0.10	0.15	0.25	0.40	0.65	1.00	1.50	2.50	4.00	6.50
A	2															
B	3															
C	5															
D	8															
E	13															
F	20															
G	32															
H	50															
J	80															
K	125															
L	200															
M	315															
N	500															
P	800															
U	1250															
V	2000															

TABLE VII-A—Limiting Quality (in percent defective) for which $P_a = 5$ Percent
(for Normal Inspection, Single sampling)

(See 11.6)

		Acceptable Quality Level																														
		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												31	45	63	78	66															
B	3													21	14	5.8		8.9	3.7	2.4	1.5	0.59	0.38	0.60	0.38	0.24	47	41	34	60	50	46
C	5																															
D	8																															
E	13																					32	50	80	125	200	315	500	800	1250	2000	24
F	20																															
G	32	9.1	5.8	14	12	9.4	18	15	13	23	20	30	25	20	37	32	26															
H	50																	32	50	80	125	200	315	500	800	1250	2000	24				
J	80																												14	5.8	8.9	3.7
K	125	9.1	5.8	14	12	9.4	18	15	13	23	20	30	25	20	37	32	26															
L	200																	32	50	80	125	200	315	500	800	1250	2000	24				
M	315																												14	5.8	8.9	3.7
N	500	9.1	5.8	14	12	9.4	18	15	13	23	20	30	25	20	37	32	26															
P	800																	32	50	80	125	200	315	500	800	1250	2000	24				
Q	1250																												14	5.8	8.9	3.7
R	2000	9.1	5.8	14	12	9.4	18	15	13	23	20	30	25	20	37	32	26															

LQ (DEFECTIVES)
5.0%

TABLE VII-B—Limiting Quality (in defects per hundred units) for which $P_d = 5$ Percent
(for Normal Inspection, Single sampling)

(See 11.6)

Code letter	Sample size	Acceptable Quality Level																				
		0.010	0.015	0.025	0.040	0.065	1.0	1.5	2.5	4.0	6.5	10	15	25	40	65	100	150	250	400	650	1000
A	2																					
B	3																					
C	5																					
D	8																					
E	13																					
F	20																					
G	32																					
H	50																					
J	80																					
K	125																					
L	200																					
M	315																					
N	500																					
P	800																					
Q	1250																					
R	2000																					

TABLE VIII — Limit Numbers for Reduced Inspection

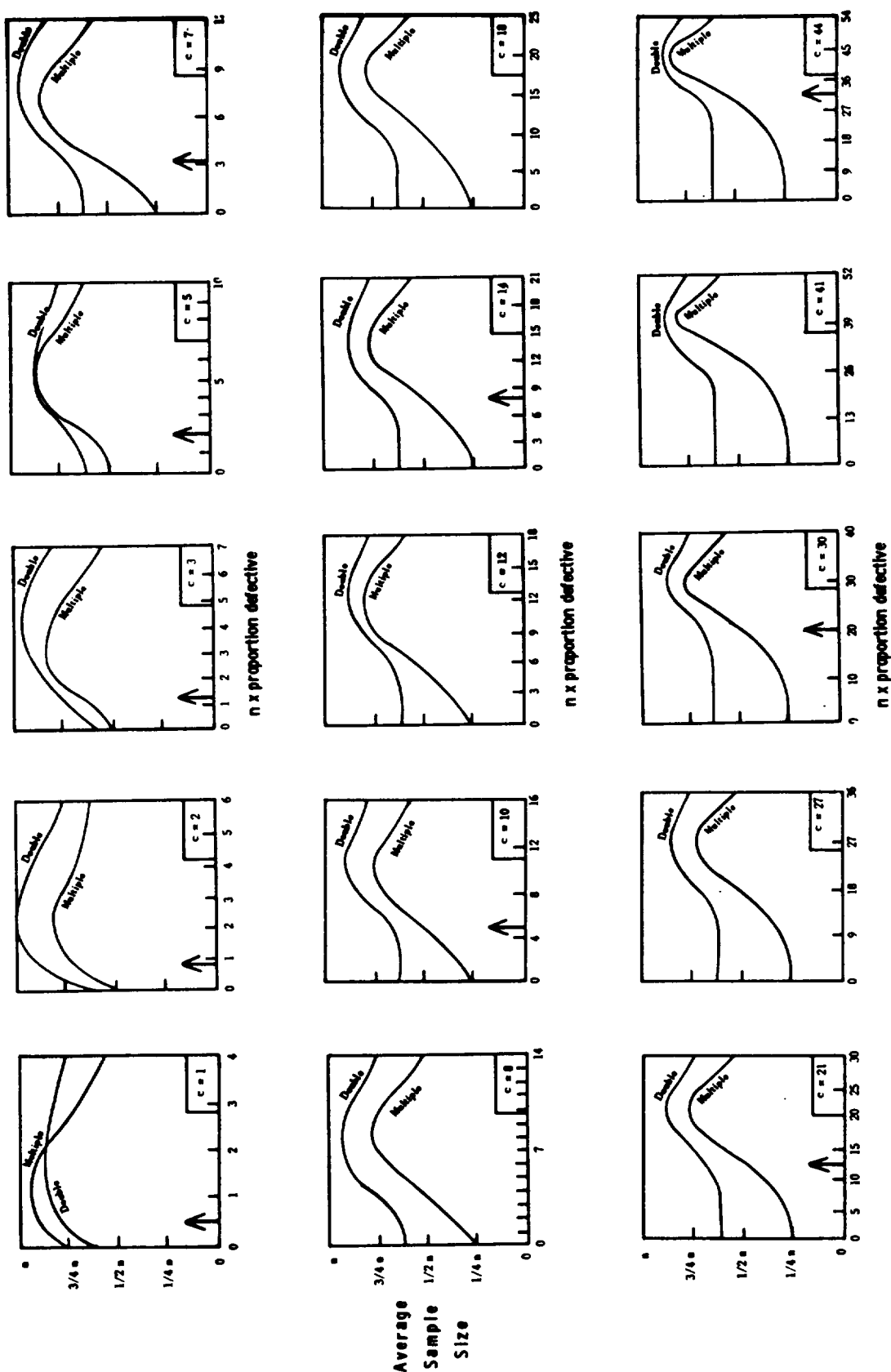
(See 8.3.3)

Number of sample units from last 10 lots or batches	Acceptable Quality Level															
	0.010	0.015	0.025	0.040	0.065	0.10	0.15	0.25	40	65	100	150	250	400	650	1000
20 - 29	•	•	•	•	•	•	•	•	4	8	14	22	40	68	115	181
30 - 49	•	•	•	•	•	•	•	3	7	13	22	36	63	105	178	277
50 - 79	•	•	•	•	•	•	•	7	14	25	40	63	110	181	301	
80 - 129	•	•	•	•	•	•	•	0	24	42	68	105	181	297		
130 - 199	•	•	•	•	•	•	•	0	25	42	72	115	177	301	490	
200 - 319	•	•	•	•	•	•	•	2	68	115	181	277	471			
320 - 499	•	•	•	•	•	•	•	4	113	189						
500 - 799	•	•	•	•	•	•	•	7	181							
800 - 1249	•	•	•	•	•	•	•	14								
1250 - 1999	•	•	•	•	•	•	•	24								
2000 - 3149	•	•	•	•	•	•	•	40								
3150 - 4999	•	•	•	•	•	•	•	68								
5000 - 7999	•	•	•	•	•	•	•	110								
8000 - 12499	•	•	•	•	•	•	•	181								
12500 - 19999	•	•	•	•	•	•	•									
20000 - 31499	0	0	2	4	8	14	22	40	68	115	181	297	490	797	1277	2000
31500 - 49999	0	1	4	8	14	24	38	67	111	181	297	490	797	1277	2000	31500
50000 & Over	2	3	7	14	25	40	63	110	181	297	490	797	1277	2000	31500	50000

Denotes that the number of sample units from the last ten lots or batches is not sufficient for reduced inspection for this AQL. In this instance more than ten lots or batches may be used for the calculation, provided that the lots or batches used are the most recent ones in sequence, that they have all been on normal inspection, and that none has been rejected while on original inspection.

**TABLE IX—Average sample size curves for double and multiple sampling
(normal and tightened inspection)**

(See 11.5)



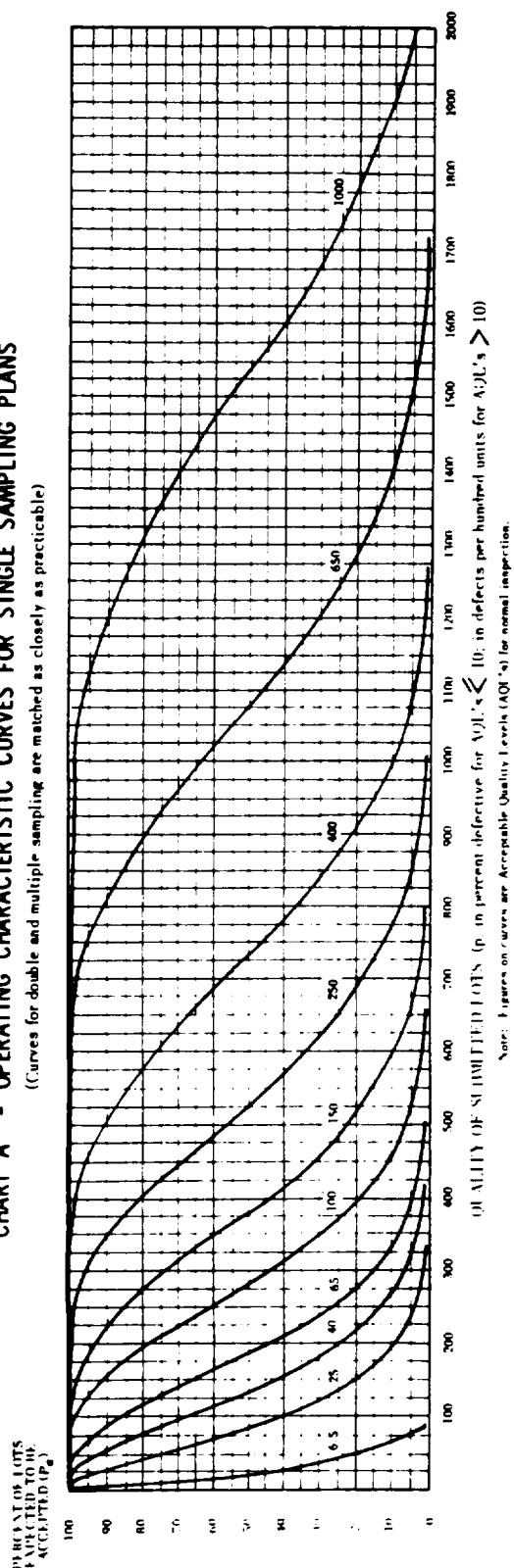
n = Equivalent single sample size
c = Single sample acceptance number
↑ = AQL for normal inspection

A

TABLE X-A—Tables for sample size code letter: A

CHART A - OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

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



Note: Figures on curves are Acceptable Quality Levels (AQL's) for normal inspection.

TABLE X-A-1 - TABULATED VALUES FOR OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

P_a	Acceptable Quality Levels (normal inspection)														
	6.5	25	40	65	100	150	250	400	650	1000	p (in defects per hundred units)				
	p (in percent defective)	6.5	25	40	65	100	150	250	400	650	1000	0.51	2.56	5.13	13.4
99.0	0.501	0.51	7.45	21.8	41.2	89.2	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	385	462	622	745	995	1122
90.0	5.13	5.25	26.6	55.1	87.3	158	233	272	351	432	515	684	812	1073	1206
75.0	13.4	14.4	48.1	86.8	127	211	298	342	431	521	612	795	934	1314	1354
50.0	29.3	34.7	83.9	134	184	284	383	433	533	633	733	933	1083	1383	1533
25.0	50.0	69.3	135	196	256	371	484	540	651	761	870	1087	1248	1568	1728
10.0	68.4	115	195	266	334	464	589	650	770	889	1006	1238	1409	1748	1916
5.0	77.6	150	237	315	388	526	657	722	848	972	1094	1334	1512	1862	2035
1.0	90.0	230	332	420	502	655	800	870	1007	1141	1272	1529	1718	2088	2270
	×	×	40	65	100	150	×	250	×	400	×	650	×	1000	×
	Acceptable Quality Levels (tightened inspection)														

Note: Binomial distribution used for percent defective computations; Poisson for defects per hundred units.

TABLE X-A-2 - SAMPLING PLANS FOR SAMPLE SIZE CODE LETTER: A

Type of sampling plan	Cumulative sample size	Acceptable Quality Levels (normal inspection)																	Cumulative sample size
		Less than 6.5	6.5	10	15	25	40	65	100	150	250	400	650	1000					
		Ac Re	Ac Re	Ac Re	Ac Re	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 9	10 11	12 13	14 15	18 19	21 22	27 28	30 31	2
Double		▽	•	Use Letter D	Use Letter C	Use Letter B	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	
Multiple		▽	•			•	•	•	•	•	•	•	•	•	•	•	•	•	
		Less than 10	10	15	25	40	65	100	150	250	400	650	1000	×				×	
Acceptable Quality Levels (tightened inspection)																			

▽ = Use next subsequent sample size code letter for which acceptance and rejection numbers are available.

Ac = Acceptance number

Re = Rejection number

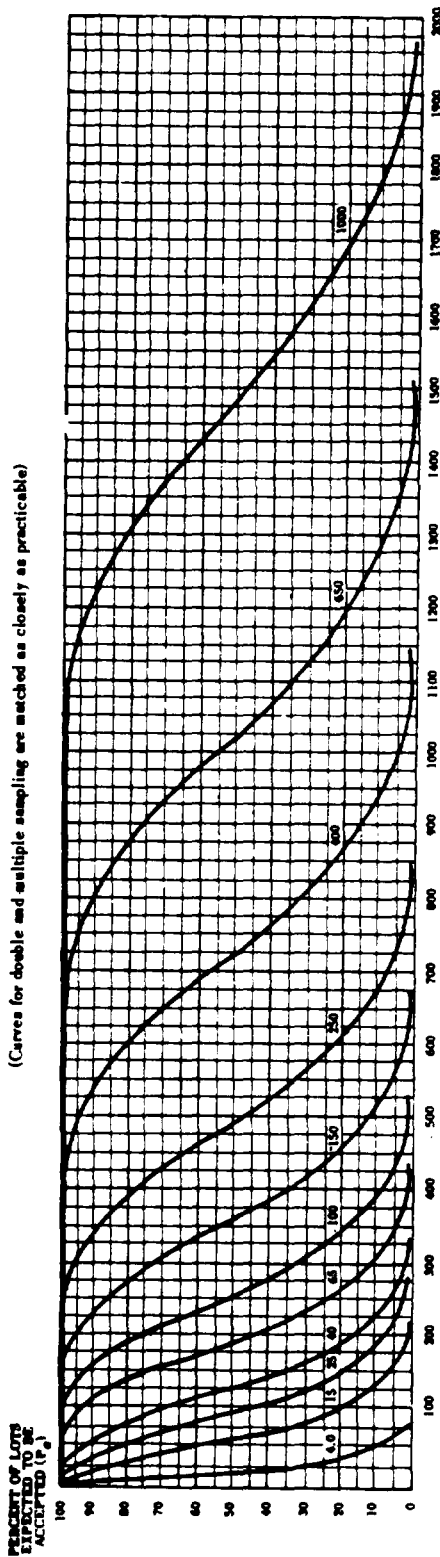
• = Use single sampling plan above (or alternatively use letter D).

(*) = Use single sampling (or alternatively use letter B).

TABLE X-B—Tables for sample size code letter: B

CHART B - OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

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



QUALITY OF SUBMITTED LOTS (p , in percent defective for AQL's ≤ 10 ; in defects per hundred units for AQL's > 10)

Note: Figures on curves are Acceptable Quality Levels (AQL's) for normal inspection.

TABLE X-B-1 - TABULATED VALUES FOR OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

P _a	Acceptable Quality Levels (normal inspection)																
	4.0	4.0	15	25	40	65	100	150	250	400	650	1000	p (in defects per hundred units)				
	p (in percent defective)																
99.0	0.33	0.34	4.97	14.5	27.4	59.5	96.9	117	159	203	249	345	419	573	651	947	1029
95.0	1.70	1.71	11.8	27.3	45.5	87.1	133	157	206	256	308	415	496	663	748	1065	1152
90.0	3.45	3.50	17.7	36.7	58.2	105	155	181	234	288	343	456	541	716	804	1131	1222
75.0	9.14	9.60	32.0	57.6	84.5	141	199	228	287	347	408	530	623	809	903	1249	1344
50.0	20.6	23.1	55.9	89.1	122	189	256	289	356	422	489	622	722	922	1022	1389	1489
25.0	37.0	46.2	89.8	131	170	247	323	360	434	507	580	724	832	1046	1152	1539	1644
10.0	53.6	76.8	130	177	223	309	392	433	514	593	671	825	939	1165	1277	1683	1793
5.0	63.2	99.9	158	210	258	350	438	481	565	648	730	890	1008	1241	1356	1773	1886
1.0	78.4	154	221	280	335	437	533	580	672	761	848	1019	1145	1392	1513	1951	2069
	6.5	6.5	25	40	65	100	150	250	400	650	1000	1500	2000	2500	3000	4000	5000
																	</

Note: Binomial distribution used for percent defective computations; Poisson for defects per hundred units.

TABLE X-B-2 - SAMPLING PLANS FOR SAMPLE SIZE CODE LETTER: B

Type of sampling plan	Cumulative sample size	Acceptable Quality Levels (normal inspection)																	Cumulative sample size																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
		Less than 4.0	4.0	6.5	10	15	25	40	65	100	150	250	400	650	1000	Ac	Re	Ac		Re	Ac	Re	Ac	Re	Ac	Re																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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Multiple		▽	•	Letter A	Letter D	Letter 1	Letter 2	Letter 3	Letter 4	Letter 5	Letter 6	Letter 7	Letter 8	Letter 9	Letter 10	Letter 11	Letter 12	Letter 13	Letter 14	Letter 15	Letter 16	Letter 17	Letter 18	Letter 19	Letter 20	Letter 21	Letter 22	Letter 23	Letter 24	Letter 25	Letter 26	Letter 27	Letter 28	Letter 29	Letter 30	Letter 31	Letter 32	Letter 33	Letter 34	Letter 35	Letter 36	Letter 37	Letter 38	Letter 39	Letter 40	Letter 41	Letter 42	Letter 43	Letter 44	Letter 45	Letter 46	Letter 47	Letter 48	Letter 49	Letter 50	Letter 51	Letter 52	Letter 53	Letter 54	Letter 55	Letter 56	Letter 57	Letter 58	Letter 59	Letter 60	Letter 61	Letter 62	Letter 63	Letter 64	Letter 65	Letter 66	Letter 67	Letter 68	Letter 69	Letter 70	Letter 71	Letter 72	Letter 73	Letter 74	Letter 75	Letter 76	Letter 77	Letter 78	Letter 79	Letter 80	Letter 81	Letter 82	Letter 83	Letter 84	Letter 85	Letter 86	Letter 87	Letter 88	Letter 89	Letter 90	Letter 91	Letter 92	Letter 93	Letter 94	Letter 95	Letter 96	Letter 97	Letter 98	Letter 99	Letter 100	Letter 101	Letter 102	Letter 103	Letter 104	Letter 105	Letter 106	Letter 107	Letter 108	Letter 109	Letter 110	Letter 111	Letter 112	Letter 113	Letter 114	Letter 115	Letter 116	Letter 117	Letter 118	Letter 119	Letter 120	Letter 121	Letter 122	Letter 123	Letter 124	Letter 125	Letter 126	Letter 127	Letter 128	Letter 129	Letter 130	Letter 131	Letter 132	Letter 133	Letter 134	Letter 135	Letter 136	Letter 137	Letter 138	Letter 139	Letter 140	Letter 141	Letter 142	Letter 143	Letter 144	Letter 145	Letter 146	Letter 147	Letter 148	Letter 149	Letter 150	Letter 151	Letter 152	Letter 153	Letter 154	Letter 155	Letter 156	Letter 157	Letter 158	Letter 159	Letter 160	Letter 161	Letter 162	Letter 163	Letter 164	Letter 165	Letter 166	Letter 167	Letter 168	Letter 169	Letter 170	Letter 171	Letter 172	Letter 173	Letter 174	Letter 175	Letter 176	Letter 177	Letter 178	Letter 179	Letter 180	Letter 181	Letter 182	Letter 183	Letter 184	Letter 185	Letter 186	Letter 187	Letter 188	Letter 189	Letter 190	Letter 191	Letter 192	Letter 193	Letter 194	Letter 195	Letter 196	Letter 197	Letter 198	Letter 199	Letter 200	Letter 201	Letter 202	Letter 203	Letter 204	Letter 205	Letter 206	Letter 207	Letter 208	Letter 209	Letter 210	Letter 211	Letter 212	Letter 213	Letter 214	Letter 215	Letter 216	Letter 217	Letter 218	Letter 219	Letter 220	Letter 221	Letter 222	Letter 223	Letter 224	Letter 225	Letter 226	Letter 227	Letter 228	Letter 229	Letter 230	Letter 231	Letter 232	Letter 233	Letter 234	Letter 235	Letter 236	Letter 237	Letter 238	Letter 239	Letter 240	Letter 241	Letter 242	Letter 243	Letter 244	Letter 245	Letter 246	Letter 247	Letter 248	Letter 249	Letter 250	Letter 251	Letter 252	Letter 253	Letter 254	Letter 255	Letter 256	Letter 257	Letter 258	Letter 259	Letter 260	Letter 261	Letter 262	Letter 263	Letter 264	Letter 265	Letter 266	Letter 267	Letter 268	Letter 269	Letter 270	Letter 271	Letter 272	Letter 273	Letter 274	Letter 275	Letter 276	Letter 277	Letter 278	Letter 279	Letter 280	Letter 281	Letter 282	Letter 283	Letter 284	Letter 285	Letter 286	Letter 287	Letter 288	Letter 289	Letter 290	Letter 291	Letter 292	Letter 293	Letter 294	Letter 295	Letter 296	Letter 297	Letter 298	Letter 299	Letter 300	Letter 301	Letter 302	Letter 303	Letter 304	Letter 305	Letter 306	Letter 307	Letter 308	Letter 309	Letter 310	Letter 311	Letter 312	Letter 313	Letter 314	Letter 315	Letter 316	Letter 317	Letter 318	Letter 319	Letter 320	Letter 321	Letter 322	Letter 323	Letter 324	Letter 325	Letter 326	Letter 327	Letter 328	Letter 329	Letter 330	Letter 331	Letter 332	Letter 333	Letter 334	Letter 335	Letter 336	Letter 337	Letter 338	Letter 339	Letter 340	Letter 341	Letter 342	Letter 343	Letter 344	Letter 345	Letter 346	Letter 347	Letter 348	Letter 349	Letter 350	Letter 351	Letter 352	Letter 353	Letter 354	Letter 355	Letter 356	Letter 357	Letter 358	Letter 359	Letter 360	Letter 361	Letter 362	Letter 363	Letter 364	Letter 365	Letter 366	Letter 367	Letter 368	Letter 369	Letter 370	Letter 371	Letter 372	Letter 373	Letter 374	Letter 375	Letter 376	Letter 377	Letter 378	Letter 379	Letter 380	Letter 381	Letter 382	Letter 383	Letter 384	Letter 385	Letter 386	Letter 387	Letter 388	Letter 389	Letter 390	Letter 391	Letter 392	Letter 393	Letter 394	Letter 395	Letter 396	Letter 397	Letter 398	Letter 399	Letter 400	Letter 401	Letter 402	Letter 403	Letter 404	Letter 405	Letter 406	Letter 407	Letter 408	Letter 409	Letter 410	Letter 411	Letter 412	Letter 413	Letter 414	Letter 415	Letter 416	Letter 417	Letter 418	Letter 419	Letter 420	Letter 421	Letter 422	Letter 423	Letter 424	Letter 425	Letter 426	Letter 427	Letter 428	Letter 429	Letter 430	Letter 431	Letter 432	Letter 433	Letter 434	Letter 435	Letter 436	Letter 437	Letter 438	Letter 439	Letter 440	Letter 441	Letter 442	Letter 443	Letter 444	Letter 445	Letter 446	Letter 447	Letter 448	Letter 449	Letter 450	Letter 451	Letter 452	Letter 453	Letter 454	Letter 455	Letter 456	Letter 457	Letter 458	Letter 459	Letter 460	Letter 461	Letter 462	Letter 463	Letter 464	Letter 465	Letter 466	Letter 467	Letter 468	Letter 469	Letter 470	Letter 471	Letter 472	Letter 473	Letter 474	Letter 475	Letter 476	Letter 477	Letter 478	Letter 479	Letter 480	Letter 481	Letter 482	Letter 483	Letter 484	Letter 485	Letter 486	Letter 487	Letter 488	Letter 489	Letter 490	Letter 491	Letter 492	Letter 493	Letter 494	Letter 495	Letter 496	Letter 497	Letter 498	Letter 499	Letter 500	Letter 501	Letter 502	Letter 503	Letter 504	Letter 505	Letter 506	Letter 507	Letter 508	Letter 509	Letter 510	Letter 511	Letter 512	Letter 513	Letter 514	Letter 515	Letter 516	Letter 517	Letter 518	Letter 519	Letter 520	Letter 521	Letter 522	Letter 523	Letter 524	Letter 525	Letter 526	Letter 527	Letter 528	Letter 529	Letter 530	Letter 531	Letter 532	Letter 533	Letter 534	Letter 535	Letter 536	Letter 537	Letter 538	Letter 539	Letter 540	Letter 541	Letter 542	Letter 543	Letter 544	Letter 545	Letter 546	Letter 547	Letter 548	Letter 549	Letter 550	Letter 551	Letter 552	Letter 553	Letter 554	Letter 555	Letter 556	Letter 557	Letter 558	Letter 559	Letter 560	Letter 561	Letter 562	Letter 563	Letter 564	Letter 565	Letter 566	Letter 567	Letter 568	Letter 569	Letter 570	Letter 571	Letter 572	Letter 573	Letter 574	Letter 575	Letter 576	Letter 577	Letter 578	Letter 579	Letter 580	Letter 581	Letter 582	Letter 583	Letter 584	Letter 585	Letter 586	Letter 587	Letter 588	Letter 589	Letter 590	Letter 591	Letter 592	Letter 593	Letter 594	Letter 595	Letter 596	Letter 597	Letter 598	Letter 599	Letter 600	Letter 601	Letter 602	Letter 603	Letter 604	Letter 605	Letter 606	Letter 607	Letter 608	Letter 609	Letter 610	Letter 611	Letter 612	Letter 613	Letter 614	Letter 615	Letter 616	Letter 617	Letter 618	Letter 619	Letter 620	Letter 621	Letter 622	Letter 623	Letter 624	Letter 625	Letter 626	Letter 627	Letter 628	Letter 629	Letter 630	Letter 631	Letter 632	Letter 633	Letter 634	Letter 635	Letter 636	Letter 637	Letter 638	Letter 639	Letter 640	Letter 641	Letter 642	Letter 643	Letter 644	Letter 645	Letter 646	Letter 647	Letter 648	Letter 649	Letter 650	Letter 651	Letter 652	Letter 653	Letter 654	Letter 655	Letter 656	Letter 657	Letter 658	Letter 659	Letter 660	Letter 661	Letter 662	Letter 663	Letter 664	Letter 665	Letter 666	Letter 667	Letter 668	Letter 669	Letter 670	Letter 671	Letter 672	Letter 673	Letter 674	Letter 675	Letter 676	Letter 677	Letter 678	Letter 679	Letter 680	Letter 681	Letter 682	Letter 683	Letter 684	Letter 685	Letter 686	Letter 687	Letter 688	Letter 689	Letter 690	Letter 691	Letter 692	Letter 693	Letter 694	Letter 695	Letter 696	Letter 697	Letter 698	Letter 699	Letter 700	Letter 701	Letter 702	Letter 703	Letter 704	Letter 705	Letter 706	Letter 707	Letter 708	Letter 709	Letter 710	Letter 711	Letter 712	Letter 713	Letter 714	Letter 715	Letter 716	Letter 717	Letter 718	Letter 719	Letter 720	Letter 721	Letter 722	Letter 723	Letter 724	Letter 725	Letter 726	Letter 727	Letter 728	Letter 729	Letter 730	Letter 731	Letter 732	Letter 733	Letter 734	Letter 735	Letter 736	Letter 737	Letter 738	Letter 739	Letter 740	Letter 741	Letter 742	Letter 743	Letter 744	Letter 745	Letter 746	Letter 747	Letter 748	Letter 749	Letter 750	Letter 751	Letter 752	Letter 753	Letter 754	Letter 755	Letter 756	Letter 757	Letter 758	Letter 759	Letter 760	Letter 761	Letter 762	Letter 763	Letter 764	Letter 765	Letter 766	Letter 767	Letter 768	Letter 769	Letter 770	Letter 771	Letter 772	Letter 773	Letter 774	Letter 775	Letter 776	Letter 777	Letter 778	Letter 779	Letter 780	Letter 781	Letter 782	Letter 783	Letter 784	Letter 785	Letter 786	Letter 787	Letter 788	Letter 789	Letter 790	Letter 791	Letter 792	Letter 793	Letter 794	Letter 795	Letter 796	Letter 797	Letter 798	Letter 799	Letter 800	Letter 801	Letter 802	Letter 803	Letter 804	Letter 805	Letter 806	Letter 807	Letter 808	Letter 809	Letter 810	Letter 811	Letter 812	Letter 813	Letter 814	Letter 815	Letter 816	Letter 817	Letter 818	Letter 819	Letter 820	Letter 821	Letter 822	Letter 823	Letter 824	Letter 825	Letter 826	Letter 827	Letter 828	Letter 829	Letter 830	Letter 831	Letter 832	Letter 833	Letter 834	Letter 835	Letter 836	Letter 837	Letter 838	Letter 839	Letter 840	Letter 841	Letter 842	Letter 843	Letter 844	Letter 845	Letter 846	Letter 847	Letter 848	Letter 849	Letter 850	Letter 851	Letter 852	Letter 853	Letter 854	Letter 855	Letter 856	Letter 857	Letter 858	Letter 859	Letter 860	Letter 861	Letter 862	Letter 863	Letter 864	Letter 865	Letter 866	Letter 867	Letter 868	Letter 869	Letter 870	Letter 871	Letter 872	Letter 873	Letter 874	Letter 875	Letter 876	Letter 877	Letter 878	Letter 879	Letter 880	Letter 881	Letter 882	Letter 883	Letter 884	Letter 885	Letter 886	Letter 887	Letter 888	Letter 889	Letter 890	Letter 891	Letter 892	Letter 893	Letter 894	Letter 895	Letter 896	Letter 897	Letter 898	

▽ = 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 letter F).

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

TABLE X-C—Tables for sample size code letter: C

CHART C - OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

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

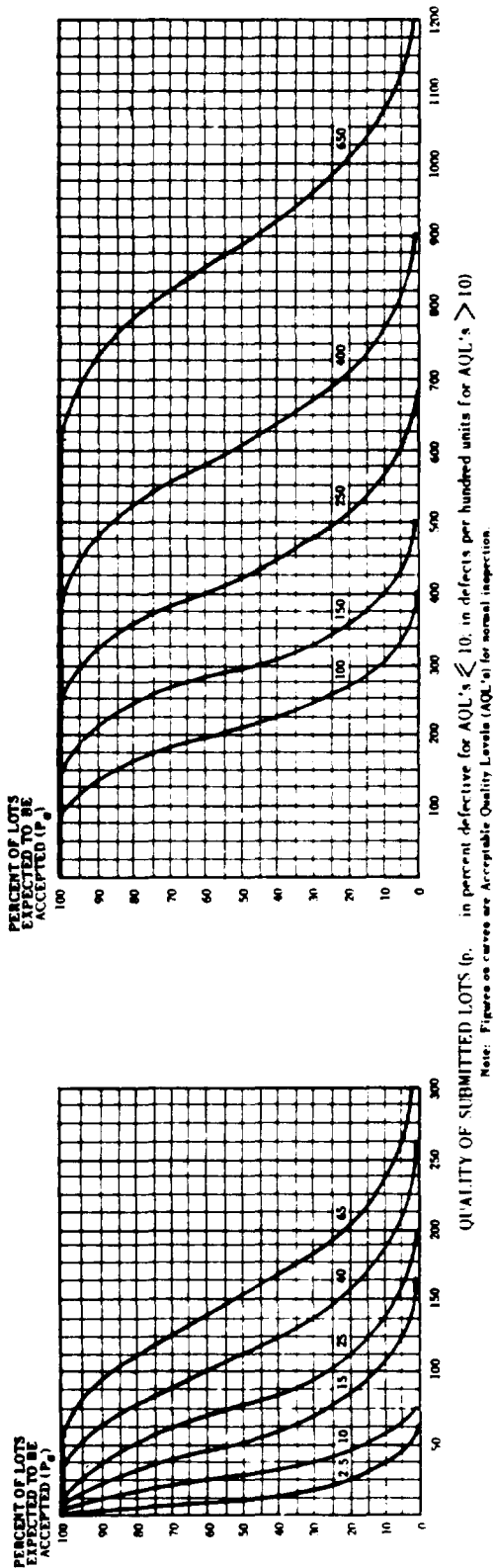


TABLE X-C-1 - TABULATED VALUES FOR OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

P_a	Acceptable Quality Levels (normal inspection)																	
	2.5	10	2.5	10	15	25	40	65	100	150	250	400	650					
	p (in defects per hundred units)																	
p (in percent defective)	0.20	3.28	0.20	2.89	8.72	16.5	35.7	58.1	70.1	95.4	122	150	207	251	344	391	568	618
99.0	0.20	3.28	0.20	2.89	8.72	16.5	35.7	58.1	70.1	95.4	122	150	207	251	344	391	568	618
95.0	1.02	7.63	1.03	7.10	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	2.10	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	5.76	19.2	34.5	50.7	84.4	119	137	172	208	245	318	374	485	542	749	806
50.0	12.9	31.4	13.9	33.6	53.5	73.4	113	153	173	211	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	987
10.0	36.9	58.4	46.1	77.8	106	134	186	235	260	308	356	403	495	564	699	766	1010	1076
5.0	45.1	65.8	59.9	94.9	126	155	210	263	289	339	389	438	534	605	745	814	1064	1131
1.0	60.2	77.8	92.1	133	168	201	262	320	348	403	456	509	612	687	835	908	1171	1241
	4.0	\times	4.0	15	25	40	65	\times	100	\times	150	\times	250	\times	400	\times	650	\times
	Acceptable Quality Levels (tightened inspection)																	

Note: Binomial distribution used for percent defective calculations; Formulas for defects per hundred units.

TABLE X-C-2 - SAMPLING PLANS FOR SAMPLE SIZE CODE LETTER: C

Type of sampling plan	Cumulative sample size	Acceptable Quality Levels (tightened inspection)															Cumulative sample size
		Less than 2.5	2.5	4.0	6.5	10	15	25	40	65	100	150	250	400	650	1000	
Single	5	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re
		0	1			1	2	3	4	5	6	7	8	9	10	11	12
Double	3 6	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re
		0	1			0	2	3	4	5	6	7	8	9	10	11	12
Multiple		Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re
		0	1			0	2	3	4	5	6	7	8	9	10	11	12

▽ = 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 letter F).

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

TABLE X-D—Tables for sample size code letter: D

CHART D - OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

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

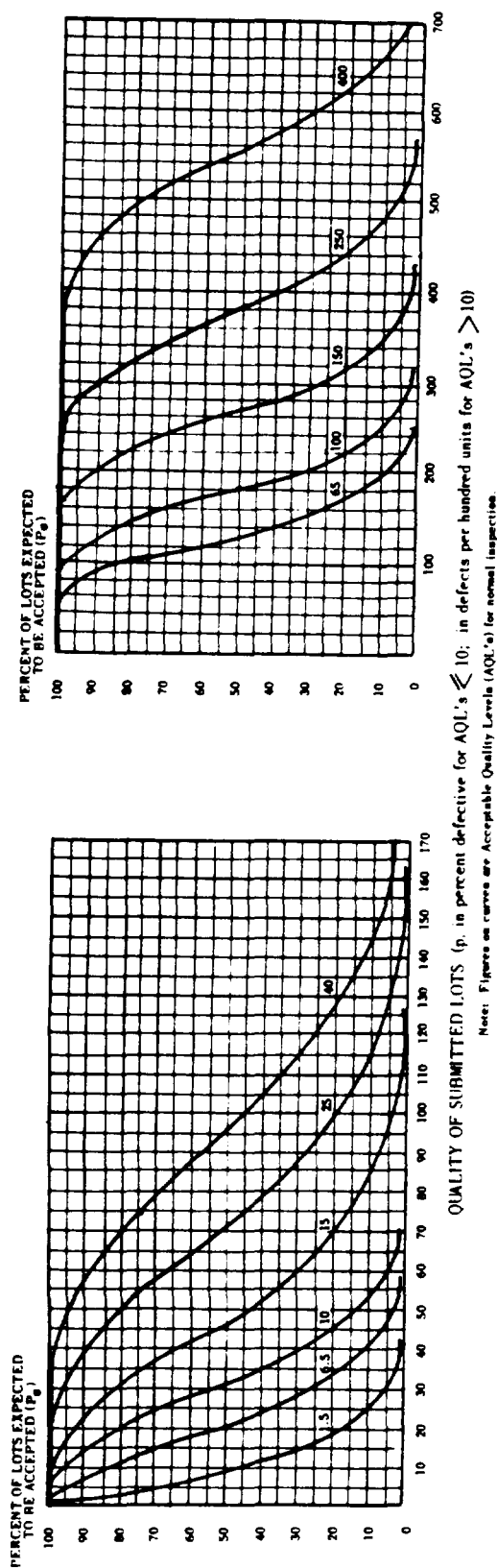


TABLE X-D-1 - TABULATED VALUES FOR OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

P_a	Acceptable Quality Levels (normal inspection)														
	1.5	6.5	10	15	25	40	65	100	150	250	400	p (in defects per hundred units)			
	p (in percent defective)														
99.0	0.13	2.00	6.00	10.3	22.3	36.3	43.8	59.6	76.2	93.5	129	157	215	244	355
95.0	0.64	2.64	11.1	17.1	32.7	49.8	58.7	77.1	96.1	116	156	186	249	281	399
90.0	1.31	6.08	14.7	21.8	39.4	58.2	67.9	87.8	108	129	171	203	268	301	424
75.0	3.53	12.1	22.1	31.7	52.7	74.5	85.5	108	130	153	199	234	303	339	458
50.0	8.30	20.1	32.1	45.9	70.9	95.9	108	133	158	183	233	271	346	383	504
25.0	15.9	30.3	43.3	63.9	92.8	121	135	163	190	218	272	312	392	432	558
10.0	25.0	40.6	53.9	83.5	116	147	162	193	222	252	309	352	437	478	617
5.0	31.2	47.1	59.9	96.9	131	164	180	212	243	274	334	378	465	509	672
1.0	43.8	58.8	70.7	126	164	200	218	252	285	318	382	429	522	568	776
	2.5	10	25	40	65	100	150	250	400	600	1000	1500	2500	4000	6000
	Acceptable Quality Levels (tightened inspection)														

TABLE X-D-2 - SAMPLING PLANS FOR SAMPLE SIZE CODE LETTER: D

Type of sampling plan	Cumulative sample size	Acceptable Quality Levels (normal inspection)																	Cumulative sample size
		Less than 1.5	1.5	2.5	4.0	6.5	10	15	25	40	65	100	150	250	400	Higher than 400			
		Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re		
Single	8	▽	0	1														△	8
Double	5 10	▽	•															△	5 10
Multiple	2	▽	•															△	2 4 6 8 10 12 14
	4																		
	6																		
	8																		
	10																		
	12																		
	14																		
	Less than 2.5	2.5	4.0	6.5	10	15	25	40	65	100	150	250	400	Higher than 400					

△ = 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 letter G).

• = Acceptance not permitted at this sample size.

TABLE X-E—Tables for sample size code letter: E

CHART E - OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

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

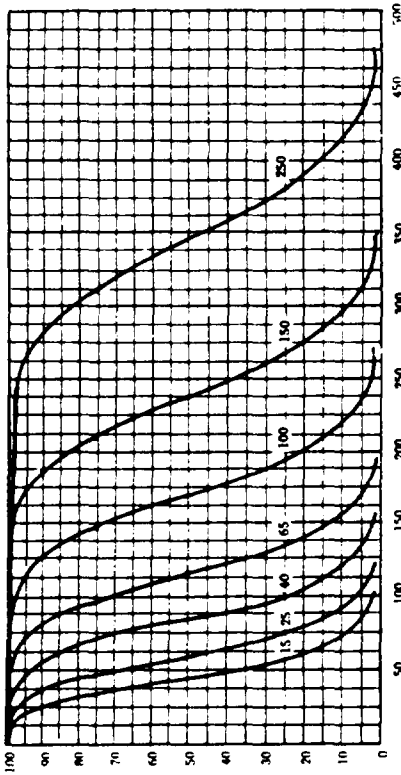
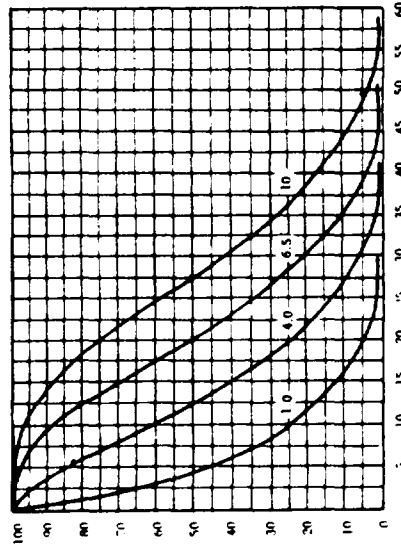
PERCENT OF LOTS
ACCEPTED TO 100
ACCEPTED (P_a)QUALITY OF SUBMITTED LOTS (p, in percent defective for AQL's ≤ 10 ; in defects per hundred units for AQL's > 10)
Note: Figures on curves are Acceptable Quality Levels (AQL's) for normal inspection.

TABLE X-E-1 - TABULATED VALUES FOR OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

P _a	Acceptable Quality Levels (normal inspection)																	Acceptable Quality Levels (tightened inspection)																
	1.0	4.0	6.5	10	1.0	4.0	6.5	10	15	25	40	65	100	150	250	1.0	4.0	6.5	10	15	25	40	65	100	150	250								
	p (in percent defective)										p (in defects per hundred units)																							
99.0	0.077	1.19	3.63	7.00	0.078	1.15	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	6.63	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	4.16	8.80	14.2	0.808	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	2.22	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	97.5	113	144	168	213	236	321	344														
25.0	10.1	19.4	28.0	36.2	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	41.5	50.6	58.7	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	10	10	1.5	6.5	10	15	25	40	40	65	100	150	250	250	250	250	250	250														

Note: Binomial distribution used for percent defective computations. Figures for defects per hundred units.

TABLE X-E-2 - SAMPLING PLANS FOR SAMPLE SIZE CODE LETTER: E

Type of sampling plan	Cumulative sample size	Acceptable Quality Levels (normal inspection)																				Cumulative sample size																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
		Less than 1.0	1.0	1.5	2.5	4.0	6.5	10	15	25	40	65	100	150	250	Higher than 250																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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△ = 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 letter H).

= Acceptance not permitted at this sample size.

TABLE X-F—Tables for sample size code letter: F

CHART F - OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

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

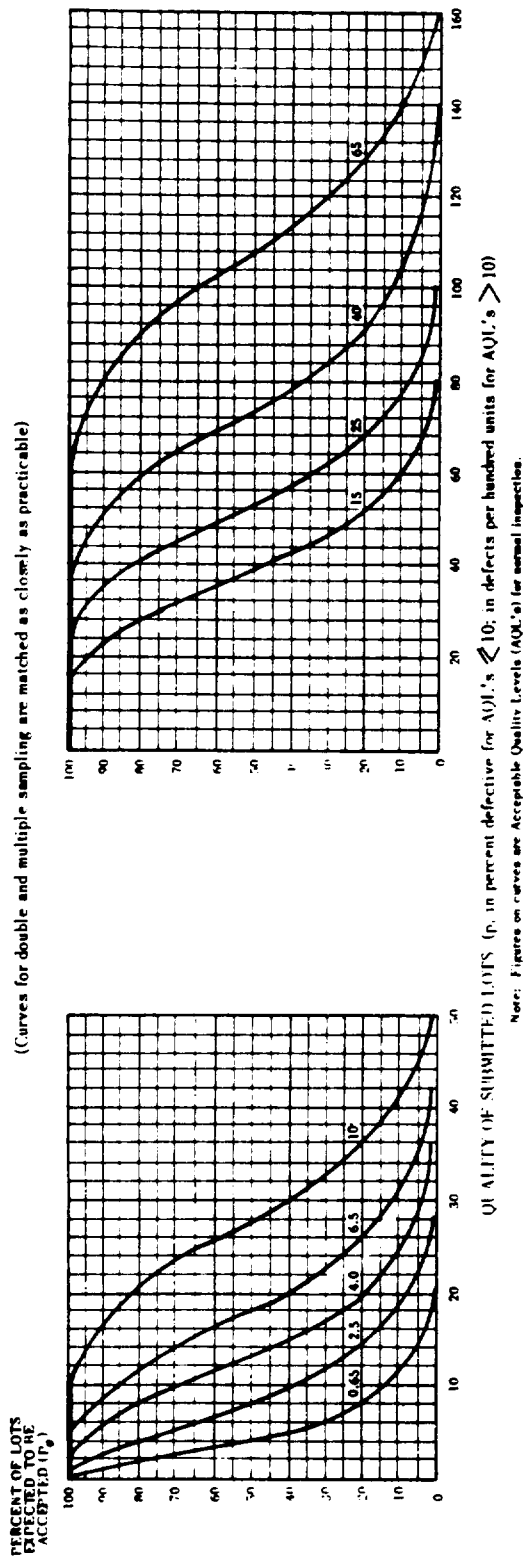


TABLE X-F-1 - TABULATED VALUES FOR OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

Pa	Acceptable Quality Levels (normal inspection)														
	p (in percent defective)					p (in defects per hundred units)									
	0.65	2.5	4.0	6.5	10	0.65	2.5	4.0	6.5	10	15	25	40	65	65
99.0	0.050	0.75	2.25	4.31	9.75	0.051	0.75	2.18	4.12	8.92	14.5	23.9	30.5	37.4	51.7
95.0	0.256	1.80	4.22	7.13	14.0	0.257	1.78	4.09	6.83	13.1	19.9	30.8	38.5	46.2	62.2
90.0	0.525	2.69	5.64	9.03	16.6	0.527	2.66	5.51	8.73	15.8	23.3	35.1	43.2	51.5	68.4
75.0	1.43	4.81	8.70	12.8	21.6	1.44	4.81	8.68	12.7	21.1	29.8	34.2	43.1	52.1	79.5
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	93.3
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	109
10.0	10.9	18.1	24.5	30.4	41.5	11.5	19.5	26.6	33.4	46.4	58.9	65.0	77.0	88.9	124
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	133
1.0	20.6	28.9	35.6	42.0	53.4	23.0	33.2	42.0	50.2	65.5	80.0	87.0	101	114	153
1.0	4.0	6.5	10	15	25	4.0	6.5	10	15	25	40	65	109	172	285

Notes: Binomial distribution used for percent defective comparisons; Poisson for defects per hundred units.

TABLE X-F-2 - SAMPLING PLANS FOR SAMPLE SIZE CODE LETTER: F

Type of sampling plan	Cumulative sample size	Acceptable Quality Levels (normal inspection)																												Cumulative sample size			
		Less than 0.65	0.65		1.0		1.5		2.5		4.0		6.5		10		15		25		40		65		Higher than 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	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	△	20
Double	13	▽	•							0	2	0	3	1	4	2	5	3	7	3	7	5	9	6	10	7	11	9	14	11	16	△	13
	26									1	2	3	4	4	5	6	7	8	9	11	12	12	13	15	16	18	19	23	24	26	27		26
Multiple	5	▽	•							•	2	•	2	•	3	•	4	0	4	0	4	0	5	0	6	1	7	1	8	2	9	△	5
	10									•	2	0	3	0	3	1	5	1	6	2	7	3	8	3	9	4	10	6	12	7	14		10
	15									0	2	0	3	1	4	2	6	3	8	4	9	6	10	7	12	8	13	11	17	13	19		15
	20									0	3	1	4	2	5	3	7	5	10	6	11	8	13	10	15	12	17	16	22	19	25		20
	25									1	3	2	4	3	6	5	8	7	11	9	12	11	15	14	17	17	20	22	25	25	29		25
	30									1	3	3	5	4	6	7	9	10	12	12	14	14	17	18	20	21	23	27	29	31	33		30
	35									2	3	4	5	6	7	9	10	13	14	14	15	18	19	21	22	25	26	32	33	37	38		35
			Less than 1.0	1.0	1.5	2.5	4.0	6.5	10	15	25	40	65	10	15	25	40	65	Higher than 65														
																				Acceptable Quality Levels (tightened inspection)													

△ = 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 letter J).

• = Acceptance not permitted at this sample size.

Note: Dimensions listed are for current defective composition; Please be refer to our standard notes.

TABLE X-G-2 - SAMPLING PLANS FOR SAMPLE SIZE CODE LETTER: G

Type of sampling plan	Cumulative sample size	Acceptable Quality Levels (normal inspection)																														
		Less than 0.40	0.40		0.65		1.0		1.5		2.5		4.0		6.5		10		15		25		40		Higher than 40							
		Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re					
		Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re					
Single	32	▽		0	1					1	2	2	3	3	4	5	6	7	8	9	10	11	12	13	14	15	18	19	21	22	△	
	20	▽				Use				0	2	0	3	1	4	2	5	3	7	3	5	9									△	
Double	40			•		Letter	F	Letter	J	1	2	3	4	4	5	6	7	8	9	11	12	12	13	15	16	18	19	23	24	26	27	
	8	▽		•						#	2	#	2	#	3	#	4	0	4	0	4	0	5	0	6	1	7	1	8	2	9	△
Multiple	16									#	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	3	1	4	2	5	3	7	5	10	6	11	8	13	10	15	12	17	16	22	19	25	
	40									1	3	2	4	3	6	5	8	7	11	9	12	11	15	14	17	17	20	22	25	25	29	
	48									1	3	3	5	4	6	7	9	10	12	12	14	14	17	18	20	21	23	27	29	31	33	
	56										2	3	4	5	6	7	9	10	13	14	15	18	19	21	22	25	26	32	33	37	38	
		Less than 0.65		0.65		△		1.0		1.5		2.5		4.0		6.5		10		15		25		40		Higher than 40						Higher than 40
		Acceptable Quality Levels (tightened inspection)																														

△ = 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.

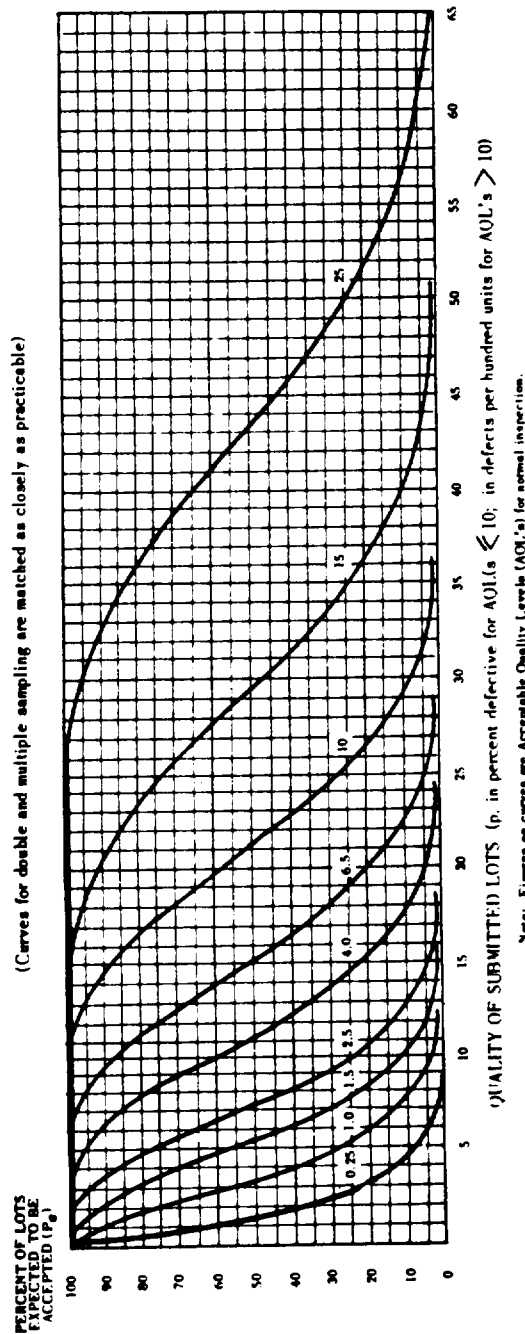
• = Use single sampling plan above (or alternatively use letter K).

= Acceptance not permitted at this sample size.

TABLE X-H—Tables for sample size code letter: H

CHART H - OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

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



Note: Figures on curves are Acceptable Quality Levels (AQL's) for normal inspection.

TABLE X-H-1 - TABULATED VALUES FOR OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

P _d	Acceptable Quality Levels (normal inspection)														
	p (in percent defective)							p (in defects per hundred units)							
	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
99.0	0.020	0.306	0.888	1.69	3.66	6.06	7.41	0.020	0.298	0.872	1.65	3.57	5.81	7.01	9.54
95.0	0.103	0.712	1.66	2.77	5.34	8.20	9.74	0.103	0.710	1.64	2.73	5.23	7.96	9.39	12.3
90.0	0.210	1.07	2.23	3.54	6.42	9.53	11.2	0.210	1.06	2.20	3.49	6.30	9.31	10.9	14.0
75.0	0.574	1.92	3.46	5.09	8.51	12.0	13.8	0.576	1.92	3.45	5.07	8.44	11.9	13.7	17.2
50.0	1.38	3.33	5.31	7.30	11.3	15.2	17.2	1.39	3.36	5.35	7.34	11.3	15.3	17.3	20.8
25.0	2.74	5.30	7.70	10.0	14.5	18.8	21.0	2.77	5.39	7.84	10.2	14.8	19.4	21.6	26.0
10.0	4.50	7.56	10.3	12.9	17.8	22.4	24.7	4.61	7.78	10.6	13.4	18.6	23.5	26.0	30.8
5.0	5.82	9.13	12.1	14.8	19.9	24.7	27.0	5.99	9.49	12.6	15.5	21.0	26.3	28.9	33.9
1.0	8.80	12.5	15.9	18.8	24.3	29.2	31.7	9.21	13.3	16.8	20.1	26.2	32.0	34.8	40.3
0.40	1.5	2.5	4.0	6.5	10	15	25	0.40	1.5	2.5	4.0	6.5	10	15	25

Acceptable Quality Levels (tightened inspection)

Note: Binomial distribution used for percent defective computations; Poisson for defects per hundred units.

TABLE X-H-2 - SAMPLING PLANS FOR SAMPLE SIZE CODE LETTER: H

Type of sampling plan	Cumulative sample size	Acceptable Quality Levels (normal inspection)																								Higher than 25							
		Less than 0.25	0.25		0.40		0.65		1.0		1.5		2.5		4.0		6.5		10		15		25										
		Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re										
		Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re										
Single	50	▽	0	1		Use	Use	Ac	Re	1	2	2	3	3	4	5	6	7	8	8	9	10	10	11	12	13	14	15	18	19	21	22	△
Double	32 64	▽	•		Use	Letter	Letter	Ac	Re	0	2	0	3	1	4	2	5	3	7	3	7	5	9	6	10	7	11	9	14	11	16	△	
Multiple	13 26 39 52 65 78 91	▽	•		G	K	J	Ac	Re	•	2	•	2	•	3	•	4	0	4	0	4	0	5	0	6	1	7	1	8	2	9	△	
	Less than 0.40	0.40	X	0.65	1.0	1.5	2.5	4.0	6.5	X	10	15	X	25	X	Higher than 25																	
Acceptable Quality Levels (tightened inspection)																																	

△ = 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

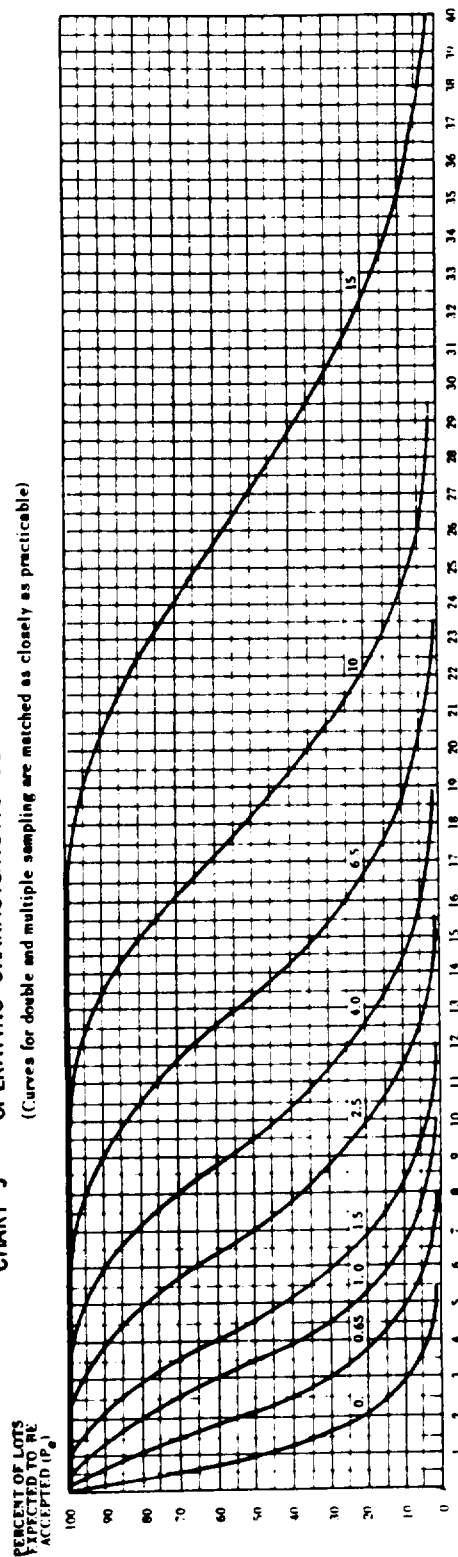
• = Use single sampling plan above (or alternatively use letter L).

• = Acceptance not permitted at this sample size.

TABLE X-J—Tables for sample size code letter: J

CHART J - OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

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



QUALITY OF SUBMITTED LOTS (p, in percent defective for AQL's ≤ 10 ; in defects per hundred units for AQL's > 10)
Note: Figures on curves are Acceptable Quality Levels (AQL's) for normal inspection.

TABLE X-J-1 - TABULATED VALUES FOR OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

P _d	Acceptable Quality Levels (normal inspection)																					
	0.15	0.65	1.0	1.5	2.5	4.0	6.5	10	15	25	4.0	6.5	10	15	25	4.0	6.5	10	15	25	4.0	6.5
	p (in percent defective)											p (in defects per hundred units)										
99.0	0.013	0.188	0.550	1.05	2.30	3.72	4.50	6.13	7.88	9.75	0.013	0.186	0.545	1.03	2.23	3.63	4.38	5.96	7.62	9.35	12.9	15.7
95.0	0.064	0.444	1.03	1.73	3.32	5.06	5.98	7.91	9.89	11.9	0.064	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	0.666	1.38	2.20	3.98	5.91	6.91	8.95	11.0	13.2	0.131	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	1.202	2.16	3.18	5.30	7.50	8.62	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	0.861	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	6.31	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	21.8	27.2	31.2
10.0	2.84	4.78	6.52	8.16	11.3	14.2	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	5.80	7.66	9.39	12.7	15.8	17.3	20.3	23.2	26.0	3.75	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	8.00	10.1	12.0	15.6	18.9	20.5	23.6	26.5	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	15	23.6	26.5	0.25	1.0	1.5	2.5	4.0	6.5	10	15	23.6	26.5	31.8	38.2
	Acceptable Quality Levels (tightened inspection)																					

Note: All values given in above table based on Poisson distribution as an approximation to the Binomial.

TABLE X-J-2 - SAMPLING PLANS FOR SAMPLE SIZE CODE LETTER: J

Type of sampling plan	Cumulative sample size	Acceptable Quality Levels (normal inspection)																												Higher than 15		
		Acceptable Quality Levels (normal inspection)																														
		Less than 0.15	0.15	0.25	0.40	0.65	1.0	1.5	2.5	4.0	6.5	10	15	Higher than 15																		
Single	80	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	
		0	1																													
Double	50	▽	*																													
	100																															
Multiple	20	▽	*																													
	40																															
	60																															
	80																															
	100																															
	120																															
	140																															
		Less than 0.25	0.25																													
		Acceptable Quality Levels (tightened inspection)																												Higher than 15		

△ = 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 letter M)

= Acceptance not permitted at this sample size.

TABLE X-K—Tables for sample size code letter: K

CHART K - OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

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

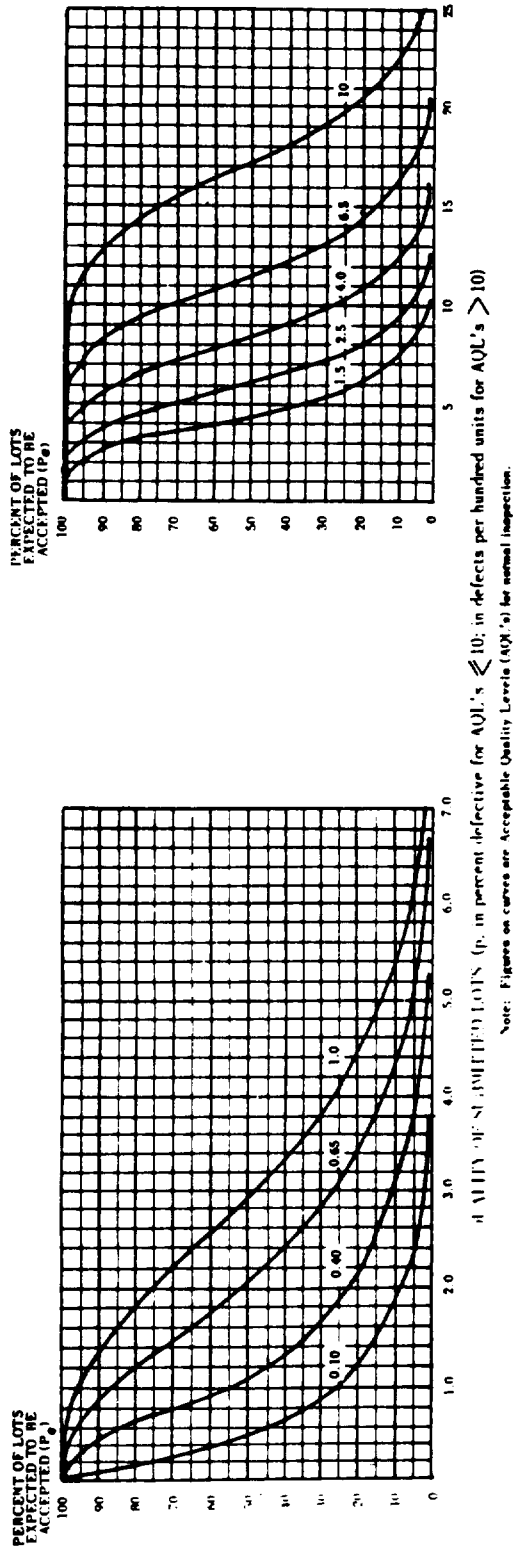


TABLE X-K-1 - TABULATED VALUES FOR OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

P_a	Acceptable Quality Levels (normal inspection)									
	0.10	0.40	0.65	1.0	1.5	2.5	4.0	6.5	10	
	p (in percent defective or defects per hundred units)									
99.0	0.0081	0.119	0.349	0.658	1.43	2.33	2.81	4.88	8.28	10.1
95.0	0.0410	0.284	0.654	1.09	2.09	3.19	3.76	6.15	9.95	11.9
90.0	0.0840	0.426	0.882	1.40	2.52	3.73	4.35	6.92	10.9	13.0
75.0	0.230	0.769	0.382	2.03	3.38	4.77	5.47	8.34	12.7	14.9
50.0	0.554	1.34	2.14	2.94	4.54	6.14	6.94	10.1	14.9	17.3
25.0	1.11	2.15	3.14	4.09	5.94	7.75	8.64	12.2	17.4	20.0
10.0	1.84	3.11	4.26	5.35	7.42	9.42	10.4	14.2	19.8	22.5
5.0	2.40	3.80	5.04	6.20	8.41	10.5	11.5	15.6	21.4	24.2
1.0	3.66	5.31	6.73	8.04	10.5	12.8	18.3	20.4	24.5	27.5
	0.15	0.65	1.0	1.5	2.5	4.0	6.5	10	10	X
	Acceptable Quality Levels (tightened inspection)									

Note: All values given in above table based on Poisson distribution as an approximation to the Binomial.

TABLE X-K-2 - SAMPLING PLANS FOR SAMPLE SIZE CODE LETTER: K

Type of sampling plan	Cumulative sample size	Acceptable Quality Levels (normal inspection)																								Cumulative sample size		
		Less than 0.10		0.10		0.15		0.25		0.40		0.65		1.0		1.5		2.5		4.0		6.5		10			Higher than 10	
		Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		Ac	Re
		Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re		Ac	Re
Single	125	▽	0	1																							△	125
	80 160	▽	•																								△	80 160
Multiple	32	▽	•																								△	32
	64																											64
	96																											96
	128																											128
	160																											160
	192																											192
	224																											224
		Less than 0.15	0.15			0.25		0.40		0.65		1.0		1.5		2.5		4.0		6.5		10					Higher than 10	
Acceptable Quality Levels (tightened inspection)																												

△ = 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 letter N).

• = Acceptance not permitted at this sample size.

CHART L - OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

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

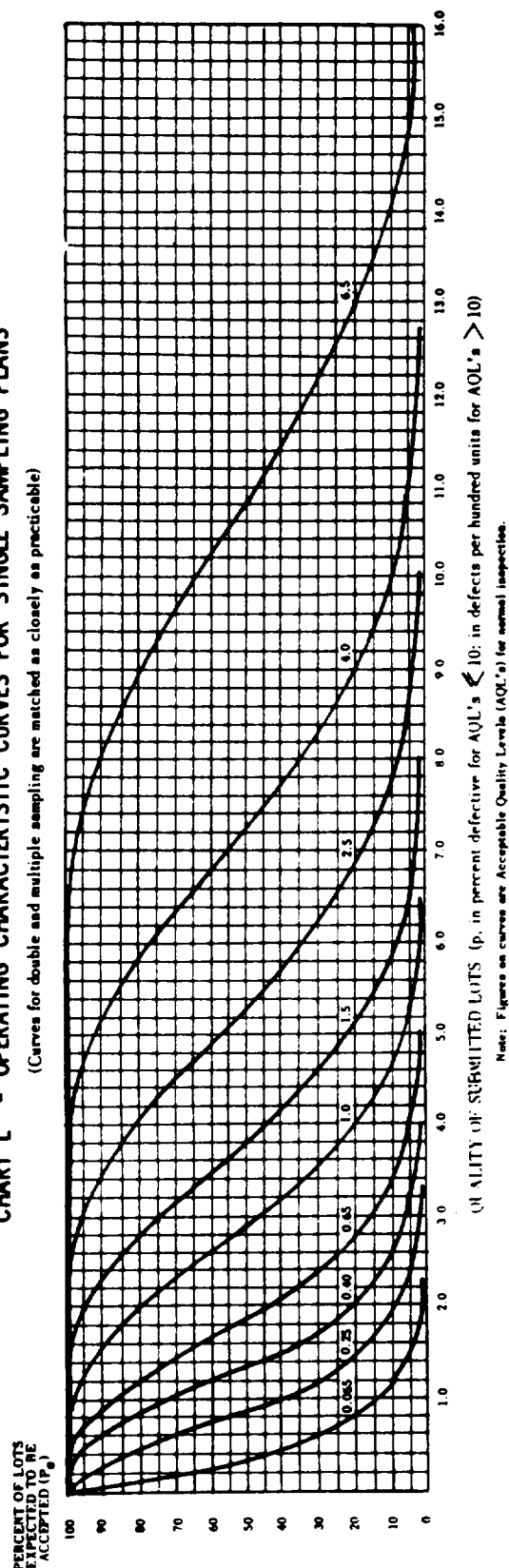


TABLE X-L-1 - TABULATED VALUES FOR OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS.

P _o	Acceptable Quality Levels (normal inspection)											
	0.065	0.25	0.40	0.65	1.0	1.5	2.5	4.0	6.5			
	p (in percent defective or defects per hundred units)											
99.0	0.0051	0.075	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	0.409	0.683	1.31	1.99	2.35	3.09	3.85	4.62	6.22	7.45
90.0	0.0525	0.266	0.551	0.873	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	2.98	3.42	4.31	5.21	6.12	7.95	9.34
50.0	0.347	0.839	1.34	1.84	2.84	3.84	4.33	5.33	6.33	7.33	9.33	10.8
25.0	0.693	1.35	1.96	2.56	3.71	4.84	5.40	6.51	7.61	8.70	10.9	12.5
10.0	1.15	1.95	2.66	3.34	4.64	5.89	6.50	7.70	8.89	10.1	12.4	14.1
5.0	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	2.30	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	X	2.5	X	4.0	X	6.5	X
	Acceptable Quality Levels (tightened inspection)											

Water: A 17-ounce glass is about half a quart. A quart is the amount of water in a quart jug. A quart is the amount of water in a quart jug.

TABLE X-L-2 - SAMPLING PLANS FOR SAMPLE SIZE CODE LETTER: L

Type of sampling plan	Cumulative sample size	Acceptable Quality Levels (normal inspection)																	Cumulative sample size
		Less than 0.065	0.065	0.10	0.15	0.25	0.40	0.65	1.0	1.5	2.5	4.0	6.5	Higher than 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				
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	△	200	
Double	125	▽	•		Use	0 2	0 3	1 4	2 5	3 7	3 7	5 9	6 10	7 11	9 14	11 16	△	125	
	250			Letter	Letter	1 2	3 4	4 5	6 7	8 9	11 12	12 13	15 16	18 19	23 24	26 27		250	
Multiple	50	▽	•			•	2 •	• 3	• 4	0 4	0 4	0 5	0 6	1 7	1 8	2 9	△	50	
	100						•	2 0	3 1	5 1	6 2	7 3	8 3	9 4	10 6	12 7	14	100	
	150						0 2	0 3	1 4	2 6	3 8	4 9	6 10	7 12	8 13	11 17	13 19	150	
	200						0 3	1 4	2 5	3 7	5 10	6 11	8 13	10 15	12 17	16 22	19 25	200	
	250						1 3	2 4	3 6	5 8	7 11	9 12	11 15	14 17	17 20	22 25	25 29	250	
	300						1 3	3 5	4 6	7 9	10 12	12 14	14 17	18 20	21 23	27 29	31 33	300	
	350						2 3	4 5	6 7	9 10	13 14	14 15	18 19	21 22	25 26	32 33	37 38	350	
		Less than 0.10	0.10	0.15	0.25	0.40	0.65	1.0	1.5	2.5	4.0	6.5	Higher than 6.5						
Acceptable Quality Levels (tightened inspection)																			

△ = 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

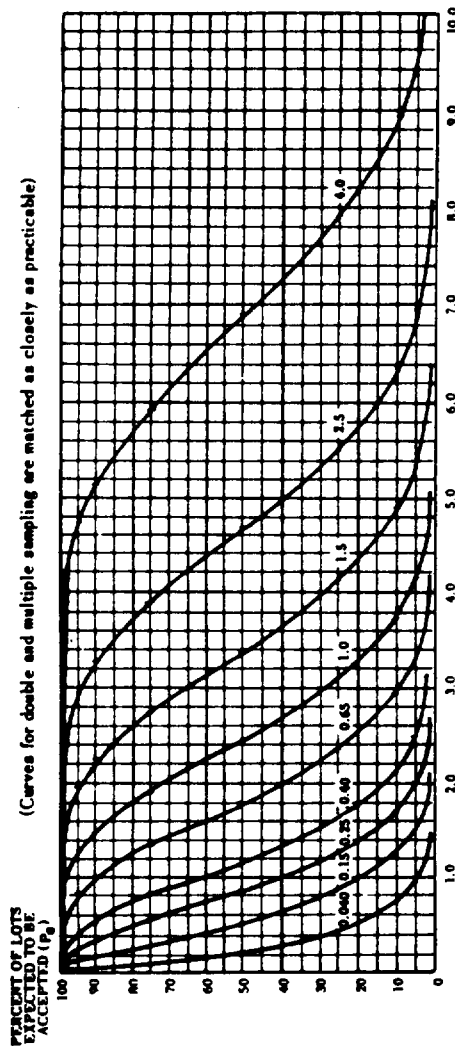
• = Use single sampling plan above (or alternatively use letter P).

• = Acceptance not permitted at this sample size.

TABLE X-M—Tables for sample size code letter: M

CHART M - OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

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



QUALITY OF SUBMITTED LOTS (p , in percent defective for AQL's ≤ 10 ; in defects per hundred units for AQL's > 10)

Note: Figures on curves are Acceptable Quality Levels (AQL's) for normal inspection.

TABLE X-M-1 - TABULATED VALUES FOR OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

P _o	Acceptable Quality Levels (normal inspection)											
	0.040	0.15	0.25	0.40	0.65	1.0	1.5	2.5	4.0			
	p (in percent defective or in defects per hundred units)											
99.0	0.0032	0.047	0.138	0.261	0.566	0.922	1.11	1.51	1.94	2.38	3.28	3.99
95.0	0.0163	0.112	0.259	0.433	0.829	1.26	1.49	1.96	2.44	2.94	3.95	4.73
90.0	0.0333	0.168	0.349	0.533	1.00	1.48	1.72	2.23	2.75	3.27	4.34	5.16
75.0	0.0914	0.305	0.590	0.804	1.34	1.89	2.17	2.74	3.31	3.89	5.05	5.93
50.0	0.220	0.532	0.848	1.17	1.80	2.43	2.75	3.39	4.02	4.66	5.93	6.88
25.0	0.440	0.854	1.24	1.62	2.36	3.07	3.43	4.13	4.83	5.52	6.90	7.92
10.0	0.731	1.23	1.69	2.12	2.94	3.74	4.13	4.89	5.65	6.39	7.86	8.95
5.0	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	1.46	2.11	2.67	3.19	4.16	5.08	5.53	6.40	7.25	8.08	9.71	10.9
	0.065	0.25	0.40	0.65	1.0	1.5	2.5	4.0	6.0	8.0	10.0	12.5
Acceptable Quality Levels (tightened inspection)												

Note: All values given in above table based on Poisson distribution as an approximation to the Binomial

TABLE X-M-2 - SAMPLING PLANS FOR SAMPLE SIZE CODE LETTER: M

Type of sampling plan	Cumulative sample size	Acceptable Quality Levels (normal inspection)																												Cumulative sample size				
		Less than 0.040	0.040		0.065		0.10		0.15		0.25		0.40		0.65		1.0		1.5		2.5		4.0		Higher than 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	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re						
Single	315	▽	0	1		Use	Letter	Use	Letter	N	0	2	0	3	1	4	2	5	3	7	8	9	10	11	12	13	14	15	18	19	21	22	△	315
Double	200 400	▽	•			Use	Letter	L	P	N	1	2	3	4	5	6	7	8	9	11	12	13	15	16	18	19	23	24	26	27	△	200 400		
Multiple	80	▽	•								#	2	#	2	#	3	#	4	0	4	0	4	0	5	0	6	1	7	1	8	2	9	△	80
	160										#	2	0	3	0	3	1	5	1	6	2	7	3	8	3	9	4	10	6	12	7	14	160	
	240										0	2	0	3	1	4	2	6	3	8	4	9	6	10	7	12	8	13	11	17	13	19	240	
	320										0	3	1	4	2	5	3	7	5	10	6	11	8	13	10	15	12	17	16	22	19	25	320	
	400										1	3	2	4	3	6	5	8	7	11	9	12	11	15	14	17	17	20	22	25	25	29	400	
	480										1	3	3	5	4	6	7	9	10	12	12	14	14	17	18	20	21	23	27	29	31	33	480	
	560										2	3	4	5	6	7	9	10	13	14	14	15	18	19	21	22	25	26	32	33	37	38	560	
		Less than 0.065	0.065				0.10	0.15	0.25	0.40	0.65	1.0	1.5	2.5	4.0	Higher than 4.0	Acceptable Quality Levels (tightened inspection)														Higher than 4.0			

△ = 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 letter Q).

= Acceptance not permitted at this sample size.

TABLE X-N—Tables for sample size code letter: N

CHART N - OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

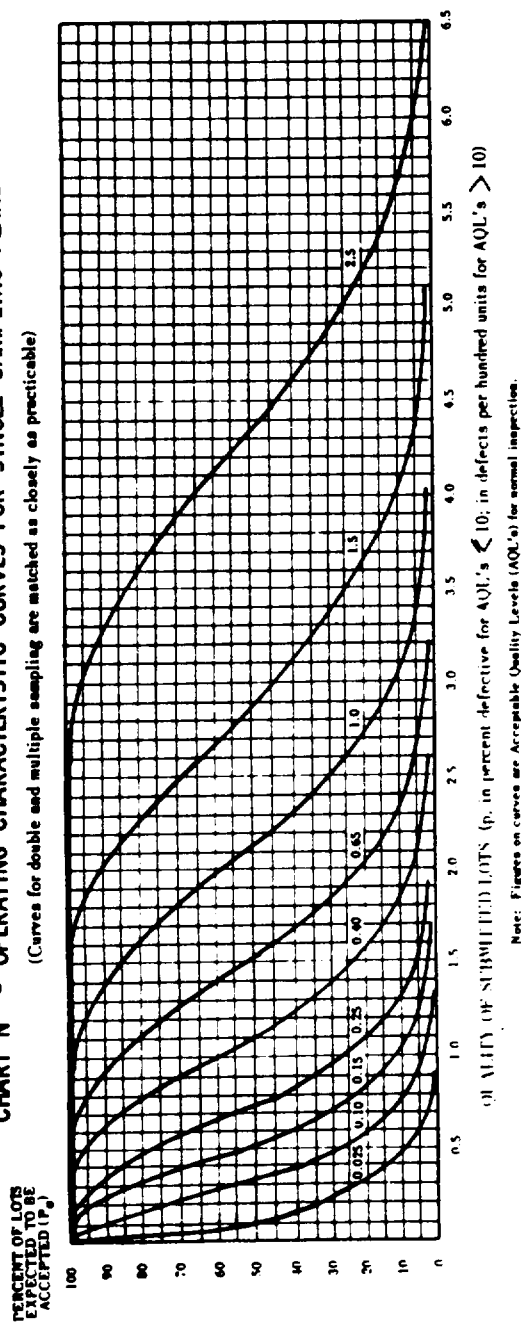


TABLE X-N-1 - TABULATED VALUES FOR OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

P _a	Acceptable Quality Levels (normal inspection)												
	0.025	0.10	0.15	0.25	0.40	0.65	1.0	1.54	2.06	2.32	2.51	2.98	3.25
	p (in percent defective or in defects per hundred units)												
99.0	0.0020	0.030	0.087	0.165	0.357	0.581	0.701	0.954	1.22	1.50	2.07	2.51	2.98
95.0	0.0103	0.071	0.164	0.273	0.523	0.796	0.939	1.23	1.54	1.85	2.49	2.98	3.25
90.0	0.0210	0.106	0.220	0.349	0.630	0.931	1.09	1.40	1.73	2.06	2.73	3.25	3.74
75.0	0.0576	0.192	0.345	0.507	0.844	1.19	1.37	1.72	2.08	2.45	3.18	3.74	4.33
50.0	0.139	0.336	0.535	0.734	1.13	1.53	1.73	2.13	2.53	2.93	3.73	4.33	4.99
25.0	0.277	0.539	0.784	1.02	1.48	1.94	2.16	2.60	3.04	3.48	4.35	4.99	5.64
10.0	0.461	0.778	1.06	1.34	1.86	2.35	2.60	3.08	3.56	4.03	4.95	5.64	6.05
5.0	0.599	0.949	1.26	1.55	2.10	2.63	2.89	3.39	3.89	4.38	5.34	6.05	6.87
1.0	0.921	1.328	1.68	2.01	2.62	3.20	3.48	4.03	4.56	5.09	6.12	6.87	7.51
0.040	0.15	0.25	0.40	0.65	1.0	1.54	2.06	2.51	2.98	3.25	3.74	4.33	4.99
Acceptable Quality Levels (tightened inspection)													
Note: All values given in above table based on Poisson distribution as an approximation to the Binomial													

TABLE X-N-2 - SAMPLING PLANS FOR SAMPLE SIZE CODE LETTER: N

Type of sampling plan	Cumulative sample size	Acceptable Quality Levels (normal inspection)																												Cumulative sample size											
		Less than 0.025	0.025	0.040	0.065	0.10	0.15	0.25	0.40	0.65	1.0	1.5	2.5	Higher than 2.5																											
															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	9	10	11	12	13	14	15	18	19	21	22	△									
Double	315 630	▽	•			Use	Letter	Use	Letter	0	2	0	3	1	4	2	5	3	7	3	7	5	9	6	10	7	11	9	14	11	16	△									
										1	2	3	4	4	5	6	7	8	9	11	12	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									#	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	3	1	4	2	5	3	7	5	10	6	11	8	13	10	15	12	17	16	22	19	25										
	625									1	3	2	4	3	6	5	8	7	11	9	12	11	15	14	17	17	20	22	25	25	29										
	750									1	3	3	5	4	6	7	9	10	12	12	14	14	17	18	20	21	23	27	29	31	33										
	875									2	3	4	5	6	7	9	10	13	14	14	15	18	19	21	22	25	26	32	33	37	38										
		Less than 0.040	0.040	0.065	0.10	0.15	0.25	0.40	0.65	1.0	1.5	2.5	Higher than 2.5																												
		Acceptable Quality Levels (tightened inspection)																																							

△ = 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 letter R).

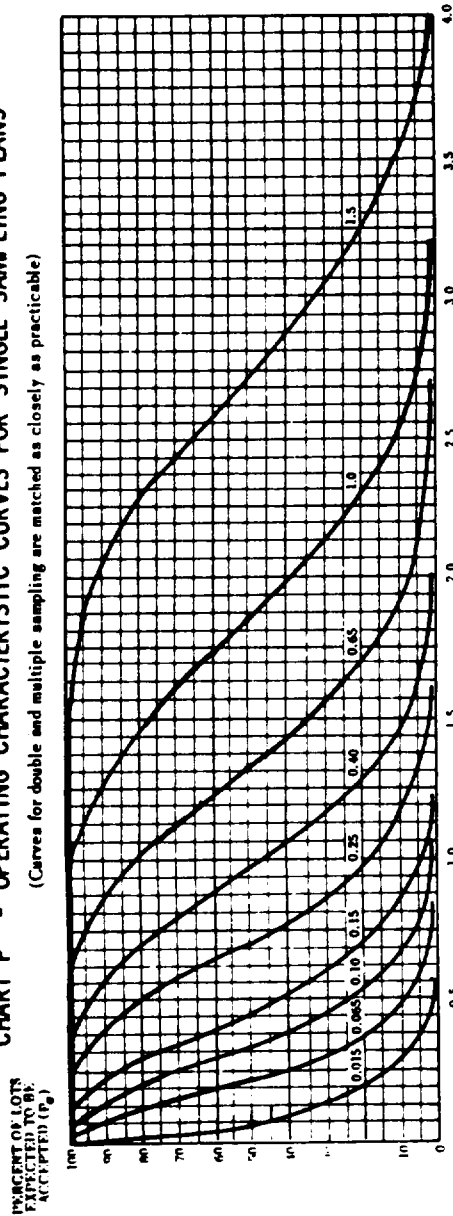
= Acceptance not permitted at this sample size.

N

TABLE X-P—Tables for sample size code letter: P

CHART P - OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

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

QUALITY OF SUBMITTED LOTS (p in percent defective for AQL's ≤ 10 ; in defects per hundred units for AQL's > 10)

Note: Figures on curves are Acceptable Quality Levels (AQL's) for normal inspection.

TABLE X-P-1 - TABULATED VALUES FOR OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

P_a	Acceptable Quality Levels (normal inspection)										
	0.015	0.065	0.10	0.15	0.25	0.40	0.65	1.0	1.5	2.0	2.5
p (in percent defective or defects per hundred units)											
99.0	0.0013	0.0186	0.055	0.103	0.223	0.363	0.438	0.596	0.762	0.935	1.29
95.0	0.0064	0.0444	0.102	0.171	0.327	0.498	0.587	0.771	0.961	1.16	1.56
90.0	0.0131	0.0665	0.138	0.218	0.394	0.582	0.679	0.878	1.08	1.29	1.71
75.0	0.0360	0.120	0.216	0.317	0.527	0.745	0.855	1.08	1.30	1.53	1.99
50.0	0.0866	0.210	0.334	0.459	0.709	0.959	1.08	1.33	1.58	1.83	2.33
25.0	0.173	0.337	0.490	0.639	0.928	1.21	1.35	1.63	1.90	2.18	2.72
10.0	0.288	0.486	0.665	0.835	1.16	1.47	1.62	1.93	2.22	2.52	3.09
5.0	0.375	0.593	0.787	0.969	1.31	1.64	1.80	2.12	2.43	2.74	3.34
1.0	0.576	0.830	1.05	1.26	1.64	2.00	2.18	2.52	2.85	3.18	3.82
0.025	0.10	0.10	0.15	0.25	0.40	0.65	1.0	1.5	2.0	2.5	3.0
Acceptable Quality Levels (tightened inspection)											
99.0	0.0013	0.0186	0.055	0.103	0.223	0.363	0.438	0.596	0.762	0.935	1.29
95.0	0.0064	0.0444	0.102	0.171	0.327	0.498	0.587	0.771	0.961	1.16	1.56
90.0	0.0131	0.0665	0.138	0.218	0.394	0.582	0.679	0.878	1.08	1.29	1.71
75.0	0.0360	0.120	0.216	0.317	0.527	0.745	0.855	1.08	1.30	1.53	1.99
50.0	0.0866	0.210	0.334	0.459	0.709	0.959	1.08	1.33	1.58	1.83	2.33
25.0	0.173	0.337	0.490	0.639	0.928	1.21	1.35	1.63	1.90	2.18	2.72
10.0	0.288	0.486	0.665	0.835	1.16	1.47	1.62	1.93	2.22	2.52	3.09
5.0	0.375	0.593	0.787	0.969	1.31	1.64	1.80	2.12	2.43	2.74	3.34
1.0	0.576	0.830	1.05	1.26	1.64	2.00	2.18	2.52	2.85	3.18	3.82
0.025	0.10	0.10	0.15	0.25	0.40	0.65	1.0	1.5	2.0	2.5	3.0

Note: All values given in above table based on Poisson distribution as an approximation to the Binomial

TABLE X-P-2 - SAMPLING PLANS FOR SAMPLE SIZE CODE LETTER: P

Type of sampling plan	Cumulative sample size	Acceptable Quality Levels (normal inspection)															Cumulative sample size
		0.010	0.015	0.025	0.040	0.065	0.10	0.15	0.25	0.40	0.65	1.0	1.5	Higher than 1.5			
		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	800	▽	0 1													△	800
Double	500	▽	*													△	500
	1000																1000
Multiple	200	▽	*													△	200
	400																400
	600																600
	800																800
	1000																1000
	1200																1200
	1400																1400
		Less than 0.025	0.025		0.040	0.065	0.10	0.15	0.25	0.40	0.65	1.0	1.5	Higher than 1.5			
Acceptable Quality Levels (tightened inspection)																	

△ = 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.

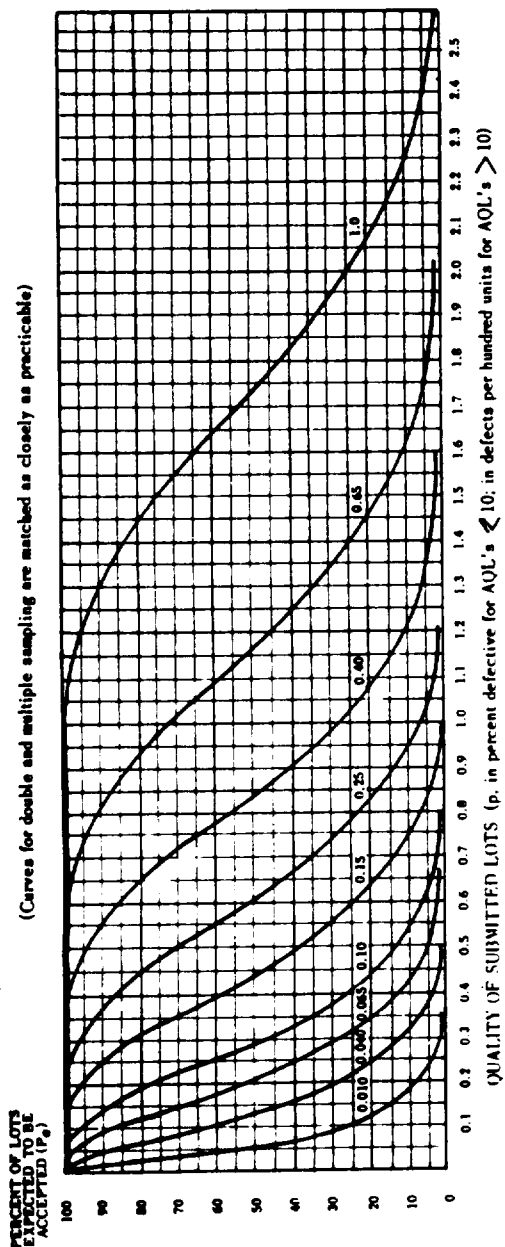
• = Use single sampling plan above.

/ = Acceptance not permitted at this sample size.

TABLE X-Q—Tables for sample size code letter: Q

CHART Q - OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

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



Note: Figures on curves are Acceptable Quality Levels (AQL's) for normal inspection

TABLE X-Q-1 - TABULATED VALUES FOR OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

P _a	Acceptable Quality Levels (normal inspection)											
	0.010	0.040	0.065	0.10	0.15	0.25	0.40	0.65	1.0	1.0	1.0	
p (in percent defective or defects per hundred units)												
99.0	0.00081	0.0119	0.0349	0.0656	0.143	0.232	0.281	0.382	0.488	0.598	0.828	1.01
95.0	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	0.00840	0.0426	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	0.476	0.547	0.690	0.834	0.979	1.27	1.49
50.0	0.0554	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	0.314	0.409	0.594	0.775	0.864	1.04	1.22	1.39	1.74	2.00
10.0	0.184	0.310	0.426	0.534	0.742	0.942	1.04	1.23	1.42	1.61	1.98	2.25
5.0	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	0.531	0.672	0.804	1.05	1.28	1.83	1.61	1.83	2.04	2.45	2.75
	0.015	0.065	0.10	0.15	0.25	0.40	0.65	1.0	1.61	2.04	2.45	3.10
Acceptable Quality Levels (tightened inspection)												
99.0	0.00081	0.0119	0.0349	0.0656	0.143	0.232	0.281	0.382	0.488	0.598	0.828	1.01
95.0	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	0.00840	0.0426	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	0.476	0.547	0.690	0.834	0.979	1.27	1.49
50.0	0.0554	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	0.314	0.409	0.594	0.775	0.864	1.04	1.22	1.39	1.74	2.00
10.0	0.184	0.310	0.426	0.534	0.742	0.942	1.04	1.23	1.42	1.61	1.98	2.25
5.0	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	0.531	0.672	0.804	1.05	1.28	1.83	1.61	1.83	2.04	2.45	2.75
	0.015	0.065	0.10	0.15	0.25	0.40	0.65	1.0	1.61	2.04	2.45	3.10

Note: All values given in above table based on Poisson distribution as an approximation to the Binomial

TABLE X-Q-2 - SAMPLING PLANS FOR SAMPLE SIZE CODE LETTER: Q

Type of sampling plan	Cumulative sample size	Acceptable Quality Levels (normal inspection)																								Cumulative sample size		
		0.010		0.015		0.025		0.040		0.065		0.10		0.15		0.25		0.40		0.65		1.0		Higher than 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		Higher than 1.0	
Single	1250	0 1																								Δ		
	800 1600	•		Use Letter		Use Letter		Use Letter																		Δ		
Multiple	315	•		P S R		•		•		•		•		•		•		•		•		•		•		Δ		
	630																											
	945																											
	1260																											
	1575																											
	1890																											
2205																												
		0.010	0.015	0.025	0.040	0.065	0.10	0.15	0.25	0.40	0.65	1.0	Higher than 1.0															
Acceptable Quality Levels (tightened inspection)																												

Δ = 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.

TABLE X-R—Tables for sample size code letter: R

CHART R - OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

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

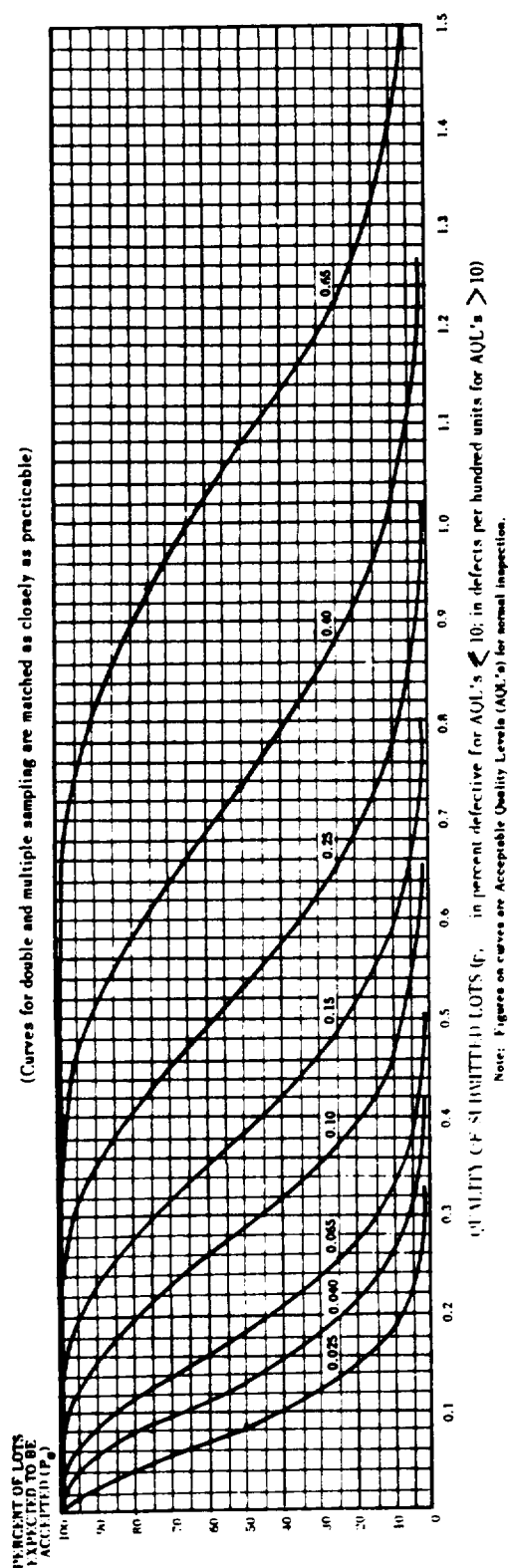


TABLE X-R-1 - TABULATED VALUES FOR OPERATING CHARACTERISTIC CURVES FOR SINGLE SAMPLING PLANS

P_a	Acceptable Quality Levels (normal inspection)									
	0.025	0.040	0.065	0.10	0.15	0.25	0.40	0.65	0.65	0.65
p (in percent defective or defects per hundred units)										
99.0	0.0074	0.0218	0.0412	0.0892	0.145	0.175	0.239	0.305	0.374	0.517
95.0	0.0178	0.0409	0.0683	0.131	0.199	0.235	0.309	0.385	0.462	0.622
90.0	0.0266	0.0551	0.0873	0.158	0.233	0.272	0.351	0.432	0.515	0.684
75.0	0.0481	0.0868	0.127	0.211	0.298	0.342	0.431	0.521	0.612	0.795
50.0	0.0839	0.134	0.184	0.284	0.384	0.433	0.533	0.633	0.733	0.933
25.0	0.115	0.196	0.256	0.371	0.484	0.540	0.651	0.761	0.870	1.09
10.0	0.195	0.266	0.334	0.464	0.589	0.650	0.770	0.889	1.01	1.24
5.0	0.237	0.315	0.388	0.526	0.657	0.722	0.848	0.972	1.09	1.33
1.0	0.332	0.420	0.502	0.655	0.800	0.870	1.02	1.14	1.27	1.53
	0.040	0.065	0.10	0.15	0.25	0.40	0.65	0.65	0.65	0.65
Acceptable Quality Levels (tightened inspection)										

Note: All values given in above table based on Poisson distribution as an approximation to the Binomial.

TABLE X-R-2 - SAMPLING PLANS FOR SAMPLE SIZE CODE LETTER: R

Type of sampling plan	Cumulative sample size	Acceptable Quality Levels (normal inspection)																												Cumulative sample size
		0.010		0.015		0.025		0.040		0.065		0.10		0.15		0.25		0.40		0.65		Higher than 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	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re					
Single	2000	0	1																								Δ			
Double	1250																													
	2500	•																												
Multiple	500																													
	1000																													
	1500																													
	2000																													
	2500																													
	3000																													
	3500																													
		0.010	0.015																											
		Acceptable Quality Levels (tightened inspection)																												

△ = 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.

TABLE X-S—Tables for sample size code letter: S

Type of sampling plan	Cumulative sample size	Acceptable Quality Level (normal inspection)	
		Ac	Re
Single	3150	1	2
Double	2000	0	2
	4000	1	2
Multiple	800	#	2
	1600	#	2
	2400	0	2
	3200	0	3
	4000	1	3
	4800	1	3
	5600	2	3
		0.025	
		Acceptable Quality Level (tightened inspection)	

Ac = Acceptance number

Re = Rejection number

= Acceptance not permitted at this sample size.

Index of terms with special meanings

<i>Term</i>	<i>Paragraph</i>
Acceptable Quality Level (AQL)	4.2 and 11.1
Acceptance number	9.4 and 10.1.1
Attributes	1.4
Average Outgoing Quality (AOQ)	11.3
Average Outgoing Quality Limit (AOQL)	11.4
Average sample size	11.5
Batch	5.1
Classification of defects	2.1
Code letters	9.3
Critical defect	2.1.1
Critical defective	2.2.1
Defect	2.1
Defective unit	2.2
Defects per hundred units	3.3
Double sampling plan	10.1.2
Inspection	1.3
Inspection by attributes	1.4
Inspection level	9.2
Inspection lot or inspection batch	5.1
Isolated lot	11.6
Limiting Quality (LQ)	11.6
Lot	5.1
Lot or batch size	5.3
Major defect	2.1.2
Major defective	2.2.2
Minor defect	2.1.3
Minor defective	2.2.3
Multiple sampling plan	10.1.3
Normal inspection	8.1 and 8.2
Operating characteristic curve	11.1
Original inspection	11.2
Percent defective	3.2
Preferred AQLs	4.6
Process average	11.2
Reduced inspection	8.2 and 8.3.3
Rejection number	10.1.1
Responsible authority	1.1
Resubmitted lots or batches	6.4
Sample	7.1
Sample size	7.1
Sample size code letter	4.1 and 9.3
Sampling plan	9.5
Single sampling plan	10.1.1
Small-sample inspection	9.2
Switching procedures	8.3
Tightened inspection	8.2 and 8.3.1
Unit of product	1.5

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5801 Tabor Avenue
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Preparing Activity:

Army - Munitions Command