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An American National Standard

Standard Guide for Preferred Methods for Acceptance of Product[1]

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1. Scope

1.1 This guide establishes lot or batch and continuous sampling plans using MIL-STD-1916 as a basis. It represents an alternative sampling approach to attributes sampling (MIL-STD-105E, same as Practice E2234), variables sampling (MIL-STD-414, Practice E2762), and continuous sampling (MIL-STD-1235B, Practice E2819).

1.2 This guide provides the sampling plans of MIL-STD-1916 in ASTM format for use by ASTM committees and others. It recognizes the continuing usage of MIL-STD-1916 in industries supported by ASTM. Most of the original text in MIL-STD-1916 is preserved in Sections 4 – 6 of this guide. The original wording of "Government" in MIL-STD-1916 has been changed to "consumer", and "contractor" has been changed to "producer" to make this standard more generic.

1.3 *Purpose*—To encourage producers supplying goods and services to its consumers to submit efficient and effective process control (prevention) procedures in place of prescribed sampling requirements. The goal is to support the movement away from an AQL-based inspection (detection) strategy to implementation of an effective prevention-based strategy including a comprehensive quality system, continuous improvement and a partnership with the consumer. The underlying theme is a partnership between consumer and the producer, with the requisite competence of both parties, and a clear mutual benefit from processes capable of consistently high quality products and services. The objective is to create an atmosphere where every noncompliance is an opportunity for corrective action and improvement rather than one where acceptable quality levels are the contractually sufficient goals.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.5 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

E456 Terminology Relating to Quality and Statistics

E2234 Practice for Sampling a Stream of Product by Attributes Indexed by AQL

E2762 Practice for Sampling a Stream of Product by Variables Indexed by AQL

E2819 Practice for Single- and Multi-Level Continuous Sampling of a Stream of Product by Attributes Indexed by AQL

2.2 *Other Standards:*[3]

MIL-STD-105E Sampling Procedures and Tables for Inspection by Attributes

MIL-STD-1235B Single- and Multi-Level Continuous Sampling for Attributes

MIL-STD-1916 DoD Preferred Methods for Acceptance of Product

MIL-STD-414 Sampling Procedures and Tables for Inspection by Variables for Percent Defective

3. Terminology

3.1 *Definitions*—The terminology defined in Terminology E456 applies to this guide except as modified below.

3.1.1 *critical defect, n*—a defect that judgment and experience indicate would 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 function of a major end item. **E2234**

3.1.2 *inspection, n*—the process of measuring, examining, testing, or otherwise comparing the unit of product with the requirements. **E2234**

[1] This guide is under the jurisdiction of ASTM Committee E11 on Quality and Statistics and is the direct responsibility of Subcommittee E11.30 on Statistical Quality Control.

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[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

[3] Available from DLA Document Services, Building 4/D, 700 Robbins Ave., Philadelphia, PA 19111-5094, http://quicksearch.dla.mil.

3.1.3 *major defect, n*—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. **E2234**

3.1.4 *minor defect, n*—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. **E2234**

3.1.5 *non-conforming item, n*—an item containing at least one non-conformity. **E2234**

3.1.6 *production interval, n*—a finite period of production, N items in length. **E2819**

3.1.6.1 *Discussion*—In this guide, the production interval is a period of production under continuous sampling assumed to consist of essentially homogeneous quality. It is normally a shift; it can be a day if it is reasonably certain that shift changes do not affect quality of product, but shall not be longer than a day.

3.1.7 *screening, n*—100 % inspection where all defective units are removed from the production flow. **E2819**

3.1.7.1 *Discussion*—The two terms, screening and 100 % inspection, are used interchangeably in this practice.

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 *acceptance, n*—the act of an authorized representative of the consumer by which the consumer, for itself or as a agent of another, assumes ownership of existing identified supplied tendered or approves specific services rendered as partial or complete performance of the contract.

3.2.2 *contract quality assurance, n*—the various functions, including inspection, performed by the consumer to determine whether a producer has fulfilled the contract obligations pertaining to quality and quantity.

3.2.3 *contract quality requirements, n*—the technical requirements in the contract relating to the quality of the product or service and those contract clauses prescribing inspection, and other quality controls incumbent on the producer, to assure that the product or service conforms to the contractual requirements.

3.2.4 *critical characteristic, n*—see *critical defect*.

3.2.5 *critical nonconforming unit, n*—a unit of product that fails to conform to specified requirements for one of more critical characteristics.

3.2.6 *major characteristic, n*—see *major defect*.

3.2.7 *major nonconforming unit, n*—a unit of product that fails to conform to specified requirements for one or more major characteristics, but conforms to all critical characteristics.

3.2.8 *minor characteristic, n*—see *minor defect*.

3.2.9 *minor nonconforming unit, n*—a unit of product that fails to conform to specified requirements of one or more minor characteristics, but conforms to all critical and major characteristics.

3.2.10 *nonconformance, n*—a departure from a specified requirement for any characteristic.

3.2.11 *nonconforming unit, n*—see *non-conforming item*.

3.2.12 *quality, n*—the composite of material attributes including performance features and characteristics of a product or service to satisfy a given need.

3.2.13 *quality assurance, n*—a planned and systematic pattern of all actions necessary to provide adequate confidence that adequate technical requirements are established; products and services conform to established technical requirements; and satisfactory performance is achieved.

3.2.14 *quality audit, n*—a systematic examination of the acts and decisions with respect to quality in order to independently verify or evaluate the operational requirements of the quality program or the specification or contract requirements of the product or service.

3.2.15 *quality program, n*—a program which is developed, planned, and managed to carry out cost effectively all efforts to effect the quality of materials and services from concept through validation, full-scale development, production, deployment, and disposal.

3.2.16 *screening inspection, n*—see *screening*.

3.2.17 *traceability, n*—the ability to trace the history, application or location of an item or activity, or similar items or activities, by means of recorded identification.

3.2.18 *verification level (VL), n*—prescribes the level of significance or utility of a characteristic to the user.

3.2.18.1 *Discussion*—The amount of effort to assure conformance can be allocated on the basis of importance to the user. (Major characteristics will require more verification effort than minor characteristics.) VL-VII requires the highest level of effort, and the effort decreases as the VL decreases to the lowest level, VL-I.

4. Summary of Practice

4.1 *Acceptance by Producer-Proposed Provisions:*

4.1.1 *General:*

4.1.1.1 This standard, when referenced in the contract or product specifications, requires the producer to perform sampling inspection in accordance with paragraph 4.2 and the product specification. However, it is recognized that sampling inspection alone does not control or improve quality. Product quality comes from proper product and process design and process control activities. When such activities are effective, sampling inspection is a redundant effort and an unnecessary cost. Producers that have an acceptable quality system and proven process controls on specific processes are encouraged to consider submitting alternate acceptance methods for one or more contractually specified characteristics. In addition, producers that have a successful quality system and a history of successful process controls relevant to the products/services being procured in this contract, are encouraged to consider submitting a systemic alternate acceptance method for all the contractual sampling inspection requirements associated with paragraph 4.2.

4.1.1.2 Submissions shall describe the alternate acceptance methods, the sampling inspection provision to be replaced, and an evaluation of the protection provided by the alternate methods as compared with the inspection requirement to be

replaced. The alternate acceptance method shall include evidence of process control and capability during production together with adequate criteria, measurement, and evaluation procedures to maintain control of the process. The acceptability of the alternate acceptance methods is dependent upon the existence of a quality system, the demonstration of its process focus, and the availability of objective evidence of effectiveness.

4.1.2 *Requirements and Procedures:*

4.1.2.1 Producers currently operating quality systems in accordance with such models as ISO 9000, ANSI/ASQC Q9004, or others that are deemed satisfactory to the consumer representative are qualified to apply for alternate acceptance methods if demonstration of process focus and objective evidence of effectiveness exists.

4.1.2.2 The producer shall include in his request for approval of an alternate acceptance method an assessment plan to periodically verify process stability, capability, and other conditions under which the alternate acceptance method was developed. The current minimum values of process capability are equivalent to a Cpk of 2.00 for critical characteristics, 1.33 for major characteristics, and 1.00 for minor characteristics. Upon approval of the assessment plan, the producer may reduce or eliminate inspection sampling when the plan criteria are met or exceeded.

4.1.3 *Submission and Incorporation:*

4.1.3.1 *Submission*—There are two ways of submitting alternate acceptance methods:

(1) Submission of individual alternate acceptance methods for one or more contractually specified sampling inspection requirements through the consumer quality assurance representative (QAR) to the procuring contracting officer (PCO) for approval at any time during the contract period of performance.

(2) Submission of a systemic alternate acceptance method to the PCO prior to contract being awarded. This pre-approval allows the producer to adopt alternate acceptance methods throughout the length of the contract. After contract award, submissions of a systemic alternate acceptance method should be made through the administrative contracting officer (ACO) to the PCO.

4.1.3.2 *Incorporation*—All approved alternate acceptance methods shall be incorporated into the producer's manufacturing and quality program plans or other vehicles acceptable to the contracting agency, as applicable.

4.1.4 *Withdrawal of Approval of Alternates*—The consumer reserves the right to withdraw approval of alternate acceptance methods that are determined to provide less assurance of quality than the inspection requirements originally specified or when the inability to maintain process stability and capability over time becomes apparent.

4.2 *Acceptance by Tables:*

4.2.1 *Preferred Sampling Plans*—This standard establishes three sets of matched sampling plans for the sampling inspection of product submitted to the consumer for acceptance. These sampling plans provide for inspecting the samples from lots or batches by attributes or variables measurement and for continuous sampling by attributes measurement. The three sets of matched sampling plans are indexed by seven specified verification levels (VL) and five code letters (CL), which are determined by the lot or production interval size. The sampling plans are matched between corresponding VL and CL combinations to result in essentially similar protection. The producer has the option to utilize the type of plan, at the same verification level, that best complements the production process.

4.2.2 *Formation and Identification of Lots or Batches*—The product shall be assembled into identifiable lots, sublots, or batches, or in such other manner as may be prescribed. Each lot or batch shall, as far as practicable, 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. The lots or batches shall be identified by the producer and shall be kept intact in adequate and suitable storage space. Although lot or batch size is not used to select a continuous sampling plan, the formation of lots or batches may remain desirable for reasons of homogeneity, shipping convenience, and facilitation of payment.

4.2.3 *Determination of Sampling Plan*—A sampling plan is determined by:

4.2.3.1 Verification level (VL) as specified,

4.2.3.2 Type of sampling (attributes, variables, or continuous),

4.2.3.3 Lot or production interval size code letter (CL) from Table 1, and

4.2.3.4 Switching procedure (normal, tightened, reduced).

4.2.3.5 For lot acceptance situations (attributes or variables), the occurrence of one or more nonconformances

TABLE 1 Code Letters (CL) for Entry into the Sampling Tables

Lot or Production Interval Size	Verification Levels						
	VII	VI	V	IV	III	II	I
2-170	A	A	A	A	A	A	A
171-288	A	A	A	A	A	A	B
289-544	A	A	A	A	A	B	C
545-960	A	A	A	A	B	C	D
961-1632	A	A	A	B	C	D	E
1633-3072	A	A	B	C	D	E	E
3073-5440	A	B	C	D	E	E	E
5441-9216	B	C	D	E	E	E	E
9217-17408	C	D	E	E	E	E	E
17409-30720	D	E	E	E	E	E	E
30721 and larger	E	E	E	E	E	E	E

shall result in withholding acceptance of the product submitted and initiation of corrective action. When continuous sampling is in effect, the occurrence of a nonconforming unit while in a sampling phase results in withholding acceptance of that unit, a return to screening, and initiation of corrective action. If a nonconforming unit is found while in a screening phase, acceptance is withheld for that unit and screening is continued until the requirements of paragraph 6.2.3.3*(2)* are satisfied.

4.2.4 *Sampling of Lots or Batches:*

4.2.4.1 *Selection of Units*—Units of product drawn from a lot for a sample shall be selected at random from the lot without regard to their quality. Random sampling requires that each unit in the lot, batch, or production interval has the same probability of being selected for the sample.

4.2.4.2 *Representative (Stratified) 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. When representative sampling is used, the units from each sublot, subbatch, or part shall be selected at random.

4.2.4.3 *Process of Sampling*—A sample may be drawn after all units comprising the lot or batch have been assembled, or sample units may be drawn during assembly of the lot or batch, in which case the size of the lot or batch shall be determined before samples are drawn. When the lot or batch passes the sampling plan, such lots or batches are acceptable and may be submitted to the consumer.

4.2.4.4 *Non-Conforming Product*—When sample units are drawn during lot or batch assembly and nonconforming units are found, the producer shall withhold from acceptance that portion of the lot completed and all additional production occurring prior to the initiation and verification of corrective action. For lots or batches withheld from acceptance, the producer shall take the following actions:

(1) Screen the lots or batches and dispose of all nonconforming units in accordance with paragraph 4.3.

(2) Determine the cause of the nonconformances and implement appropriate process changes.

(3) Initiate the switching requirements of paragraph 6.2.1.3.

(4) Advise the consumer representative of actions taken and resubmit the screened lot or batches to the consumer for evaluation/consideration.

4.3 *Disposition of Nonconforming Product*—All units of product found to be nonconforming by the producer shall be removed and kept apart from the flow of production or otherwise identified or segregated to preclude submission to the consumer. The producer may rework or repair these units unless the contract excludes such activities. Corrected product shall be screened by the producer and resubmitted to the consumer apart from the regular flow of the product.

4.4 *Critical Characteristics*—Unless otherwise specified in the contract or product specifications, the producer is required for each critical characteristic to implement an automated screening or a fail-safe manufacturing operation and apply sampling plan VL-VII to verify the performance of the screening operation. The occurrence of one or more critical nonconformances requires corrective action as specified in paragraph 4.5.

4.5 *Special Reservations for Critical Nonconformance*—When a critical nonconformance is discovered at any phase of production or during any inspection, the following immediate actions are required:

4.5.1 Prevent delivery of critical nonconforming units to the consumer,

4.5.2 Notify the consumer representative,

4.5.3 Identify the cause,

4.5.4 Take corrective action, and

4.5.5 Screen all available units.

4.5.6 Records of corrective actions shall be maintained and made available to the consumer representative.

5. Significance and Use

5.1 Procurement practices encourage industry innovation and provide flexibility to achieve the benefits of continuous improvement.

5.2 There is an evolving industrial product quality philosophy that recognizes the need for quality policy changes that will provide producers with opportunities and incentives toward improvement of product quality and cooperative relationships between the producer and the consumer.

5.3 Process controls and statistical control methods are the preferable means of preventing nonconformances, controlling quality, and generating information for improvement. An effective process control system may also be used to provide information to assess the quality of deliverables submitted for acceptance. Producers are encouraged to use process control and statistical control procedures for their internal control and to submit effective process control procedures in lieu of prescribed sampling requirements to the consumer for approval.

5.4 Sampling inspection by itself is an inefficient industrial practice for demonstrating conformance to the requirements of a contract and its technical data package. The application of sampling plans for acceptance involves both consumer and producer risks; and increased sampling is one way of reducing these risks, but it also increases costs. Producers can reduce risks by employing efficient processes with appropriate process controls. To the extent that such practices are employed and are effective, risk is controlled and, consequently, inspection and testing can be reduced.

5.5 The following points provide the basis for this standard:

5.5.1 Producers are required to submit deliverables that conform to requirements and to generate and maintain sufficient evidence of conformance.

5.5.2 Producers are responsible for establishing their own manufacturing and process controls to produce results in accordance with requirements.

5.5.3 Producers are expected to use recognized prevention practices such as process controls and statistical techniques.

5.6 This standard also provides a set of sampling plans and procedures for planning and conducting inspections to assess

quality and conformance to contract requirements. This standard eliminates acceptable quality levels (AQL's) and associated practices within specifications.

5.7 *Applicability*—This standard, when referenced in the contract, specification, or purchase order, is applicable to the prime producer, and should be extended to subcontractors or vendor facilities. The quality plans are to be applied as specified in the contract documents, and deliverables may be submitted for acceptance if the requirements of this standard have been met.

5.8 *Applications*—Quality plans and procedures in this standard may be used when appropriate to assess conformance to requirements of the following:

5.8.1 End items,
5.8.2 Components or basic materials,
5.8.3 Operations or services,
5.8.4 Materials in process,
5.8.5 Supplies in storage,
5.8.6 Maintenance operations,
5.8.7 Data or records, and
5.8.8 Administrative procedures.

NOTE 1—Use of the word "product" throughout this standard also refers to services and other deliverables.

5.9 *Product Requirements*—The producer is required to submit product that meets all contract and specification requirements. The application of the quality plans or procedures of this standard does not relieve the producer of responsibility for meeting all contract product requirements. The producer's quality system, including manufacturing processes and quality control measures, will be established and operated to consistently produce products that meet all requirements. Absence of any inspection or process control requirement in the contract does not relieve the producer of responsibility for assuring that all products or supplies submitted to the consumer for acceptance conform to all requirements of the contract.

5.10 *Limitations*—The sampling plans and procedures of this standard are not intended for use with destructive tests or where product screening is not feasible or desirable. In such cases, the sampling plans to be used will be specified in the contract or product specifications.

6. Procedure

6.1 *Acceptance by Producer-Proposed Provisions*—In order for an alternate acceptance method to be considered, the producer shall establish and implement an internal prevention-based quality system as a means of ensuring that all products conform to requirements specified by the contract and associated specifications and standards. The acceptability of the quality system as part of the request for alternate acceptance method(s) is dependent on its compliance with an industry-accepted quality system model, demonstration of its process focus, and the availability of objective evidence of its implementation and effectiveness.

6.1.1 *Quality System Plan*—The quality system shall be documented and shall be subject to on-site consumer review throughout the contract. It shall include, at a minimum, a description of the organizational structure, responsibilities, procedures, processes, and resources. Such documentation is hereinafter called the quality system plan. The producer shall maintain, disseminate, update, and improve the quality system plan in order to ensure its continued use and accuracy. The design and documentation of the quality system plan shall allow for ease of use, review, and audit by internal as well as consumer personnel.

6.1.2 *Prevention-Based Quality System*—The quality system shall be prevention-based. Common quality system models that reflect this philosophy include the ISO 9000 series and many industry specific total quality standards and programs. The quality system shall also reflect additional needs in accordance with the requirements of this standard. Regardless of the model chosen, the quality system shall demonstrate its prevention-based outlook by meeting the following objectives throughout all areas of contract performance:

6.1.2.1 The quality system is understood and executed by all personnel having any influence on product or process quality.

6.1.2.2 Products and services meet or exceed consumer requirements.

6.1.2.3 Quality is deliberately and economically controlled.

6.1.2.4 Emphasis is on the prevention of process discrepancies and product nonconformances.

6.1.2.5 Discrepancies and nonconformances that do occur are readily detected, and root cause corrective actions are taken and verified.

6.1.2.6 Sound problem solving and statistical methods are employed to continuously reduce process variability and, in turn, improve process capability and product quality.

6.1.2.7 Records are maintained and indicate implementation of the quality plan and effectiveness of the control procedures.

6.1.3 *Process Focus of Quality System*—To demonstrate a process focus, the producer shall demonstrate that the manufacturing process and its related processes have been studied and are understood, controlled, and documented to show that they are:

6.1.3.1 Consistently producing conforming product.

6.1.3.2 Controlled as far upstream as possible.

6.1.3.3 Robust to variation in equipment, raw materials, and other process inputs, and designed to yield a quality product.

6.1.3.4 Operated with the intent to constantly strive to reduce process/product variability.

6.1.3.5 Designed to utilize manufacturing equipment with objectives of minimum variability around targeted values.

6.1.3.6 Managed for continuous improvement.

6.1.3.7 Designed and controlled using a combination of manufacturing practices and statistical methods in order to ensure defect prevention and process improvement.

6.1.4 *Objective Evidence of Quality System Implementation and Effectiveness:*

6.1.4.1 *Examples of Evidence Regarding Process Improvement:*

(1) Process flow charts showing the key control points where action is taken to prevent the production of defective product.

(2) Identification of process improvement techniques and tools used, for example, Plan-Do-Check-Act (PDCA) cycle,

Failure Modes and Effects Analysis (FMEA), Pareto Analysis, and Cause and Effect Analysis.

(3) Identification of the measures used, for example, trend analysis, cost of quality, cycle time reduction, defect rates, 6-sigma capability.

(4) Results of the improvements from the use of these process improvement tools.

(5) Results of properly planned experiments that led to reduced common cause variability of a process and improved productivity.

6.1.4.2 *Examples of Evidence Regarding Process Control:*

(1) Identification of the scope of use of process control techniques, for example, SPC, automation, gages, set-up verification, preventative maintenance, visual inspection.

(2) Process control plans, including the improvement goals and statements of management commitment to SPC.

(3) Approaches and supporting data used to determine if producers have adequate controls to assure defective product is not produced and delivered.

(4) Descriptions of the required training in SPC or continuous improvement, or both, that is, the number of courses and their content, courses required for personnel at each organizational level and function associated with the quality plan, the qualifications of the instructors or trainers for SPC classes, support by management to attend such courses, and information demonstrating the effectiveness of the training.

(5) Identification and definition of the interrelations of all departments (for example, production, engineering, purchasing, marketing, administration, etc.) involved in SPC and quality improvement, their responsibilities, and the use of teams.

(6) When applying control charts, the reasoning behind establishing rational subgroups and sampling frequency; the procedures for determining and updating control limits; and the criteria for determining out-of-control conditions.

(7) Identification of key parameters used in lieu of one or more specified characteristics, verification of the correlation of such parameters to those characteristics, and description of the manufacturing process steps responsible for these parameters.

(8) Identification of personnel responsible for process-related corrective action.

(9) Proper gage measurement studies showing measurement variations relative to the total variation.

(10) Traceability of the product and process corrective action(s) taken when the process went out of statistical control, showing how the root cause was identified and eliminated.

6.1.4.3 *Examples of Evidence Regarding Product Conformance:*

(1) Control charts showing the process in statistical control in accordance with the criteria asked for in paragraph 6.1.4.2*(6)*.

(2) Records of product and process corrective action(s) taken when nonconformances occur.

(3) Process capability studies consisting of the correct calculation and interpretation of indices, such as Cp and Cpk.

(4) History of product inspection results reinforced by statistical data and analysis.

(5) Results from in-process control methods, such as 100 percent automated assembly and/or inspection.

6.2 *Acceptance by Tables:*

6.2.1 *Sampling Inspection*—When acceptance is to be accomplished using the sampling tables provided in this document, the following considerations apply.

6.2.1.1 *Verification Level Specification*—The VL's are specified in the producer product specifications. A VL may be specified for individual characteristics, for a group of characteristics, or for subgroups of characteristics within the group. The VL and code letter (CL) from Table 1 determine the sampling plan required to assess product compliance to contract and specification requirements. Producers are expected to produce and submit product in full conformance to all requirements. Lots, batches, or production intervals of product that consistently meet or exceed all requirements will be accepted by the sampling plans of this standard and will result in qualifying for reduced sampling levels.

6.2.1.2 *Sampling Procedures*—Sampling is performed at one of three stages called normal, tightened, and reduced. Unless otherwise specified, the VL stated in the contract shall be considered the normal stage of inspection and shall be used at the start of inspection. The tightened and the reduced stages are then defined as the stages to the immediate left and right, respectively, of the initial stage. The sampling inspection stage in effect shall continue unchanged for each group of characteristics or individual characteristic except where the switching procedures given in paragraph 6.2.1.3 require change. The switching procedures shall be applied to each group of characteristics or to individual characteristics.

6.2.1.3 *Switching Procedures*—The procedures for switching among normal, tightened, and reduced inspection are given as Note (2) in Tables 2-4. The switching procedures are independent of the results of any remedial action, such as

TABLE 2 Attributes Sampling Plans

NOTE 1—When the lot size is less than or equal to the sample size, 100 percent attributes inspection is required.

NOTE 2—One verification level (VL) to the left/right of the specified normal VL is the respective tightened/reduced plan. Tightened inspection of VL-VII is T, reduced inspection of VL-I is R.

Code Letter	Verification Levels								
	T	VII	VI	V	IV	III	II	I	R
	Sample size (n_a)								
A	3072	1280	512	192	80	32	12	5	3
B	4096	1536	640	256	96	40	16	6	3
C	5120	2048	768	320	128	48	20	8	3
D	6144	2560	1024	384	160	64	24	10	4
E	8192	3072	1280	512	192	80	32	12	5